R E P O R T R E S U M E S

ED 013 104 JC 670 815

FINANCING CALIFORNIA'S PUBLIC JUNIOR COLLEGES.

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CALIFORNIA STATE COORD. COUNCIL FOR HIGHER EDUC.

REPORT NUMBER CCHE-1029 PUB DATE JUN 67

EDRS PRICE MF-$0.50 HC-$5.04 126P.

DESCRIPTORS- *JUNIOR COLLEGES, *EDUCATIONAL FINANCE, *STATE PROGRAMS, STATE AID, FOUNDATION PROGRAMS, SCHOOL DISTRICT SPENDING, SCHOOL TAXES, BUDGETING, CALIFORNIA,

THE ROLES OF THE STATE AND THE LOCAL DISTRICT IN PROVISION OF OPERATING FUNDS ARE DISCUSSED IN RELATION TO FIVE CRITERIA--(1) EQUALITY OF OPPORTUNITY FOR ALL ELIGIBLE PERSONS TO RECEIVE A JUNIOR COLLEGE EDUCATION, (2) EQUITY OF CONTRIBUTIONS FROM EACH SOURCE, BASED ON ABILITY TO PAY AND BENEFITS RECEIVED, (3) OPTIMUM UTILIZATION OF AVAILABLE RESOURCES, (4) FLEXIBILITY AT THE LOCAL LEVEL WITHIN THE FRAMEWORK OF STATE EDUCATIONAL OBJECTIVES, AND (5) SIMPLICITY WITH LONG RANGE STABILITY. THE AUTHORS RECOMMEND A PLAN FOR SHARING OF COSTS BETWEEN THE STATE AND THE LOCAL DISTRICTS, WITH EACH LEVEL CONTRIBUTING A PREDETERMINED PERCENTAGE OF THE BUDGETED COSTS. ALTERNATIVE PLANS DISCUSSED ARE (1) COMPLETE STATE SUPPORT WITH A PREDETERMINED PROGRAM AMOUNT COMPUTED PER STUDENT OR PER WEEKLY STUDENT CONTACT HOUR, (2) COMPLETE STATE SUPPORT THROUGH A PROCESS OF BUDGET REVIEW, (3) STATE-LOCAL SHARING OF A PREDETERMINED PROGRAM AMOUNT, AND (5) EQUAL SHARING OF PROGRAM COSTS BY THE STATE AND THE LOCAL DISTRICT. CONSIDERATION OF FACILITIES NEEDS LEADS TO A PROPOSAL WITH FEATURES OF (1) ANNUAL PREPARATION AND UPDATING OF LONG RANGE MASTER BUILDING PLANS FOR EACH COLLEGE, (2) STATE APPROVAL OF BUILDING PROJECTS AND PLANS, (3) STATE AND DISTRICT SHARING OF COSTS ACCORDING TO A FORMULA, AND (4) LEVYING OF A DISTRICT TAX TO PROVIDE THE DISTRICT'S SHARE OF THE COSTS OF THE APPROVED PROJECT. (WO)

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CALIFORNIA'S
HIGHER
EDUCATION

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EDUCATION

Number 1029
June, 1967

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FINANCING CALIFORNIA'S PUBLIC JUNIOR COLLEGES

A Report to the Coordinating Council for Higher Education

PART I NOVEMBER, 1966

PART II JANUARY, 1967

PREFACE

California now has over 75 Junior Colleges, administered by 66 local governing boards, the State Board of Education and State Department of Education. The number of Junior Colleges has been increasing at a rapid pace and it will not be long before California has over 100 such local institutions.

During fall term, 1966, these Junior Colleges enrolled 198,135 full time students and 289,323 part-time students. Enrollments of such magnitude are unknown in Junior Colleges in any other state.

The total estimated expenditures for current operations of Junior Colleges in 1964–65 was $166 million. The state provided approximately $58 million, but the bulk of financial support was obtained through local property tax assessments. These expenditures are increasing at a rate of about 10% per year and by 1975, expenditures may approach $500 million for current operations alone.

Although the state has continuously provided funds for the current operations of Junior Colleges since the first college was established in 1910, it has only recently provided funds for construction purposes. In 1961, the Legislature made its first effort in this direction by appropriating five million dollars. Since then another seventy-five million dollars has been made available to local Junior College governing boards.

When faced with figures such as these it becomes exceedingly apparent that the Junior Colleges in California are a massive educational operation. Such an educational system offers an opportunity unknown in any other state for the large-scale education of its population. The opportunity is unprecedented; the problems are formidable. The financing of our Junior Colleges continues to be one of the major dilemmas facing educators, local and state boards of trustees, and politicians who are interested in helping the Junior Colleges to achieve their maximum potential.

The Donahoe Higher Education Act requires the Coordinating Council to annually review the budgets of the University of California and the California State Colleges and to make comment on the general level of support sought. Statutes do not require a similar comment regarding the financing of Junior Colleges. Nevertheless, because of its concern for the development of Junior Colleges under the provisions of the Donahoe Act and the Master Plan for Higher Education, it has been the Council's policy to attempt to comment annually on the general level of support for Junior Colleges.

From the first, however, the efforts of the Council and its staff to comment effectively with regard to expenditures for current operations have been frustrated by the complexity of the program for the support of Junior College operations—a program which has evolved over a number of years through a multitude of statutory changes. Additional frustration has come from the nature of the state-local fiscal relationship as represented by the foundation program and the limitations of that method, such as its inability to equalize local support, the increase of permissive override taxes, varying levels of support for "adults" and "other than adults," etc.

The Council has consistently supported the Master Plan recommendation that the proportion of state support for Junior College operations be gradually increased to 45% by 1975. However, within the present method of financing, it has been increasingly difficult for the staff to advise the Council on a means of implementing this recommendation that could be adequately justified and substantiated, or for that matter, recommend adjustments in the program that could lead to a meaningful increase in the percentage of state support. The Council, therefore, on February 23, 1965, approved the following recommendation:

> A representative technical committee be established to advise the staff in a study in depth of the financing of the Junior Colleges through the current support program and alternate programs and report back to the Council prior to the 1967 session of the Legislature.

Following this action, an advisory committee, composed of representatives of all segments dealing with the Junior Colleges, was appointed [1] and a study was conducted. Part I of this report on "Financing California's Public Junior Colleges," presents the results of this study. Criteria were established for the support of Junior College operations against which the current support program and alternate programs have been evaluated. In establishing criteria such factors as equalization, the degree of state and local support, central control and local autonomy, an adequate means of measuring enrollments, and the need for greater uniformity among the three segments of public higher education budgeting and accounting have been given careful consideration. The staff has investigated past and current costs of Junior College operations and on the basis of these costs and enrollment projections has estimated the cost of Junior College operations over the next decade. The ability of the state and local districts to meet these estimated expenditures and the effort required have also been considered. Programs of support in other states have been analyzed to determine factors that should be considered in a support program for California. Finally, a number of plans are

[1] Complete Advisory Committee membership shown as Appendix A.

presented which could be effectively implemented for supporting Junior College operations.

The brief five year period during which the state has provided funds to assist in Junior College capital construction has been fraught with difficulties, confusion, instability and frustration. During this time three different plans for distributing state funds have been developed and implemented, both General Fund and bond monies have been appropriated, a federal construction program with different requirements than in any existing state program has been established, the Junior Colleges have been included in and excluded from statewide bond issues for higher education construction, and finally there is a growing concern over the possibility of ever devising an assistance program for capital construction that will be acceptable at both the local and state level.

In 1966, the Legislature adopted Senate Concurrent Resolution No. 14 [2], which directed the Coordinating Council to attempt to resolve this difficult dilemma. Part II of this report was prepared and is submitted in answer to that directive.

[2] Senate Concurrent Resolution No. 14 is attached as Appendix G.

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COUNCIL RESOLUTIONS

The following resolutions based on this report were adopted by the Coordinating Council for Higher Education. The resolution related to Financing of Current Operations was adopted on March 28, 1967 and the resolution relating to Capital Outlay was adopted on January 30, 1967.

Resolution on Financing Junior College Current Operations

WHEREAS, The Council directed its staff to study the financing of Junior Colleges, including possible revision of the present system as well as new methods; and

WHEREAS, The Council staff has conducted a year-long study of the best possible method of financing California's Junior Colleges; and

WHEREAS, The Council believes that an essential ingredient to the continued growth and development of the Junior Colleges is the provision of adequate financial support; now, therefore, be it

RESOLVED, That the Coordinating Council for Higher Education advises the Governor, the Legislature, and the State Board of Education that the following means of providing financial support to the Junior Colleges is preferable.

1. A financial measure of the cost per student unit of an adequate educational program should be established. This measure, to be known as the "Program Amount," should be reflective of the actual costs of the educational program and should be adjusted annually on the basis of changes in price-related and policy-related cost factors.

2. Two "Program Amounts" should be established—one for Junior College districts with less than 1,000 units of average daily attendance (or the equivalent size in the student measure used) and one for all other districts. (The Program Amounts should be established and adjusted as described in Chapter V of the Council staff report entitled, "Financing California's Public Junior Colleges. Part I—Current Operations," and should be based upon the "current expense of education" as defined in the *Junior College Accounting Manual*, and should include the expense of graded classes).

3. A student measure based upon a course class hour of enrollment, rather than attendance, should be established as the measurement of the educational workload. This measure (the Weekly Student Class Hour) should not distinguish whether students are residents in the district, full-time or part-time, or of any particular age.

4. A division between the state and the local district of the Program Amount should be developed, with the state's share based upon equalization and the local share upon a statewide computational property tax rate levied against an adjusted district assessed valuation; provided that the State Board should estimate and recommend to the Governor and the Legislature the statewide funding required to establish the state's share in the fiscal year 1967–68 as 35% of the total, increasing such share by an additional 5% in each succeeding fiscal year until the state's share reaches 45%.

5. All districts wishing, or needing, to operate at a level beyond the Program Amount should have the following two options:

   A. The district could obtain the desired increase through district voter approval of an operational tax.

   B. The district could obtain the desired increase by making a request of the State Board of Education and if this request were approved the additional amount would be shared between the state and the local district.

6. Full-time out-of-state students should pay a tuition equal to the Program Amount and part-time out-of-state students should pay a tuition amount prorated according to the number of units for which the student is enrolled. (Districts could exempt non-residents who are both citizens and residents of a foreign country or are military personnel or dependents of military personnel.)

7. Students attending non-graded classes are not to be counted in determining the state share. Local district may charge tuition to cover the full cost of non-graded classes.

8. Fees may be charged and retained by the local district's governing board to cover the cost of student parking and health services; and be it further

RESOLVED, That:

1. The account classification system used by the Junior Colleges should be revised to correspond with that generally used in institutions of higher education and to separately account the elements of each program.

2. The calendar for the preparation of local college budgets should be revised in order to permit local boards to review and approve these budgets approximately nine months prior to commencement of the budget year.

3. The statute limiting teacher salary costs to not less than 50% of the total current expense of education should be repealed; and be it further

RESOLVED, That the State Board of Education, with the advice of representatives of Junior College districts local boards, should initiate the following actions in order to implement program budgeting in the Junior Colleges:

1. Formulate broad state educational objectives to be reflected in the state-local fiscal relationships.

2. Ascertain information that measures and explains program activity and performance for each program element.

3. Stimulate automation of cost and performance information systems.

4. Stimulate establishment and adequate staffing of institutional research and analytical studies offices at the local and state level.

5. Institute a system of long-range program planning including all cost implications of present and planned changes in program performance.

Resolution Regarding Junior Colleges Capital Outlay

WHEREAS, Senate Concurrent Resolution No. 14 directed the Coordinating Council for Higher Education to review the current program for providing state assistance to the California Junior Colleges for capital construction purposes, and to make recommendations for any needed changes, and

WHEREAS, Senate Concurrent Resolution No. 14 directed the Council to present a report and proposed legislation to the Legislature not later than January 31, 1967, now, therefore, be it

RESOLVED, That the Coordinating Council for Higher Education adopts and transmits to the Legislature the report entitled "*Financing California's Public Junior Colleges, Part II: Capital Outlay*" (67-3), and be it further

RESOLVED, That the Director of the Council is authorized and directed to have legislation prepared pursuant to the recommendations and proposals contained in the above named report and to transmit such proposed legislation to the Legislature as soon as possible.

PART ONE

CURRENT OPERATIONS

CHAPTER I

THE HISTORICAL PATTERN OF SUPPORT FOR CURRENT OPERATIONS

Since the first Junior College was established in Fresno in 1910 as a two-year postgraduate course the state has participated in the support of such institutions. Until 1915, support was provided through the State High School Fund, but at that time, the Attorney General ruled against such practice.

It was not until 1917 that state support was resumed through legislation which substituted the term "junior college courses" for "postgraduate courses" and gave the schools giving such courses the same support for the average daily attendance (a.d.a.) of Junior College students as for high school students—$30 a year. State support remained at this $30-a-year level until 1921, when the Legislature authorized establishment of separate Junior College districts and an allocation to these districts of a flat sum of $2000 per year, plus $100 for each unit of a.d.a. if an additional $100 was provided from local funds. Junior College departments in high schools continued to receive the high school allowance of about $75 per unit of a.d.a. and without the flat grant.

The 1921 legislation provided that funds to defray the state costs of the new Junior College districts be derived from the rents, royalties and bonuses turned over to the state by the federal government for mining on the public domain. These proceeds, deposited in a "Junior College Fund," were sufficient to meet the state costs until 1928, when only $96 per unit of a.d.a. was available. This resulted in a 1929 law that any difference, up to $30 per unit of a.d.a., between the federal funds available and the funds needed to provide the $100 per unit of a.d.a. be provided by the state. The 1931 Legislature authorized governing boards of Junior College districts to levy a tax of 20¢ on each $100 of assessed valuation, to arrange interdistrict contracts for the interchange of students, and to charge districts not maintaining a Junior College a tuition for the students from such districts. In 1935, the Legislature reduced the $100 payment for a unit of a.d.a. to $90, and in 1937 established a maximum district tax rate of 35¢ for Junior College programs.

Except for a 1946 law which, for the first time, placed a limit on the amount of state support to be provided to classes for adults, state support remained unchanged for almost 10 years—an annual flat grant of $2000 with a payment of $90 per unit of a.d.a.

Pressures generated by rising enrollments, increasing costs, and the great differences in the ability of local districts to provide public education at all levels, resulted in voter approval in 1946 of constitutional amendments vitally affecting education. On the basis of these amendments the Legislature, in 1947, established an entirely new framework of law for state support of public education—a framework based upon a foundation program.

With respect to the Junior Colleges this program was simple and straightforward, specifying that $200 per unit of a.d.a. was the minimum amount necessary to provide a satisfactory level of support for a Junior College program and identifying this as the "foundation amount." The new foundation program specified that the state would contribute $90 per unit of a.d.a. in addition to $2000 for each regular college and $2000 for each evening college maintained by a district toward this foundation amount and identified this contribution as "basic aid." The difference between the foundation amount ($200) and basic aid ($90) would be provided from the local district from the proceeds from a 20¢ tax (identified as a "computational tax") levied against 90% of the district's assessed valuation. If, however, the proceeds from the district's computational tax would not be sufficient to attain the foundation amount, then the state would provide the difference. This additional state support was identified as "equalization aid."

Except for a gradual increase in the foundation amount to $225 and in the computational tax to 22¢, this relatively simple approach to state support remained unchanged until 1953–54, when the first of three legislative modifications occurred—modifications that have, over the years, distorted and greatly complicated the state-local fiscal relationship.

The first modification directed that a.d.a. from regular classes and from classes for adults be separated. While basic aid continued to be provided for all a.d.a., the eligibility for equalization aid and the amount per a.d.a., was to be determined by the foundation amount, the computational tax, and the a.d.a. from *regular classes* only. Additional equalization aid was to be provided for the a.d.a. from classes for adults, but with a maximum rate of $80 per a.d.a. In effect, this modification created two foundation amounts with

the one for regular classes being much higher than the one for classes for adults.

The second legislative modification occurred the next year and directed that the accounting of a.d.a. again be changed to divide it between: (1) a.d.a. derived from students over 21 years of age enrolled for less than 10 class hours per week, and identified as "defined adults;" and (2) a.d.a. derived from all other students, identified as "other than defined adults." The "other than defined adults" included, of course, students *over* 21 years of age if they were enrolled in *10 or more* class hours per week. Basic aid continued to be provided for all a.d.a. regardless of category, but the eligibility for equalization aid and the amount per unit of a.d.a. now had to be determined by the foundation amount, the computational tax, and the a.d.a. from "*other than defined adults.*" Additional equalization aid was provided for the a.d.a. derived from "adults," up to a unit amount of $80.

The first modification, which divided a.d.a. between regular classes and classes for adults, had the merit of relating state support to the cost of the classes in which students were enrolled. The second modification lost this advantage because the state was now supporting some students in a regular class at a much lower rate than other students in that same class.

The third—and last significant legislative modification—occurred in 1961–62, and again modified the manner in which a.d.a. was accumulated and categorized. The a.d.a. derived from *both* "adults" and "other than adults" was now *further* divided on the basis of whether the student was a resident in the district ("in-district a.d.a."), or not a resident ("out-of-district a.d.a."). As before, basic aid continued to be provided for all a.d.a., but now eligibility for equalization aid and the amount per a.d.a., was determined by the foundation amount, the computational tax, and only the in-district a.d.a. for "other than adults". Additional equalization aid was provided up to $95 per in-district "adult" a.d.a. Thus, only basic aid was provided for out-of-district students.

In addition to these major modifications, the Legislature by 1961–62 had eliminated the $2000 flat sum grants, increased basic aid to $125, the foundation amount to $543, and the computational tax to 24¢.

In 1963–64, the foundation amount was raised to $573 and the computational tax to 25¢. Additionally, support for in-district adult a.d.a. was now to be determined on the basis of a foundation amount of $480 and a computational tax of 24¢, with the amount of equalization aid that could be received limited to $95 per unit of a.d.a. In 1964–65, the foundation amount for "other than adults" was raised to $600, the foundation amount for "adults" to $490 and the limit on "adult" equalization was raised to $105. This is the basis for current apportionments.

A breakdown of the present system and its ramifications is presented in greater detail in Chapters II and III. However, in order to comprehend more clearly some of the problems present under the current system several factors are considered below.

LOCAL FINANCIAL SUPPORT

It has long been the pattern in California that the state and local districts share the operating expenses of Junior Colleges. Funds from other sources are minimal. The provision of state support through the foundation program as described above, is based upon varying degrees of local support. The only source of revenue for a local district is the property tax and there was no limit on the tax rate which a district could levy, until 1937 when the Legislature established a maximum tax rate of 35¢ per $100 of assessed valuation. This may be exceeded by a two-thirds vote of the electorate of the district. During 1965–66, forty-six (or almost 84%) of the Junior College districts were levying a general-purpose tax at the maximum rate, nine (or about 18%) were above the maximum and only two were below.

Local funds beyond that available through the general-purpose tax are provided through special purpose taxes—sometimes referred to as permissive overrides—authorized by the Legislature. In 1964–65, Junior College districts utilized ten such special purpose taxes. About three-fourths of the Junior Colleges levied such taxes for retirement annuity, community service, State Employees Retirement, and social security; 25% for health and welfare payments; 13% for adult education; 9% for interdistrict attendance; and one district each for meals for pupils, conservation and fire safety.

VARIATION IN LOCAL FINANCING ABILITY

Local districts vary widely in their ability to support the expenditures of their Junior Colleges. State funds available through "equalization aid" reduce, but do not eliminate, the great difference in ability. In terms of the dollars of assessed valuation per a.d.a. available for taxation in 1965–66, the wealthiest district had almost eight times the ability of the least wealthy district. However, if both districts had taxed themselves at the 35¢ maximum, the equalization aid available to the least wealthy district reduced the relative ability to about 2.5, which means that the wealthiest district could provide the same level program as the least wealthy district but at almost one-third the tax rate.

Further, in 1965–66 some 18 Junior College districts (representing one-third of the a.d.a.) had an assessed valuation that could produce the entire current $600 foundation amount at the maximum (35¢) tax rate. These districts received almost $10 million in state basic aid. Eight districts had an assessed valuation that would produce the foundation amount using the 25¢ computational tax. These districts received almost $600,000 in basic aid.

THE MASTER PLAN ON JUNIOR COLLEGE SUPPORT

California's 1960 Master Plan for Higher Education provided that the Junior Colleges be a part of public higher education governed by local boards and offering instruction for transfer to four-year institutions, for preparation for employment in vocational-technical fields, and for general or liberal arts purposes. Other recommendations suggested that University and State College admission requirements be increased and that the percentage of lower divisions be decreased with the result that substantial numbers of students would be diverted to the Junior Colleges.

In view of the added local financial responsibilities resulting from these recommendations, the Master Plan further recommended that the proportion of total current support provided the Junior Colleges from the State School Fund be increased gradually from the proportion then in effect (approximately 30%) to approximately 45% in 1975.

The percentage of state support continued to decline even further following this recommendation and in 1962–63 was approximately 27%. Since 1962, however, the percentage has increased slowly and in 1964–65 amounted to almost 32%.

Progress toward a greater percentage of state support becomes even more difficult as additional special purpose taxes authorize districts to raise additional local revenue to cover expenditures normally funded through the general purpose tax. These permissive overrides also add to the variations in tax effort that result from the widely varying ability of local districts to support Junior College operations.

CHAPTER II

PROVISIONS OF THE EXISTING EDUCATIONAL PROGRAMS IN CALIFORNIA'S JUNIOR COLLEGES

A prime objective of Junior College education in California is to provide the opportunity of equal access for all eligible individuals to an adequate Junior College education.

This concept is one of five criteria used in this study to evaluate any state and local fiscal relationship concerned with the operating support of the Junior Colleges.

> *Criterion Number 1:* The State-local fiscal relationship should afford all eligible individuals within the state an equal opportunity for Junior College education.

Ideas relative to equality of opportunity are not new, especially in the theory of public school finance. However, complete equality of educational opportunity in practice is difficult, if not impossible, to achieve in any large system of public education. While total equality may not be an achievable goal, criterion number one should serve as a useful yardstick for measuring the effect of changes in the pattern of financing California Junior Colleges.

To fit the equality concept into a solution of the state and local fiscal relationship, the educational program must be translated into terms which will distinguish situations where inequalities may exist among the Colleges. This requires the establishment of a norm (based upon some index of "adequacy") by which the educational program may be measured. Many measures have been suggested, ranging from rather sophisticated weighted student units, with required expenditures, to the concept of total school population. As an important facet of a fiscal relationship, however, the measurement of need or program must contain at least two components: (a) the educational program to be conducted and (b) the student load to be served. The total program level is then translated into financial terms for actual allocation of both State and local resources.

MEASUREMENT OF PROGRAM

All relevant factors should be taken into account when attempting to measure the educational program. The following section analyzes financial data from the Junior Colleges and attempts to derive some general relationships between costs and those activities considered important in the conduct of the college program with the objective of identifying the most significant cost variables.

Adequacy

The determination of the extent of equality of opportunity in Junior Colleges requires an examination of "adequacy". Presumably, only direct measurement of the "value-added" to student quality would lead to any confident conclusions regarding adequacy. While a number of studies of the cost-quality relationship in education have been conducted over the years, no relevant quality data are currently available for California Junior Colleges. As an alternative, this study examines those variables which essentially represent "effort to achieve quality", i.e., breadth of curriculum, average class sizes, faculty loads, and real program expenditures over time.[1] Data are available to allow comparison of several of these variables for the Junior Colleges with similar measures of lower division instruction in the State Colleges and University. These data were developed in the Coordinating Council's Cost and Statistical Study of instruction in the segments in the Fall term 1963.

Breadth of curriculum is examined on the basis of the emphasis placed upon several major subject fields and the variation of emphasis between individual colleges. During the Fall of 1963, as indicated in Table 1, greatest emphasis occurred in the technical-vocational area (termed "Junior College Classification"). However, this was also the area of greatest variation among individual colleges. For example, 90.5% of the total graded instruction at Los Angeles Trade-Technical College was in this subject area, while at Santa Barbara City College only 16.2% was technical-vocational.

Even greater variation between colleges occurred in the subcategory of "Trade-Technical" Offerings.[2] The social sciences and humanities, next in level of emphasis, and constituting 22% and 25% respectively of the graded curriculum on a statewide basis, displayed the least variation among individual colleges. Life Sciences received the least statewide emphasis among the category groupings.

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[1] Real expenditure is that level of spending exhibited when all price changes are held constant.

[2] Courses of study in the subcategory of "trade-technical' include such areas as Engineering Technology, Metal Trades, Welding, Mechanical Trades, Electronic Technology, Drafting Technology, etc.

Comparison of Junior College curricula emphasis with lower division emphasis in the University and State Colleges (in Table 2) reveals nothing of unusual significance except that the latter two segments give greater emphasis to the life sciences. On the basis of the material examined, relevant conclusions as to "adequate" or "inadequate" breadth of curriculum appear difficult, if not impossible. Variation in "program balance" among Junior Colleges may largely be reflective of the differences in local demand.

Average instructional expenditures and program characteristics in Junior Colleges are compared to similar effort in State College and University lower divisions during the Fall 1963 in Table 3.

In general, the teaching situation reported in lower division appears similar in all three segments. The "teaching" expenditure per student credit hour in the segments was remarkably similar. The "instructional" expenditure, however, was substantially greater in the University and State Colleges, due primarily to expenditures for equipment and larger departmental supporting staffs. Staff and operating expenses for departmental research also contributed to the higher unit expenditure reported by the University.

The mean faculty salary reported in the Junior Colleges is only slightly below that of the State Colleges. The relatively low University mean salary ($3,092) for lower division teaching staff is partially due to inclusion of teaching assistants in the data. There is significantly greater variation in salaries among individual Junior Colleges (as indicated by the higher coefficient of variation), than exists in the other segments. The average classroom load differed by only one contact hour per week between the Junior Colleges and the State Colleges, while the University reported a much lower load, again, due to teaching assistants. Junior Colleges reported a smaller average class size in lecture and slightly larger class size in laboratory than the other two segments. No significant difference in emphasis upon laboratory instruction, as measured by the ratio of laboratory class hours to total class hours, is apparent.

In summary, the Junior Colleges' teaching program appears to have been at least as adequate (in terms of quantifiable "effort") during the Fall of 1963 as lower division programs in the State Colleges or the University. However, Junior Colleges did report the largest internal variation between colleges in teaching salary expenditure per student credit hour—a coefficient of variation of 36.8 percent—due primarily to variation in average faculty salaries paid at different colleges. If salary paid is any index of faculty quality, one might

TABLE 1

Ratio of Student Credit Hours Taken by Subject Field to Total Student Credit Hours, Junior Colleges, Fall 1963

Item	*Life Sciences*	*M.P.E. Sciences*[1]	*Social Sciences*	*Humanities*	*Junior*[2] *College Class*	*Trade-*[3] *Technical*
Mean	.041	.155	.219	.254	.279	.094
Standard Deviation	.014	.039	.041	.046	.105	.076
Coefficient of Variation	34.1%	25.2%	18.7%	18.1%	37.6%	80.8%
Range						
Low	.000	.010	.029	.034	.162	.013
High	.087	.228	.315	.336	.905	.649

[1] Mathematics, Physics, and Engineering.
[2] Junior College Classification.
[3] Included also within figures for "Junior College Classification".
SOURCE: CCHE Cost and Statistical Study, 1965.

TABLE 2

Segmental Ratios of Student Credit Hours Taken by Subject Field to Total Student Credit Hours, Lower Division Fall 1963

Item	*Life Sciences*	*M.P.E. Sciences*	*Social Sciences*	*Humanities*	*Junior College "Class"*	*Professional*
Junior Colleges	0.041	0.155	0.219	0.254	0.279	--
University of California	0.072	0.232	0.227	0.423	--	0.026
California State Colleges	0.099	0.207	0.257	0.297	--	0.083

SOURCE: CCHE Cost and Statistical Study, 1965.

conclude that the instructional programs at certain colleges were "more (or less) adequate" than those at other colleges. The assumption of salary paid being a quality indicator may be of doubtful use, however.

Another indirect approach to the measurement of adequacy is the change in the level of real expenditures. In Figure 1, the increase in actual per-student expenditures for separate Junior Colleges during the period 1954–55 through 1964–65 is compared to the same expenditures expressed in terms of constant 1964–65 dollars. For both "instruction" and "other current activities" the highest real expenditure per student occurred during 1959–60. The recent 1964–65 expenditure level was much like that reported in 1954–55. Thus, while actual expenditures per student have been rising consistently since 1954–55, the real program level is currently about equivalent to that during 1954–55. In the intervening years, however, the real program level in separate Junior College districts was substantially higher.

The student-faculty [1] ratios reported for the same period coincide with the levels of real instructional expenditures. The lowest student-faculty ratio (33.2) occurred during the year (1959–60) of highest real instructional expenditures. Conversely, the highest student-faculty ratio (38.2) occurred during the year (1964–65) of lowest real instructional expenditure. Real expenditures for current activities (other than instruction) were relatively constant during the 10-year period represented. One may conclude that there has been a decline in quantifiable instructional "effort" since the "peak" year of 1959–60.

[1] Full-time faculty.

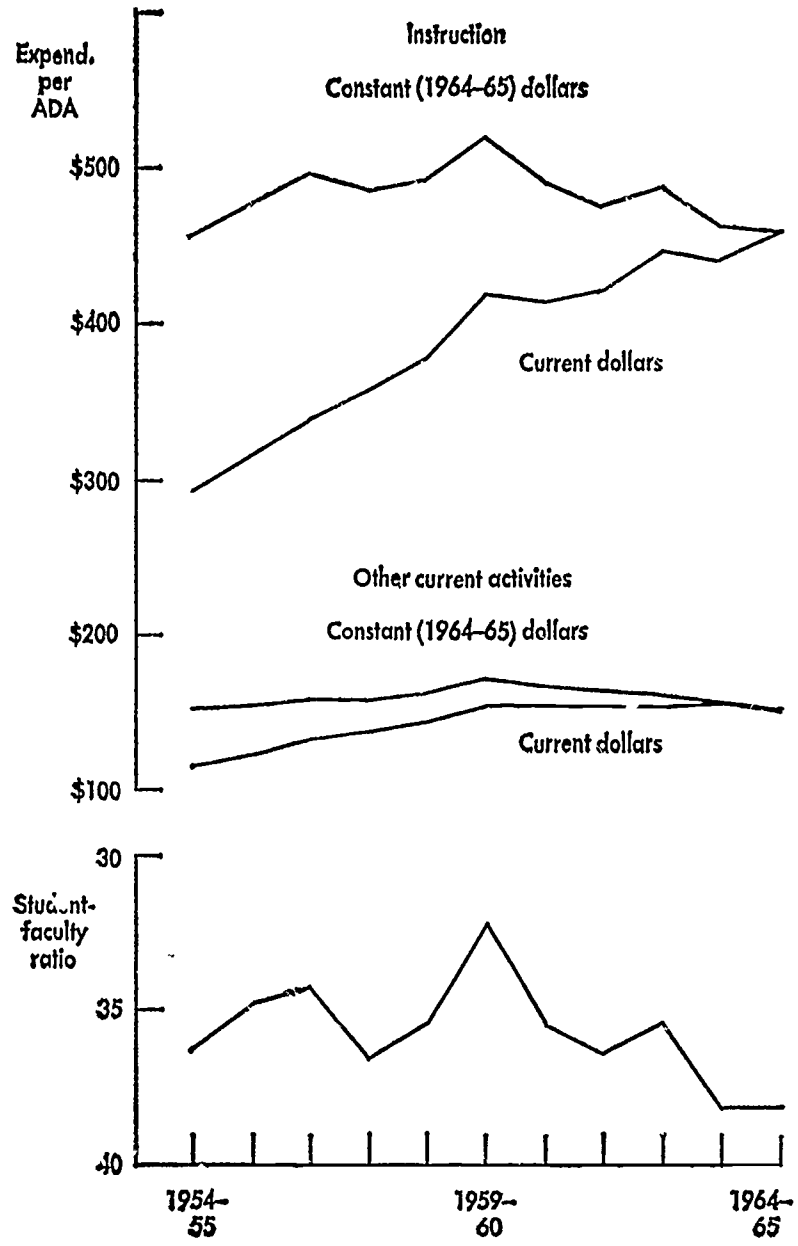
TABLE 3
Segmental Comparison of Instructional Expenditures and Program Characteristics
Fall 1963

Item	*Junior Colleges*	*State Colleges*	*University*
Number of campuses	71	16	5
Instructional expenditure per student credit hour:			
Mean	$14.69	$18.51	$23.63
Standard Deviation	3.11	2.96	2.67
Coefficient of Variation	21.2%	15.9%	11.3%
Teaching expenditure per student credit hour:			
Mean	$12.15	$13.69	$15.28
Standard Deviation	2.53	4.04	1.66
Coefficient of Variation	20.8%	29.5%	10.9%
Teaching salary expenditure per student credit hour:			
Mean	$9.69	$10.19	$9.56
Standard Deviation	3.72	3.17	.98
Coefficient of Variation	36.8%	31.1%	10.3%
Mean faculty salary:			
Mean	$3,965.	$4,194.	$3,029.
Standard Deviation	400.	179.	263.
Coefficient of Variation	10.1%	4.3%	8.7%
Preparation hours per week per FTE teaching staff:			
Mean	25	N/A	N/A
Standard Deviation	3.7	N/A	N/A
Coefficient of Variation	14.8%	N/A	N/A
Class hours per week per FTE teaching faculty:			
Mean	20	19	14
Standard Deviation	1.6	1.88	3.13
Coefficient of Variation	8.0%	9.9%	22.5%
Average class size lecture:			
Mean	31	34	37
Standard Deviation	5.5	7.15	3..
Coefficient of Variation	17.7%	21.0%	8.9%
Average class size lab:			
Mean	23	22	21
Standard Deviation	5.7	4.21	3.15
Coefficient of Variation	24.8%	19.1%	15.0%
Average class size total:			
Mean	28	28	30
Standard Deviation	4.3	5.80	3.98
Coecffiient of Variation	15.4%	20.7%	13.3%
Ratio of laboratory class hours to total class hours:			
Mean	0.372	0.404	0.360
Standard Deviation	N/A	N/A	N/A

SOURCE: CCHE Cost and Statistical Study, 1965.

FIGURE 1

Expenditures Per Student for Instruction and Other Current Activities, Separate Junior College Districts; Systemwide Junior College Student-Faculty Ratios, 1954–55 to 1964–65



SOURCE: Tables 4 and 5, Appendix B.

Costs According to Functions

A possibly more productive method of examining Junior College expenditure programs is to explore the costs of those functions which have been traditionally assigned to these colleges.

The Donahoe Act sets forth the following four instructional responsibilities:

1. standard collegiate courses for transfer to higher institutions
2. vocational and technical fields leading to employment
3. general or liberal arts courses
4. adult education and community services

Contained in official publications, but not in law, there has been historically a fifth function:

5. guidance, counseling, and remedial instruction.

The following analysis explores the relative costs of the five general functions outlined above. Transfer instruction and liberal arts instruction are combined b cause of the form in which available cost data a reported.

Liberal Arts and Trade-Technical—A comparis of unit expenditures during the Fall of 1963 for liber arts instruction, as opposed to technical vocation instruction (termed "Junior College Classification" reveals the latter to be significantly more expensiv (see Table 4). This high cost is due principally to lo average class size both in lecture and laboratory sit ations, although other cost elements, such as mea faculty salary and faculty load do not follow the pa tern that would be expected from the relatively hig unit instructional costs of these courses. All areas liberal arts instruction reported lower unit expend tures than did the "Junior College Classification". Th least expensive were the social sciences, primarily b cause of the large average class size (41). The human ties and the M.P.E. Sciences reported comparable cos while the life sciences were slightly more expensiv

In order to identify elements contributing to hig cost instructional programs, factors representing pr gram emphasis (ratios of subject area student cred hours to total student credit hours) were correlate on certain of the cost factors as shown in Table None of the program factors correlated significant with either total instructional expenditure per stude credit hour or mean faculty salary. For mean class si only one correlation, that for the MPE sciences, w significant (at the 5% level).

More significant correlations were obtained in co nection with the overall faculty load. Faculty in tho colleges offering a high level of trade-technical cours spent more time in the classroom ($r = .388$) and l time in preparation ($r = -.303$) than faculty in t other subject fields. By comparison, those colleg reporting relatively higher emphasis in the social s ences reported, in addition, that their faculty spe relatively less time in the classroom ($r = -.273$) b more time in preparation ($r = .319$). That fact which correlated most highly on program empha was the index of laboratory emphasis. As expecte life sciences and trade-technical exhibited high positi correlations, whil. the social sciences exhibited a hi negative correlation.

Relationships of the variables used in the analy to the total instructional expense per student cre hour, ranked in order of absolute magnitude of c relation, as follows:

Mean class size	—.619
Assessed valuation per student	.423
Class hours per teaching staff	.379
Mean faculty salary	.376
Ratio of class hours to credit hours	.309
Size (total college student credit hours)	—.261
Social science emphasis	—.157
Trade-technical emphasis	.142
Humanities emphasis	—.137

Life sciences emphasis	.137
Ratio of laboratory class to total class hours	.119
MPE sciences emphasis	—.115
Preparation hours per teaching staff	.111
Junior college classification emphasis	.068

In general, mean class size, district financial ability, faculty salaries, faculty class hour load, high class hour-credit hour ratios, and size are the most significant variables determining the level of instructional cost.

Table 6 ranks colleges in the first and fourth quartiles according to unit instructional expenditure and provides an indication of the general characteristics of high cost versus low cost programs. Fourth quartile (high expenditure) colleges paid faculty about 12% more than colleges in the first quartile. The high cost colleges also displayed significantly lower class sizes. A rather surprising result of the comparison is that the total faculty load (class contact plus preparation time) was higher in the fourth quartile colleges than in the first quartile colleges. This result, however, is consistent with correlations of these variables on unit costs obtained above. Further, high cost colleges reported a greater emphasis in the technical-vocational areas and less emphasis in the social sciences.

TABLE 4

Expenditures and Program Characteristics by Subject Field Area, Junior Colleges Fall 1963

Subject Field Area	*F.T.E. Faculty*	*Mean Faculty Salary*	*Weekly Faculty Load*		*Mean Class Size*			*S.C.H. per Teaching F.T.E.*	*W.S.H. per Teaching F.T.E.*	*Teaching Salary Expenditure per S.C.H.*
			Class Hours per F.T.E.	*Preparation Hours per F.T.E.*	*Nonlab*	*Lab*	*Total*			
Life Sciences	308	$4,352	21.5	24.5	28	--	28	400	631	$10.85
M.P.E. Sciences	1,111	4,004	18.8	25.1	31	21	28	420	533	9.53
Social Sciences	966	4,028	16.9	28.5	41	22	41	684	701	5.89
Humanities	1,840	4,017	18.2	28.7	28	23	27	417	493	9.63
Total Junior College Classification	2,610	3,726	22.0	21.6	27	21	23	323	496	11.53
Business	797	3,667	19.3	24.4	32	28	30	461	588	7.96
Trade-technical	1,065	3,688	23.5	19.2	22	19	20	267	473	13.83
Health Services	304	3,893	23.3	22.4	24	18	19	176	364	10.70
Personal Services	166	3,179	21.8	20.7	29	34	31	381	539	8.35
Agricultural Sciences	51	4,462	21.9	25.5	21	16	18	301	407	14.81
Applied Graphic Arts	151	4,123	24.1	19.6	17	18	17	254	422	17.65
Education	8	4,464	15.6	29.2	27	--	27	445	446	10.04
Home Economics	69	4,061	21.3	25.5	25	18	21	316	460	12.84
Physical Education and Health Education	539	4,533	24.6	23.0	40	31	32	292	763	15.52

SOURCE: CCHE Cost and Statistical Study, 1965.

TABLE 5

Correlation Coefficients of Program Emphasis on Cost and Instructional Relationships, Junior Colleges, Fall 1963

Cost and Instructional Relationships	*Program Emphasis*[1]					
	Junior College Classification	*Trade-Tech.*	*Life Sciences*	*MPE Sciences*	*Social Sciences*	*Humanities*
Total instructional expenditure per SCH	.068	.142	.137	—.115	—.157	—.137
Mean salary per FTE teaching staff	—.115	.055	.054	.109	—.077	.042
Mean class size (lab and non-lab)	—.114	—.093	.012	.269	.029	.106
Weekly class hours per FTE teaching staff	.285	.338	.018	—.166	—.273	—.247
Weekly preparation hours per FTE teaching staff	—.262	—.303	.149	.036	.319	.230
Ratio of laboratory class hours to total class hours	.236	.434	.547	—.229	—.357	—.144
Size, total student credit hours reported	.074	.221	.001	.142	.132	—.089

[1] Based on ratios of subject area student credit hours to total student credit hours reported in 71 individual colleges.

SOURCE: CCHE Cost and Statistical Study, 1965.

The several relations examined have been of the type where differences in one variable are considered to be due to differences in one other variable. It is possible, however, that the coefficients of correlation obtained are due not only to the interaction of two variables, but to a number of variables acting simultaneously. In order to accurately measure the effect of an independent variable (class size, for example) upon the important dependent variable, instructional cost per SCH, while holding other significant variables constant, a multiple linear regression was calculated from Junior College expenditure data utilizing the following variables:

- x_1 instructional expenditure per student credit hour;
- x_2 mean salary per FTE teaching staff;
- x_3 mean class size (laboratory and non-laboratory);
- x_4 weekly class hours per FTE teaching staff;
- x_5 size (total student credit hours);
- x_6 ratio of trade-technical student credit hours to total student credit hours; and
- x_7 ratio of class hours to credit hours.

The following multiple regression equation was obtained for 71 Junior Colleges during the Fall of 1963:[3]

$$x_1 = 9.50424 + \underset{(.602)}{0.00424\,x_2} - \underset{(.725)}{0.64816\,x_3} - \underset{(.102)}{0.15702\,x_4}$$
$$+ \underset{(.100)}{0.00013\,x_5} - \underset{(.086)}{2.93639\,x_6} + \underset{(.236)}{6.81373\,x_7}$$

The coefficient of multiple determination (adjusted for degrees of freedom lost, $R^2_{1.234567} = 0.693$) is significant and indicates that about 70% of the variation in total instructional expense per student credit hour is explainable in terms of the six independent variables of which mean class size x_3, mean faculty salary x_2, and the ratio of class hours to credit hours (x_7) are statistically significant. The regression coefficients may be interpreted as follows. The net coefficient of 0.00424 for mean teaching salary, for example, indicates that during the Fall of 1963, each increase of $1,000 in average teaching salary was associated, on the average, with an increase of $4.24 in the total instructional expenditure per student credit hour. Similarly, the net coefficient of —0.64816 for average class size indicates that for each decrease of 1.0 in average class size there was an associated increase of $0.65 in total instructional expense per student credit hour. And, finally, an increase of 0.10 in the class hour/contact hour ratio was associated with an increase of $0.68 in total instructional expenditure per student credit hour. The figures in parentheses are partial correlation coefficients and are indicative of the statistical significance of each of the associated variables.

[3] The method of calculation used is the matrix solution suggested by Joan Friedman and Richard J. Foote and reproduced by Ezekiel and Fox in *Methods of Correlation and Regression Analysis* (New York: John Wiley & Sons, Inc., 1959), pp. 507–525.

TABLE 6

Comparison of Program Characteristics of Colleges Ranked in First and Fourth Quartiles According to Instructional Expenditures Per Student Credit Hour

Fall 1963

Item	*First Quartile*	*Mean All Colleges*	*Fourth Quartile*
Total instructional expenditure per SCH[1]	$14.35	$14.69	$19.96
Total teaching expenditure per SCH	9.84	12.15	16.55
Mean teaching salary	$3,584.	$3,965.	$4,006.
Mean class size:			
Total	28.8	28	22.4
Non-laboratory	32.0	31	24.6
Laboratory	23.9	23	19.1
Class hours per week per faculty	19	20	21
Preparation hours per week per faculty	24	25	26
Ratio of laboratory class hours to total class hours	.360	.372	.410
Ratio of contact hours to credit hours	1.263	1.338	1.395
Ratio of Subject credit hours to total credit hours:			
Life Sciences	.034	.041	.041
M.P.E. Sciences	.156	.155	.141
Social Sciences	.235	.219	.205
Humanities	.248	.254	.251
Junior College classification	.280	.279	.314
(Trade-technical)	(.075)	(.094)	(.114)

[1] Student credit hour.

SOURCE: CCHE Cost and Statistical Study, 1965.

TABLE 7

Cost Comparison of Graded and Non-Graded Instruction, by Function
1964–65

Item	Adult Classes		Grades 13 and 14		Total	
	Cost per A.D.A.	*Percent of total*	*Cost per A.D.A.*	*Percent of total*	*Cost per A.D.A.*	*Percent of total*
Administration	$54.52	12.2	$42.09	7.0	$42.57	7.1
Instruction	307.05	68.6	438.96	72.9	433.79	72.8
(Teaching Salaries)	(217.28)	(48.5)	(314.04)	(52.1)	(310.25)	(52.0)
Health Services	1.73	.4	2.39	.4	2.35	.4
Transportation	.00	--	3.82	.6	3.68	.6
Maintenance and Operation of Plant	58.64	13.1	79.34	13.2	78.53	13.2
Fixed charges	25.74	5.7	35.68	5.9	35.29	5.9
Total Current Expense of Education per ADA	$447.68		$602.28		$596.21	

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 8

Attendance in Graded and Non-Graded Instruction
1961–62 to 1964–65

Year	Non-graded		Graded	
	A.D.A.	*Percent*	*A.D.A.*	*Percent*
1964–65	10,899	3.9%	266,902	96.1%
1963–64	10,973	4.5	235,021	95.5
1962–63	10,426	4.8	204,681	95.2
1961–62	10,305	5.1	191,283	94.9

SOURCE: Bureau of School Apportionments, Department of Education.

The variables were chosen solely in an attempt to identify significant relationships in the *cost* differentials of liberal arts versus vocational technical instruction, relationships which might be of practical use in the measurement of Junior College functions. Of special importance for program measurement are the variables for mean faculty salary and the class hour-credit hour ratio. Notably, the variables of size and emphasis on trade-technical instruction were not significant as determinants of variation in unit instructional expense among the Junior Colleges. Thus, if the Junior College program were to be measured by a single average amount (such as the existing foundation amount), variation for differential costs of trade-technical offerings (as opposed to transfer or general instruction) does not seem warranted, at least not until more definitive data are available for examination of the total current expense of education.

Adult Education-Community Service—Expenditures for adult education constitute a minor portion of the total Junior College program but must be examined for possible significance in the state-local fiscal relationship. Such expenditures represented 2.95% of the total current expense of education during 1964–65, and only 2.65% of "total expense".[4] The less expensive non-graded "classes for adults" are reported to require greater administrative support per student, but, at the same time, are characterized by a lower outlay for instruction than is the case for graded instructional offerings (see Table 7). Non-graded activity has been declining in recent years, falling from 5.1% of total attendance in 1961–62, to only 3.9% in 1964–65 (see Table 8). The advisability of recognizing a differential cost for this small a portion of the total Junior College program in any statement of fiscal support may be seriously questioned.

By contrast, the community service function seems to be increasing slightly. In 1961–62, such services accounted for 1.08% of total expense and in 1964–65 the share had risen to 1.97%.[5] There is large variation between individual districts in the level of this activity. In 1964–65, 92% of the Junior College districts reported expenditures in the category ranging from a low of $490 to a high of $530,037. The average expenditure per college was $60,245. The services are

[4] As reported by the Bureau of School Apportionments and Reports, State Department of Education, "total expense" includes capital outlay, food service, and community service expenditures from the General Fund.
[5] Bureau of School Apportionments and Reports, State Department of Education.

local and oriented to the general public and are not a part of the program upon which state participation is based.

Guidance, Counseling, and Remedial Instruction—Data relative to expenditures for what is considered to be a major and unique Junior College function—guidance, counseling, and remedial instruction—are not available on a statewide basis because of current accounting and reporting practices.

Other Cost Factors

Other variables which are relevant to program measurement, are: (1) college size, (2) faculty salary policy, and (3) district organization.

Size—Data examined to this point indicate that the size of the college is not a significant determinant in the unit instructional cost, i.e., there are no apparent economies-of-scale in California Junior College operations. In the multiple regression obtained above, the partial correlation of size on unit instructional expense ($r = .100$) was not significant. The entire group of simple correlations of size upon other variables utilized in the analysis are as follows:

Mean class size	.654
Mean salary per teaching staff	.331
Total instructional expenditure per SCH	—.261
Class hours per teaching staff	—.261
Trade-technical emphasis	.221
Ratio of laboratory class hours to total class hours	.175
MPE sciences emphasis	.142
Social Sciences emphasis	.132
Humanities emphasis	—.089
Ratio of class hours to credit hours	.080
Junior College classification emphasis	.074
Preparation hours per teaching staff	.053
Life sciences emphasis	.001

While there is a highly significant positive correlation of size on mean class size, there is also a significant positive correlation on mean teaching salary (.331) which tends to cancel out the former relationship. The positive correlation exhibited by trade-technical emphasis indicates that the larger colleges offer, on the average, more courses in this area, another factor which tends to limit any potential economies of scale. Results of a similar analysis of 31 Texas Junior Colleges [6] found there was no statistically significant relationship between size and unit operating costs in Texas Junior Colleges either.

Correlations of size on the current expense of education for junior colleges during 1963–64 and 1964–65 as indicated in Table 9, proved relatively insignificant by comparison to coefficients obtained for the State Colleges. These results are linear coefficients, however, and when Junior College size-unit expense relationships are plotted (Figure 2) the actual configuration is somewhat of an L-shaped curve. Further, there appears to have been a natural distinction between those Junior Colleges with more than 1,000 a.d.a. and those with less. The smaller colleges are characterized by exceptionally high expenditures (see Table 10) while there is no discernible relationship between size and unit expenditure in colleges with more than 1,000 a.d.a.

Thus, despite the fact that the larger colleges exhibit larger average class sizes (an important economy factor), economies inherent in the size of operations do not occur primarily because the larger colleges pay higher average teaching salaries, require less class contact hours per teacher, and offer more trade-technical instruction than do the smaller colleges. There is, however, a basis for establishing differential expenditure

[6] T. E. Jordan, "An Exploration of the Relationships Among Size, Cost, and Selected Educational Opportunities in Certain Texas Public Junior Colleges", Unpublished doctoral dissertation, University of Houston, 1965.

TABLE 9

Correlation Coefficients of Total Expenditure Per Student on Size, Junior Colleges and State Colleges 1963–64, 1964–65

Item	*1963–64*		*1964–65*	
	n	r	n	r
Junior Colleges				
Separate districts	48	—.113	55	—.221
Unified Districts	--	--	8	—.314
Unified and high school districts	16	—.383	--	--
State Colleges	16	—.675	16	—.893

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 10

Comparison on Functional Expenditures For Large and Small Separate Districts 1963–64, 1964–65

	1963–64		*1964–65*	
	Less than 881 A.D.A.	*More than 881 A.D.A.*	*Less than 1163 A.D.A.*	*More than 1163 A.D.A.*
Number of districts	11	37	12	43
Administration (per ADA)	$107	$40	$114	$41
(percent)	13.3%	6.9%	13.2%	6.8%
Instruction (per ADA)	$529	$420	$520	$439
(percent)	64.7%	72.0%	60.0%	73.2%
(Teachers' Salaries) (per ADA)	($385)	($298)	($408)	($310)
(percent)	(47.1%)	(51.1%)	(47.1%)	(51.7%)
Maintenance and Operation of Plant (per ADA)	$124	$84	$124	$84
(percent)	15.2%	14.4%	14.3%	14.0%
Fixed charges (per ADA)	$58	$33	$59	$36
(percent)	7.1%	5.7%	6.8%	6.0%
Total	$817	$583	$866	$600

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

levels for those colleges having less than 1,000 a.d.a. and those having more.

Salary—Previous analysis points to the importance of average faculty salaries as an influence upon the variation in expenditure which occurs between Junior Colleges. Examination of the district salary schedules for teaching personnel during 1964–65 reveals considerable variation as indicated below:[7]

SALARY SCHEDULE FEATURES[7]

	Number of Steps	*Number of Classes*	*Minimum Salary*	*Maximum Salary Without Doctorate*	*Maximum Salary With Doctorate*
mean	13.5	5.7	$5,777	$11,085	$11,504
median	13	6	5,750	11,200	11,635
range					
high	16	14	7,290	12,300	12,730
low	10	1	4,500	9,000	9,200

[7] California State Department of Education, *Salary Schedules for Teaching Personnel in California Public Junior Colleges*, 1964–65, A Report Prepared by the Bureau of Junior College Education, November, 1964.

The correlation coefficients obtained for mean salary per teaching staff during the Fall of 1963 are as follows:

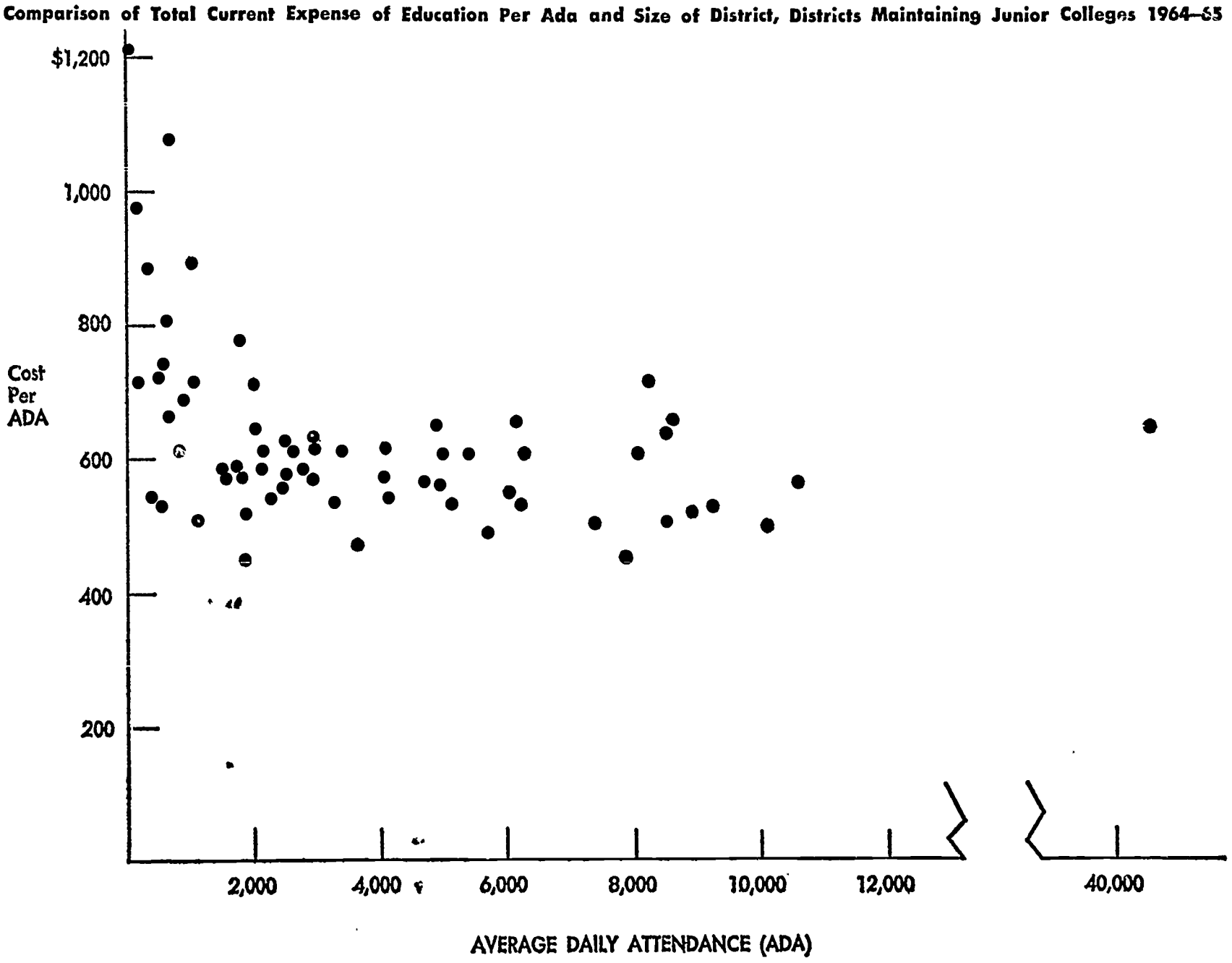
Preparation hours per teaching staff	.776
Mean class size	–.602
Total instructional expenditure per SCH	.376
Size, total student credit hours	.331
Ability (assessed valuation per ADA)	.117
Junior College classification emphasis	–.115
MPE sciences emphasis	.109
Social sciences emphasis	–.077
Class hours per teaching staff	.069
Trade-technical emphasis	.055
Life sciences emphasis	.054
Humanities emphasis	.042

The highly significant correlations for mean class size and faculty preparation hours are rather surprising and not readily explainable. Relationships between salary and both size and unit instructional cost were noted earlier.

Full-time teaching personnel received a mean salary payment of $9,601 during 1964–65 and $10,199 dur-

FIGURE 2

Comparison of Total Current Expense of Education Per Ada and Size of District, Districts Maintaining Junior Colleges 1964–65



ing 1965–66.[8] Comparable mean salary levels for the State Colleges were $9,696 and $10,620, respectively.[9] Thus, the basic difficulty for the Junior Colleges exists not so much in absolute salary levels as in the variation between districts.

A uniform statewide salary scale is often mentioned as a solution to the variation in the ability of districts to bid for faculty. Even with uniform scales, however, wealthy districts would still be able to pay higher salaries unless the level of compensation for new appointments and policies for merit and promotion were also standardized. Rather than impose such restrictions on the local administration, a more effective method is to insure that each district has sufficient faculty salary funds to be able to hire faculty whose competence is equal to (or nearly so) that of faculty being hired elsewhere. Some districts must pay higher than average compensation to attract comparable faculty. Measures of such "exceptional" need might include (1) vacancy rates, (2) numbers of part-time or hourly personnel, (3) average level of education of staff, and (4) average level of experience of staff.

[8] State Department of Education, *Salaries of Certificated Employees in California Public Schools, 1964–65*, Prepared by the Bureau of Education Research, 1965; Also unpublished reports of the Bureau of Education Research for 1965–66.

[9] CCHE, *Annual Report on Faculty Salaries, Benefits and Recruitment*, January 1966.

Organization—A final factor in program measurement is that of district organization. It is well known that Junior College programs administered by unified and high school districts report a smaller per student expenditure for instructional programs than those in separate Junior College districts. Less often examined, however, are differences in expenditure levels between multi-college and single college districts. This comparison is important since the shift toward multi-college districts is probably the single most significant organizational trend of recent years. Data in Table 11 indicate that the average multi-college district was spending approximately $23 per student less for administration than the aggregate of single campus districts during 1964–65. At the same time, however, the average multi-campus district spent $26 per student more for instruction. All multi-college districts spent proportionately less for administration and more for instruction than that level reported by single college districts. Differentials in other expenditures were not significant.

MEASUREMENT OF STUDENT POPULATION

The student population determines the instructional "workload" of the Junior Colleges and a measurement of this population is necessary so that funds can be distributed equitably according to need. A measure-

TABLE 11

Comparison of Functional Expenditures of Multi-College Districts and Single College Districts

1964–65

Item	*State Center*	*Los Angeles*	*Peralta*	*Contra Costa*	*San Diego*	*Total Multi-College Districts (unweighted average)*	*Single College Districts (unweighted average)*
Number of Colleges	2	7	2	2	2	15	60
Total ADA	6,037	41,151	8,262	8,303	8,548	72,301	157,672
Administration (per ADA)	$34.60	$54.64	$55.53	$23.00	$35.62	$40.66	$64.10
(percent)	6.2%	8.4%	7.7%	3.5%	6.9%	6.6%	10.1%
Instruction	$420.10	$450.37	$525.51	$488.93	$399.21	$456.82	$440.50
	74.8%	69.0%	73.5%	75.9%	77.1%	73.9%	69.5%
Health Services	$1.80	$0.97	$4.56	$4.50	$2.67	$2.92	$2.20
	0.3%	0.2%	0.6%	0.7%	0.5%	0.5%	0.3%
Transportation	$7.10	$1.08	$0.89	$3.60	0	$2.54	$6.40
	1.3%	0.2%	0.1%	0.6%	0	0.4%	1.0%
Management and Operation of Plant	$66.40	$107.65	$44.22	$88.04	$54.51	$72.16	$81.20
	11.8%	16.5%	6.2%	13.7%	10.5%	11.7%	12.8%
Fixed Charges	$31.90	$38.52	$84.52	$35.72	$25.80	$43.28	$39.20
	5.7%	5.9%	11.8%	6.0%	5.0%	6.9%	6.2%
Total Current Expense	$561.90	$653.23	$715.23	$643.87	$517.84	$618.38	$633.60

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

ment by headcount is not desirable since the program loads carried by Junior College students vary greatly. Some students attend on a part-time basis, carry only a few units of classwork, and represent a smaller burden upon the staff and facilities than do the students who carry a full class load. To count both types of students on a comparable basis would distort the measure of educational need. A desirable measure would not be influenced by full-time or part-time attendance. Currently, such a measure is used in the Junior Colleges to describe the student population and is based upon the actual attendance of students in the classes in which they are enrolled. If a student is enrolled in classes that meet a total of 15 hours each week and if he is in attendance each one of these hours he generates one unit of "average daily attendance". If he is not in attendance each of the 15 hours he generates somewhat less than one unit. Fifteen hours of attendance is used as a basis on the assumption that a full-time student will attend this number of hours each week. A measure relating students and the classes which they attend, has many advantages, since most instructional costs are related to courses—size of course or class, equipment, facilities, etc. Since these costs, however, are largely fixed by the enrollment in courses, and do not vary as attendance may vary, a more desirable student measure would be determined on the basis of enrollment rather than attendance.

A student measure frequently used in higher education to indicate educational need is also based upon the enrollment of students in courses, but is determined through the credit value of the courses rather than the hours per week the course meets. This measure, designated full-time equivalent (FTE), relates the equivalency of full-time to enrollment in courses providing fifteen units of credit each semester. Table 12 compares the several measures discussed above.

TABLE 12

Alternative Student Population Measures, Junior Colleges
Fall 1963

	Total[1] *Enrollment*	*Full Time*[2] *Enrollment*	*Average*[3] *Daily Attendance*	*Contact*[4] *Hour Equivalents*	*Credit Hour*[4] *Equivalents (FTE)*
Systemwide Total	368,008	128,221	230,744	269,464	201,357
Mean college	5,183	1,806	3,722	3,795	2,836
Range					
Low	356	40	162	219	155
High	16,241	5,524	36,363	11,556	9,159

[1] Headcount.
[2] Students carrying 12 or more units.
[3] By district (rather than by college); excludes nongraded.
[4] Based upon 15 hours per "equivalent".

SOURCE: CCHE, Cost and Statistical Study, 1965; Department of Finance, Report of Total and Full-Time Enrollments, Fall 1963.

Both the University and State Colleges use the "full-time equivalent" student based upon credit hours for determining instructional and supporting expenditures. Faculty load, however, is generally described in terms of the course contact (rather than credit) hours that a faculty member is assigned.

As is usually the case with the Junior Colleges, the primary concern is with the extent of variation in proposed measures between individual districts. Comparison of ratios of class hours to credit hours in individual colleges thus becomes relevant. As indicated in Table 13, Junior Colleges displayed no more variation (a coefficient of variation of 7.3%) than did the State Colleges (8.4%) during the Fall of 1963. The University reported the least variation. For all three segments, the systemwide class hour/credit hour ratio was approximately 1.3. Only Los Angeles Trade-Technical College departed significantly from the usual ratio.

TABLE 13

Segmental Comparison of Contact Hour-Credit Hour Ratios
Fall 1963

Item	*Junior Colleges*	*State Colleges*	*University*
Number of campuses	71	16	5
Range	1.16–1.78	1.08–1.50	1.28–1.41
Mean	1.338	1.293	1.346
Median	1.32	1.29	1.31
Standard Deviation	.098	.109	.052
Coefficient of Variation	7.3%	8.4%	3.9%

SOURCE: CCHE Cost and Statistical Study, 1965.

The student measurement based upon the number of class hours per week in which a student is enrolled would appear to be a desirable and useful measure of the instructional workload. Such a measure, called "Weekly Student Class Hour" (WSCH), is frequently used in higher education, and is currently used by the Junior Colleges to measure enrollments and capacity with respect to capital outlay expenditures. The measure lends itself to describing costs, faculty load and class size. Further, through an appropriate divisor the measure can be converted to a measure of full-time equivalency.

A good deal of discussion has been carried on in recent years regarding the definition of "defined adult". If the purpose of this distinction is to determine the costs needed to support one type of student as opposed to another, it should be noted that the bulk of the defined adults attend graded classes which (as in Tables 1 and 2 of Appendix B) are significantly more expensive than non-graded classes. There is no particular relationship between defined adults and non-

graded courses. The defined adult is, therefore, relatively useless as an index for measuring need.

The present method of distributing state assistance dictates that Junior Colleges must maintain records of students based upon whether they are (1) resident of the particular district, (2) resident of another district, or (3) residents of no district. Such measures relate only to the method of fund distribution and have no relationship to possible educational need based upon student numbers. The analysis in Chapter V will examine the use of these distinctions for distributing funds.

CHAPTER III

SOURCES OF SUPPORT

Revenue to support public education is most often extracted on the basis of ability-to-pay. This concept is generally described as follows:

> ". . . The state should insure equal educational facilities to every child within its borders at a uniform effort throughout the state in terms of the burden of taxation; the tax burden of education should throughout the state be uniform in relation to tax-paying ability . . ." [1]

This type of revenue support is currently utilized in most public elementary and secondary school systems. In public institutions of higher education, however, there has been an increasing tendency in recent years to charge the student a tuition for all or part of the cost of his instruction, i.e., a shift away from the ability-to-pay concept toward a benefits basis.

The second criterion used in this study is related to such concepts of the sources of Junior College financial support.

> *Criterion Number 2:* Revenue to support the state-local fiscal relationship should be exacted equitably from those contributors involved; based primarily upon (1) ability-to-pay (as between districts and as between income classes) and, (2) to the extent appropriate, benefits received.

The idea of equalization between districts is implicit in this criterion if it is found that the financial ability of such districts vary significantly. Ability-to-pay as between income classes, by contrast, relates to the effective incidence of taxation upon individual tax-paying units within the districts.

The first section of this chapter examines existing and potential contributors to the support of the Junior Colleges and compares this pattern with that for other segments of California public higher education and with Junior Colleges in other states. Data from the usual sources are supplemented by the results of two Council staff questionnaires: one sent to all Junior College districts in California regarding student charges and the other circulated among eight selected states [2] regarding current fiscal patterns.

The second section of the chapter examines related equity questions and explores existing methods of equalizing tax bases through the use of state-local subvention programs.

PATTERNS OF CONTRIBUTION

Student Contribution

Charges for Instruction—All states responding to the Council questionnaire, with the exception of Arizona, charge varying tuition rates to both regular and adult students. The student contribution in all the sample states, except Illinois and Oklahoma, has, however, been decreasing since 1960–61. Nationwide, during 1960–61, the student contribution in all types of Junior Colleges amounted to an average of 35% of expenditures. Considering only those 27 states with a governance pattern similar to that in California, the effective student contribution was an average of 31.3% during 1960–61. California was the only state of the 28 which did not require some student contribution. (See Tables 1 and 2, Appendix C.)

Support for adult education and public service are reviewed in Tables 14 and 15. Adult education classes offered in the Junior Colleges were slightly more expensive to operate than those in either unified or high school districts during 1964–65. While the user fees were relatively comparable at all three levels, both high school and unified districts received substantially more state aid for their programs than did Junior Colleges. The colleges relied to a much greater extent upon specific taxes for the "adult" program than did the other levels.

University and State College Extension programs consist primarily of graded instruction. The state provides eight percent of University Extension expenditures and no funds to the State Colleges Extension program. In contrast, the state general fund provided 36% of the costs of non-graded "classes for adults" in the Junior Colleges (Table 15). The University and State Colleges assess relatively uniform per unit charges for instruction. Tuition charges for defined adults in the Junior Colleges are permissive and, as a result, such charges vary significantly between districts. Of 71 districts responding to the Council's questionnaire, 15 charged "adults" an average registration fee of $2.90 in graded and $3.45 in non-graded courses. Of the 15 districts nine also charged adults an average of $4.40 per graded unit and $3.82 per unit in non-

[1] G. D. Strayer and R. M. Haig, *The Financing of Education in the State of New York*, Educational Finance Inquiry Commission (New York: The Macmillan Co., 1923), Vol. I p. 173.

[2] Arizona, New York, Florida, Wisconsin, Texas, Illinois, Michigan, and Oklahoma.

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graded classes during 1964–65. An additional nine districts charged adults only for non-graded instruction. Thirty-eight districts reported no "adult" tuition fees of any sort.

While the individual contributes less and the state substantially more for instruction of "Adults" in the Junior Colleges than in the other segments, it should be noted that the University receives more than one-fourth of its support for public service activities from the state general fund. In the Junior Colleges, this activity is supported by a permissive-override (property) tax, which must be set at a level that will support estimated expenditures (but not exceed 5¢ per $100 of assessed valuation). During 1964–65 three-fourths of the 55 separate districts levied this tax. The average levy was $0.034, slightly below the maximum rate. Based upon the recorded community service taxes for separate districts, total income from this source would have been $4.9 million during 1964–65.[3] Actual community service expenditures for the same

[3] Source: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 14

Income and Expenditures for Classes for Adults
Junior College, Unified, and High School Districts
1964–65

Item	*Expenditures*			*Income*		
	Total	*Per ADA*	*User Fees*	*State*	*Specific Taxes*[1]	*Other*
Junior College[2]						
Amount	$3,382,988	$458.41	$185,546	$1,235,584	$314,013	$1,647,855
Percent	--	--	5.4%	36.4%	9.2%	49.0%
Unified						
Amount	$23,219,866	$392.26	$1,017,628	$9,630,453	$75,415	$12,496,370
Percent	--	--	4.3%	41.4%	.3%	54.0%
High School						
Amount	$7,774,609	$404.53	$463,865	$3,647,218	$51,525	$3,612,001
Percent	--	--	6.0%	46.8%	.7%	46.5%

[1] Junior College tuition and equalization aid offset taxes.
[2] Separate districts.
SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 15

Segmental Expenditures, State Support, and Fees for Extension, Adult Classes, and Public Service Activities
1964–65

Item	*Total Expenditure*	*State Support*	*Percent State Share*	*Fees*
University				
Agricultural Extension	$7,788,196	[1]$5,903,004	75.8%	
Extension	$11,592,038	[1]$883,617	7.6%	$15–20/unit
Public Service	$1,102,393	[1]$287,799	26.1%	
Totals, Extension and Public Service	$12,694,431	[1]$1,171,416	9.2%	
State Colleges				
Extension	[2]$1,198,475	0	0	$10–20/unit
Junior Colleges				
Classes for adults	$4,879,236	[3]$1,750,599	35.9%	Various
Community Service	$3,614,689	0	0	
Totals, Classes for adults and Community Service	$8,493,925	$1,750,599	20.6%	

[1] Reported as "University General Funds", all or nearly all of which are derived from the State General Fund.
[2] Reimbursements from student fees totaled $1,361,883, with a resulting surplus of $163,408.
[3] State School Fund, does not include Vocational Education Aid.
SOURCE: State of California Support and Local Assistance Budget for 1966-67; Bureau of School Apportionments and Reports State Department of Education; University of California.

TABLE 16

Enrollment and Support for Summer Session, Three Segments 1964–65

Item	*Adults*	*Other than Adults*	*Total*	*Fees*
Junior Colleges				
ADA	1,846	11,110	[1]12,956	None
Total Current Expense				
Total	--------	--------	$7,803,140	
Per ADA	--------	--------	[2]$602.28	
State Apportionment				
Total	$265,639	$2,223,555	$2,489,194	
Per ADA	$143.90	$200.14	$192	
Percent of Current Expense	--------	--------	31.9	
University				
Enrollment	--------	--------	25,147	(various)
Expenditure	--------	--------	$1,855,470	
State Colleges				
Enrollment	--------	--------	--------	$14.25/unit
Expenditure	--------	--------	[3]$4,136,112	

[1] Graded instruction only. Attendance in "classes for adults" conducted during summer session is indeterminate.
[2] Average full year expenditure for graded instruction. Actual summer expenditures per ADA may be lower, increasing the relative state share of support.
[3] Includes personal services, operating expenses, and estimated equipment and staff benefits.
SOURCE: State of California Support and Local Assistance Budget for 1966–67; Bureau of School Apportionments and Reports, Department of Education.

year were reported at $3.5 million. Some districts raised substantially more than they spent, while other districts did not have sufficient revenue to support the reported expenditures.

Another significant difference among the three segments is the student contribution for summer session instruction (see Table 16). The student supports nearly the entire cost of the summer program in the State Colleges and the University, whereas no charges (other than possible fees for "defined adults") are made in the Junior Colleges. The state supported at least 32% of estimated summer expenditures in the Junior Colleges during 1964–65.

An out-of-state student attending the University and State Colleges is charged tuition for the average teaching expense [4] which is estimated for the year the student is enrolled. Similar tuition charges in the Junior Colleges, by contrast, are based upon an actual cost recorded two years previously. For example, the $10.40 per unit charge for 1966–67 is based upon the actual expenditure for the 1964–65 fiscal year. Thus, the charge may be as much as 5% below the actual cost, based upon historical increases in Junior College unit expenditures.

TABLE 17

Expenditures and Fees for Health Services, Three Segments 1964–65

Item	*Junior Colleges*	*State Colleges*	*University*
Cost per Student			
Mean	$1.73	$20.28	$67.23
Median	2.26	19.75	67.47
Range			
high	$8.71	$26.93	$118.49
low	0	6.97	53.43
Fees (mean)	[1]0	[2]$20.28	[2]$67.23

[1] Only two districts charged the permissive health service fee in 1964–65; the rates were $1.50 and $6.00.
[2] The actual rates vary from campus to campus depending upon operating costs. In both cases the full cost is borne by the student through an incidental fee (University) or materials and service fee (State Colleges).
SOURCE: Bureau of School Apportionments and Reports, State Department of Education; State of California Support and Local Assistance Budget.

Other Student Charges—Junior colleges are permitted by Statute to charge a fee up to $10 for health service and parking. However, of 71 colleges responding to the Council questionnaire, only two charged a health service fee and four charged parking fees during 1964–65 and 1965–66. Four additional districts indicated a health service fee would be charged in 1966–67 and three indicated they would initiate parking fees.

A comparison of the health service costs and charges for 1964–65 is presented in Table 17. In both the University and State Colleges the full cost of the service is borne by the student. Obviously there is a higher level of service in these segments than in Junior Colleges. Examination of health service and parking fees practices in other states reveals an equally inconsistent pattern. As shown in Table 18, the tendency is toward no charges, or charges in some (but not all) colleges within a system.

No data are available on parking expenditures in the Junior Colleges.

Guidance and counseling expenditures are not separately identified on Junior Colleges budgetary ac-

[4] The average teaching expense as defined by the Master Plan Survey Team.

counts. As expected none of the responding Junior Colleges in California reported charges for such services since the Statutes do not authorize such fees. While the State Colleges and the University both charge for such services a comparison among the segments is not entirely appropriate since the type of services offered in the Junior College is not comparable to that in the University or State Colleges. None of the other selected states reported charging for guidance and counseling.

Students at the University and State Colleges support a portion of the expense of their instruction through a laboratory fee. Only 11 Junior College districts reported charging for laboratory or shop costs and most of these related to materials used in these courses. Again, there was no particular consistency in the practices reported by other states.

TABLE 18

Student Charges in Junior College Systems of Six Selected States [1]

	Health Service	*Parking*	*Counseling*	*Placement*	*Lab. and shop materials*
Charged in all colleges	1	--	--	--	1
Charged in some colleges	2	3	--	--	3
None charged	3	3	6	6	2

[1] Arizona, Texas, New York, Florida, Wisconsin, Illinois.
SOURCE: CCHE Questionnaire, 1966.

State and Local Contributions

The degree to which the state and local districts should participate in supporting Junior College programs has been discussed, in recent years, from a number of different standpoints. The Master Plan recommendation that state support reach 45% by 1975, is often cited as an appropriate approach. Another viewpoint holds that the state share should be increased, but not to more than 50% since the local district would, in such a case, presumably relinquish much of their local control. Arguments are made for increased state participation because the state share of educational expenses in the other segments is much higher. No agency or association has recommended decreasing the state share.

Although it is difficult to arrive at a precise statement for cost-sharing, a justified and workable approximation may be arrived at by: (1) generally identifying statewide versus purely local interests; (2) considering appropriate support sources and equalization procedures; and (3) meeting as nearly as possible the two criteria for equity in contribution and educational opportunity which have been set forth above.

California supported its Junior Colleges less at the state level during 1964–65 than did any of the responding states with the exception of Texas (see Tables 1 and 2, Appendix C) Since all of the states required some student contribution, the local share was smaller in all cases than the two-thirds supported by local taxpayers in California. The 27 states with governance patterns similar to that in California (during 1960–61) reported an average contribution pattern as follows:

State	26.8 percent
Local	41.9
Student	31.3

Federal Contribution

Currently, Federal funds used for current operations amount to only 2% of total Junior College income. Most of these funds are earmarked for specific purposes, such as vocational education, student loans, language laboratories, etc. Funds received as a result of the "impacted area aid" (P.L. 874) and Forest Reserve funds are for general expenditures in the district. During the 1964–65 fiscal year the following federal income was reported:[1]

Maintenance and operation (PL 874)	$1,777,348
Veterans education	8,280
School construction (PL 815)	13,933
Vocational Education Act	1,898,585
National Defense Education Act	887,989
Forest Reserve funds	16,511
Miscellaneous	305,864

[1] Taken from report by Bureau of Junior College Administration and Finance, State Department of Education, February, 1966.

Federal funds coming to all institutions of higher education is the subject of another Council study to be completed within the next several months.

EQUITABLE CONTRIBUTION

Tax Equity

Determinations of "equity" in taxation are based, in part, upon the effective percentage that the tax represents of a person's personal income, otherwise known as the rate of incidence Many studies of tax incidence group individuals according to successive income levels, then determine the rate of incidence for each level. The incidence of those taxes which support California Junior Colleges has been examined in at least two studies done recently for the Legislature.[5] As commonly postulated in taxation theory, the property tax is found to be distinctly regressive, i.e., it imposes a higher effective rate upon those individuals with low income than upon those with higher incomes. The net incidence of those taxes comprising the state general fund (mostly personal income and sales taxes) was nearly proportional, i.e., the same effective rate upon all income levels. Since the local

[5] California State Assembly, Interim Committee on Revenue and Taxation, *Taxation of Property in California*, Vol. 4, Report No. 12, December 1965; and California State Senate, Fact Finding Committee on Revenue and Taxation, *Property Taxes and Other Local Revenue Sources*, March 1965.

property tax comprises approximately two-thirds of the Junior Colleges income and the state general fund only one-third, the composite of state and local taxes used to support California Junior Colleges is regressive. This result contradicts criterion Number 2, where equity of contribution on the basis of ability-to-pay as between income classes would imply that, at the minimum, the effective tax rates paid should be the same regardless of income level.

Another relatively important, though less objective, method of analyzing "tax equity" is a review of taxpayer acceptance of particular taxes. While there is no valid method of measuring reaction to general fund taxes, reaction to local property taxes may be measured by the successes or failures of local bond and tax override elections. Data on override elections are not available. However, in Table 3, Appendix C, the outcomes of bond elections in Junior College districts between 1960–61 and 1964–65 are tabulated. There appears to be a slight trend toward more successes with all elections held in 1964–65 having been successful. Between 1954–55 and 1963–64, 33% of the Junior College bond proposals were rejected. In this regard, the colleges were less successful than the elementary and unified districts (who had a 23% rejection rate) but exhibited about the same success as high school districts.[6]

District Equalization

Equally important as equity between income classes is equity of contribution by individuals residing in different districts. If local revenue sources are utilized for at least part of the Junior College income, some recognition must be taken of the fact that not every district has the same local taxing ability. Such variations are presented in Table 19. While the variation in assessed valuation per student is most significant, even estimated personal income per capita varies markedly from district to district. The per-capita income of high districts is three times that of the low district.

Ability—Numerous measures of local school district ability have been proposed but only a few are used in actual practice. The proposals range from highly theoretical indices of economic activity to more practical indices which measure the local basis for taxation. Florida currently employs an index of local district ability which includes the following: sales taxes collected, gainful employment, value of farm products, assessed valuation of railroads and telegraph units, and auto tax registration.[7] A recent study conducted in Wisconsin concluded that local fiscal capacity could not be measured by the single variable of equalized valuation of property if any equitable relationship to income was to be achieved. Unfortunately, the study did not recommend any specific measure to be substituted for assessed valuation.[8]

TABLE 19

Variation in Financial Ability of Districts Maintaining Junior Colleges

1963–64, 1964–65

Item	*Assessed Valuation Per ADA*		*Personal Income Per Capita*[1]	
	Amount	*Ratio to Low*	*Amount*	*Ratio to Low*
1964–65				
High	$500,000	9.12	$3,031	2.98
Median	149,977	2.74	2,123	2.08
Mean	123,077	2.22	2,286	2.25
Low	54,722	----	1,017	----
1963–64				
High	586,533	10.69	NA	NA
Median	151,774	2.77		
Mean	158,914	2.90		
Low	54,885	----		

[1] Adjusted gross income estimated for 1964 income year by the Franchise Tax Board, per capita figures for districts estimated on basis of location of assessed valuation where necessary.

SOURCE: Franchise Tax Board; Department of Education; Department of Finance.

For districts maintaining Junior Colleges during 1964–65 in California, the data examined in this study revealed that the tax basis (assessed valuation per a.d.a.) was found to correlate negatively ($r = -.226$) with the source from which the taxes are paid (estimated personal income per capita). There is thus no significant positive relationship between the property basis and income basis (at least not in the California Junior College situation). In Table 20 three different measures of local ability are compared for the San Francisco and Yuba Junior College districts. While the difference in local ability between the two districts is obvious, the magnitude of this difference changes markedly as different indices are employed.

It is sometimes argued that a measure of local district ability must recognize the effort that is required for local services other than education. In other words, a district which must levy a high property tax to support necessary local services because of a relatively low property base is, in a sense, less able to support the local Junior College than is that district in which the property tax levy for services other than education is quite low. A number of "effort" variables are correlated on "ability" variables for Junior College districts in Table 21. The property tax rate for all local services correlates significantly with personal income per capita ($r = .505$). This result is consistent with the correlation ($r = -.439$) of total local tax rate on the tax burden index. In other words, those districts with higher local tax rates also displayed, on the average,

[6] California State Assembly, *Taxation of Property in California*, 1964, p. 318.

[7] Response to CCHE questionnaire, August, 1966.

[8] LeRoy J. Peterson *et al.*, *Economic Impact of State Support Models on Educational Finance*, Cooperative Research Project No. 1495 (Madison: University of Wisconsin, 1963).

higher personal income per capita. Local ability as measured by "assessed valuation per a.d.a." did not correlate significantly on any of the effort variables examined; nor were significant relationships recorded when the property tax rate for local services other than education was examined. There is a significant positive correlation for the Junior College tax rate on the total tax rate for all local services until the levies for education are removed. The coefficient then falls to —.041.

Another measure of the "other local responsibility" might recognize the element of population as an index of what local services other than education would or should be required. If assessed valuation per capita is utilized to recognize the "density" factor, then the essential difference between such a measure and the more traditional assessed valuation per student basis becomes the ratio of population to students in the various districts within a Junior College system. An examination of such ratios in a number of California districts is presented in Table 22. Generally, the more urban areas display the highest ratios of population to students and differ markedly from those ratios obtained in the relatively rural districts. A specific illustration of such differences appeared in Table 20.

TABLE 20

Comparison of Relative Ability of San Francisco Unified and Yuba Junior College Districts

1964–65

Item	*San Francisco*	*Yuba*	*Ratio of San Francisco to Yuba*
ADA in junior college	8,072	2,324	
District population[1]	755,700	40,800	
Ratio population to ADA	93.6	17.6	
Assessed valuation			
Amount	$1,641,063,874	$73,802 945	
Per ADA	$234,203	$11z,333	2.08
Per capita	$2,172	$1,809	1.20
Personal income[2]			
Amount	$2,278,255,051	$41,512,177	
Per ADA	$282,242	$17,862	15.80
Per capita	$3,015	$1,017	2.96
Taxable transactions			
Amount	$1,923,237,000	$60,263,000	
Percent of state total	6.25%	0.20%	
Per capita	$2,545	$1,477	1.72

[1] July 1, 1964, provisional.
[2] 1964 adjusted gross income estimate by Franchise Tax Board.
SCURCE: Board of Equalization Annual Report, 1964–65; Bureau of Education Research, State Department of Education.

TABLE 21

Correlation Coefficients of Ability, Effort, and Aid Variables on Local Effort Variables.—Districts Maintaining Junior Colleges

1964–65

Item	*Junior College Tax Rate*[1]	*Property Tax Rate for Local Services*	*Property Tax Rate for Local Services less Education*	*Index of Property Tax Burden*[2]
State aid as percent of expense	—.020	—.520	.105	.001
Assessed valuation per ADA	—.155	—.205	—.143	.179
Personal income per capita	.100	.505	.153	—.862
Junior college tax rate	----------	.271	—.041	.057
Property tax rate for local services	----------	----------	.592	—.439
Property tax rate for local services less education	----------	----------	----------	—.171

[1] Only separate districts used in correlations for "junior college tax rate".
[2] Based upon method described by H. S. Frank in "Measuring State Tax Burdens," National Tax Journal, 1959.
SOURCE: State Board of Equalization, *Annual Report* 1963–64, 1964–65; Bureau of Educational Research, State Department of Education; Research and Statistics Section, Franchise Tax Board; State Department of Finance, *Report on California Population—1964.*

This study has not addressed itself to possible inequities in practices of assessing real property. However, several adjustments in assessments are of value if the local ability measure is to be comparable throughout the state. One adjustment, necessary when assessments are set at only a fraction of full market value, is to insure that the same fractional assessment is applicable to all districts. This may be done by comparing the average assessment ratio in any given district to an assessment ratio representing the statewide average and adjusting the assessment of the district(s) to establish uniformity. This is accomplished in California by what is known as the "Collier Factor".

Other adjustments in local ability are used to recognize that local districts receive income from sources other than the student or local property taxpayer. Such increments may be viewed as increases in local ability. In California, adjustments in assessed valuation are made for federal "impacted area" (P.L. 874) monies and for "miscellaneous income". In either case, only a portion of the income is recognized as being an increment to local ability. The systemwide magnitude of such adjustments in California is indicated in Table 23. The net result is a systemwide increase in local ability over that indicated by the unadjusted valuation and, therefore, a decrease in state assistance.

Effort—In examining the implications of criterion number two (equity of contribution as between districts), it is useful to review the actual tax effort that local districts make in order to fund the total educational program. The objective of criterion number two is that, given comparable educational expendi-

TABLE 22
Comparison of Ratios of District Population to Average Daily Attendance Selected Districts 1964–65 [1]

Campus	*Ratio of Population to District ADA*	*Campus*	*Ratio of Population to District ADA*
San Francisco City College	93.6	Marin	59.9
Ventura	68.2	Contra Costa	59.4
Los Angeles County districts	(61.4)	Santa Rosa	50.9
Los Angeles City	96.9	San Joaquin	56.0
El Camino	58.7	Antelope Valley	43.5
Mt. San Antonio	47.2	Shasta	31.2
Compton	46.3	Orange County districts	(25.1)
Long Beach	37.4	Orange Coast	35.2
Glendale	33.8	Santa Ana	27.4
Cerritos	25.6	Fullerton	15.6
Pasadena	20.6	Yuba	17.6
Santa Monica	20.0		
Citrus	18.7		
Rio Hondo	16.2		

[1] All population figures (except San Francisco and Yuba) are estimated based upon relative location of assessed valuation; as a result, some ratios (especially those for individual districts in Los Angeles and Orange Counties) may vary slightly from the actual situation.

SOURCE: Bureau of School Apportionments and Reports, State Department of Education; State Department of Finance, *Report on California Population—1964.*

TABLE 23
Adjustments in Assessed Valuation for Collier Factor, P. L. 874 and Miscellaneous Income, Junior College Districts, 1961–62 to 1963–64.

Item	*1963–64*	*1962–63*	*1961–62*
Total assessed valuation	$28,364,694,422	$26,130,798,205	$23,754,031,257
Adjustment for assessment ratio	−161,157,432	−30,634,474	−143,169,665
Percent decrease	−0.57%	−0.12%	−0.60%
Adjustment for P.L. 874 entitlement	$184,002,657	$182,234,021	$131,967,881
Percent change	0.65%	0.70%	0.56%
Adjustment for miscellaneous funds	$49,858,230	$50,201,520	$28,911,271
Percent change	0.17%	0.19%	0.12%
Adjusted assessed valuation	$28,437,397,877	$26,332,599,272	$23,771,740,744

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

tures, there be as little variation in tax rates as possible between districts based upon relative taxpaying ability. Thus, if taxpaying ability is measured the same way in all districts, the tax rates in all districts should be uniform.[9]

Junior College district tax rates during 1964–65 are summarized in Table 24. The "mean" column represents the unweighted average of those districts who charged the levy concerned. The general purpose tax average of $0.3745 per $100 of assessed valuation exceeds the statutory maximum and, therefore, must include a number of general purpose overrides. The number of permissive overrides and the wide variation in their rates is important. When these permissive levies are included, the total average levy in 1964–65 for current purposes (including pay-as-you-go capital outlay) amounted to slightly more than 43¢ per $100 of assessed valuation. The total range of rates varied from a low of 25¢ to a high of 85¢. When taxes for bond interest and redemption are included, the average total levy for all purposes becomes 52¢. Data for 1965–66 indicate that the total average levy rose to more than 55¢.[10]

Another method of assessing the average statewide tax levy is presented in Table 25. The local property tax share of the total current expense of education was estimated for 1964–65. Those taxpayers residing within districts were levied an average tax of $0.3235. This result differs from that obtained above for actual tax levies in that it represents a weighted rate whereas the rate in Table 24 is an unweighted average of rates in 55 districts. Other more obvious differences are the community service tax and inclusion of capital outlay funding within the general purpose levy.

Table 26 compares the assessed valuation of those areas outside, as opposed to within, Junior College district boundaries. In 1965–66, 90% of the State's assessed valuation was within district boundaries. A "junior college tuition" tax is levied upon property in those non-district areas which send students to Junior Colleges. The rate is computed by taking the actual cost of instruction at the college (less basic aid of $125) plus a "seat fee" [11] for such students, and applying this amount to assessed valuation in the county in which the student resides. Progressively fewer counties levy this tax as more of the state's assessed valuation comes within districts (Table 27). The average (unweighted) tax rate of 22.46¢ per $100 for non-district areas is noticeably lower than that charged district taxpayers. The variation in tuition tax levies is significant, with rates ranging from a low of 2¢ to a high of more than 56¢. The average contribution of the non-district property owner toward the total current expense of education was estimated for 1964–65 in Table 25. The effective tuition tax rate upon non-district property was 32.77¢ per $100 and included 22¢ toward a seat fee and only 11¢ for current operations. The latter rate is in contrast to the 32¢ levy calculated for the district property owner. Such marked variation violates the equity concept contained in criterion number 2.

[9] It may be that some districts wish to tax locally at a higher rate in order to establish a program which may be better than some other districts. The question then becomes one of whether or not such local prerogatives should be allowed when taxpayers may not wish to be taxed at the same rate as another district.

[10] SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

[11] "Seat fee" is $300 per unit of a.d.a.

TABLE 24

Local Property Tax Rates for Junior College Districts
1964–65

Type of Tax	*Districts Levying Tax*		*Mean Tax Rate*[1]	*Standard Deviation*[1]	*Coefficient of Variation*	*Range in Tax Rate*[1]	
	Number	*Percent*				*High*	*Low*
Net general purpose tax	55	100.00	$.3745	$.0978	26%	$.8500	$.2300
Retirement annuity	43	78.2	.0133	.0036	64%	.0426	.0040
Community service	41	76.4	.0374	.0190	63%	.0500	.0014
SERS	42	76.4	.0076	.0066	86%	.0300	.0010
OASDI	41	74.5	.0038	.0035	92%	.0160	.0005
Health and Welfare	14	25.5	.0058	.0033	52%	.0102	.0010
Adult education	6	12.7	.0178	.0126	--	.0366	.0040
J.C. interdistrict attendance	5	9.1	.0686	.0581	--	.1400	.0130
Meals for pupils	1	1.8	.0001				
Youth conservation and training	1	1.8	.0700	--	--		
Fire and panic safety	1	1.8	.0050	--	--		
Sub Total	55	100.00	.4306	--	--	.8500	.2500
Bond interest and principle payments	36	65.5	.1323	.1049	73%	.5198	.0140
Acquisition of property	1	1.8	.1120		--		
Sub Total	37	67.4	.1344	.0986		.2198	.0200
Totals (All)	55	100.00	.5210	.1351	26%	.9701	.2500

[1] Dollars per $100 of assessed valuation.

TABLE 25

Sources of Expenditures for Districts Maintaining Junior Colleges, 1963–64, 1964–65

Item	1964–1965 Total Expenditure		1964–1965 Expenditure per A.D.A.[1]	1964–1965 Effective Local Tax Rate ($ per $100 av)	1963–64 Total Expenditure		1963–64 Expenditure per A.D.A.[2]	1963–64 Effective Local Tax Rate ($ per $100 av)
Total Current Expense of Education	$165,627,853		$596.21		$141,114,368		$573.65	
Basic Aid	34,470,375		124.08		30,749,375		125.00	
District Aid	80,416,780		289.48	$0.2500	71,093,494		289.00	$0.2500
(District Assessed Valuation)	($32,166,712,000)				($28,437,397,000)			
Equalization Aid	18,132,855		65.27		10,593,807		43.07	
Junior College Tuition Tax	$14,994,813				$17,337,733			
"Seat Fee"	($10,071,849)			0.2201	($11,657,801)			0.1759
Operating Portion	(4,922,964)		17.72	0.1076	(5,679,932)		23.09	0.0857
(Nondistrict assessed valuation)	($4,576,652,000)				($6,628,691,000)			
Fees								
Adult	$601,832				$484,169			
Nonresident	$1,633,960				$63,241			
Total	$2,235,792		$8.05		$547,410		$2.23	
Federal								
PL 874	$1,777,348				$1,091,008			
Forest Reserve	$16,511				$8,666			
Total	$1,793,859		$6.46		$1,099,674		$4.47	
Additional District Support	$23,655,228		$85.15	$0.0735	$21,350,676		$86.79	$0.0751
Summary:								
State	$52,603,230	31.8%	$189.36		$41,343,182	29.3%	$168.07	
Local	108,994,972	65.8	392.35	0.2966	98,124,102	69.5	398.89	0.2798
Student Fees	2,235,792	1.3	8.05		547,410	0.4	2.23	
Federal	1,793,859	1.1	6.46		1,099,674	0.8	4.47	
Total	$165,627,853	100.0	$596.21		$141,114,368	100.0	$573.65	

[1] 1964–65 A.D.A. was 277,801.
[2] 1963–64 A.D.A. was 245,994.

SOURCES: State Controller, *Annual Report of Financial Transactions Concerning California School Districts* 1963–64, 1964–65; State Department of Education, Bureau of School Apportionments and Reports.

TABLE 26

Comparison of Assessed Valuation Inside and Outside Districts Maintaining Junior Colleges 1957–58 to 1965–66

Year	Statewide Assessed Valuation (billions)	Assessed Valuation in Districts Maintaining Junior Colleges (billions)	District Assessed Valuation as Percent of Statewide Assessed Valuation
1965–66	$39.5	$35.5	89.9%
1964–65	36.7	32.0	87.2
1963–64	35.0	28.4	81.1
1962–63	33.3	26.1	78.4
1961–62	31.5	23.8	75.6
1960–61	29.6	20.8	70.3
1959–60	27.4	19.3	70.4
1958–59	26.0	18.3	70.4
1957–58	24.3	17.0	70.0

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

Methods of Equalization

Two methods can be used in effecting equalization among districts supported by both state and local funds. One method is known as the "percentage-equalizing grant". The other method, currently in use in California, is the "foundation program."

The percentage-equalizing grant assumes that the state share of total district expenditures will be fixed at a certain percentage for any given year. For a particular district, this state share is then adjusted by a ratio which expresses the ability of that district relative to the ability of the average district in the state. Thus, the established state sharing percentage is adjusted according to the individual district's ability; this percentage is then applied to the district expenditures to derive the total state grant. This procedure is expressed by the following formula:

$$A_d = (1 - k\,(AV_d / AV_s))E_d$$

where,

A_d = the state grant to the individual district
k = an arbitrary constant, between 0 and 1, which determines the aggregate state share; i.e., if $k = 0.6$, the state share would be 40% of total system expenditures
AV_d = Assessed valuation per pupil in the individual district
AV_s = Assessed valuation per pupil in the system
E_d = expenditures in the individual district

The alternative method, used by the majority of states in distributing state assistance to local districts, is the foundation program. This method is based upon the establishment of a foundation amount which is supposed to represent an "adequate" per student cost. Local districts contribute toward this amount from a uniform tax rate applied to their assessed valuation. The difference between this local contribution and the total requirement, based upon the foundation amount, becomes the amount of state assistance. An additional feature, basic aid, has been added to the foundation program in California. This is a flat grant per student provided by the state to all districts regardless of variation in local ability. The foundation formula, with basic aid, is generally as follows:

$$A_d = A_b + A_e$$
$$A_e = (F_s \times S_d) - [A_b + (r_s \times AV_d)]$$

where,

A_d = total state assistance to the individual district
A_b = basic state flat grant to individual district; total determined on a per student basis
A_e = state equalization aid to the individual district
F_s = foundation amount (per student unit)
S_d = the number of student units in the individual district
r_s = systemwide computational tax rate
AV_d = assessed valuation within the individual district

Numerous other features, such as differential assistance to defined adults, use of student residence rather than student enrollment for computing state assistance, and use of both current and past year student counts, all complicate the basic method and will not be described in this study except as they are evaluated in Chapter V.[12]

Results of state assistance to Junior Colleges during 1963–64 and 1964–65 were shown in Table 24 and are also described in Table 28. The computational tax rates of 24¢ and 25¢ and foundation amounts of $490 and $600 for defined adults and "others", respectively, (along with certain other restrictions) resulted in a state share of approximately 32% in 1964–65. The 32% level was higher than in prior years but meant that districts actually were required to levy an average of 32¢ (in contrast to the computational tax) in order to support a total expenditure of $596 per student.

While averages are most often quoted, variation in state assistance is shown below:

State Aid as a Percent of Current Expense

	1963–64	*1964–65*
Median	24.7%	31.8%
Mean	29.3	31.8
Standard deviation	13.4	13.5
Range		
high	85.9	83.5
low	6.3	4.6

[12] A very comprehensive description of the current foundation method for Junior College assistance was contained in the Council's report *A Consideration of Issues Affecting California Public Junior Colleges*, Report No. 1018, April 1965.

TABLE 27

Junior College "Tuition Tax", 1960–61 to 1965–66

Item	*1965–66*	*1964–65*	*1963–64*	*1962–63*	*1961–62*	*1960–61*
Number of Counties levying tax	34	45	49	53	51	49
Percent of all Counties	59%	78%	84%	91%	88%	84%
Average (unweighted) Tax Rate ($/100)	.2246	.2543	.2496	.2174	.2327	.2015
Range						
high	.5631	.6700	.6000	.5400	.5900	.4600
low	.0200	.0200	.0400	.0031	.0200	.0100

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

During 1964–65, 32 of 65 districts received more than 32% of their current expense from state assistance Of this group 17 received more than 40%. In general, the increase in the foundation amount in 1964–65 resulted in greater state assistance. The number of districts that received only basic aid was reduced from 19 in 1963–64 to nine in 1964–65. Another feature of the data regarding state assistance was the magnitude of the percentage changes in state aid per student which individual districts received in 1964–65 as opposed to 1963–64.[13] Such changes ranged from a decrease in aid per student of 34% in Santa Monica to an increase of 148% in that level received by Merced. Twenty-three districts saw changes of more than 25% in the amount of state assistance in the two years.

The results of a number of correlations of ability and effort variables on state apportionment aid are presented in Table 29. There is no relationship between state aid and local ability, if the latter is measured by personal income per capita of the particular district. Total state aid correlates significantly with local ability as measured by assessed valuation per

[13] SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 28

Comparison of Total State Apportionment Aid, Current Expense and Income
1961–62 to 1964–65
(dollar amounts in 000's)

Item	*1964–65*	*1963–64*	*1962–63*	*1961–62*
State apportionment aid				
Basic	$34,470	$30,023	[1]$27,002	[1]$25,483
Equalization	18,133	11,289	7,071	5,454
Total	52,603	41,312	34,093	30,937
Total current expense	$165,628	$141,114	$125,152	$112,558
Percent State aid				
Basic	20.8%	21.3%	21.6%	22.6%
Equalization	10.9	8.0	5.6	4.8
Total	31.7	29.3	27.2	27.4
Total general fund income	$195,917	$172,333	$147,936	$125,156
Percent State aid				
Basic	17.6%	17.4%	18.3%	20.4%
Equalization	9.3	6.6	4.8	4.4
Total	26.9	24.0	23.1	24.8

[1] Includes principle and growth apportionments, excludes special purpose and final apportionments.

TABLE 29

Correlation Coefficients of Ability and Effort Variables on State Apportionment Aid, Districts Maintaining Junior Colleges
1964–65

Variable	*Total State aid as percent of total current expense of education*	*Basic aid as percent of total current expense of education*	*Equalization aid as percent of total current expense of education*	*Total State aid per ADA*
Assessed valuation per ADA	−.700	.530	−.422	−.694
Personal income per capita	−.220	.105	−.132	−.073
Junior college tax rate	−.020	−.071	.023	.009
Property tax rate for local services	−.520	.003	−.083	−.082
Property tax rate for local services less education	.105	.135	−.127	−.009
Index of property tax burden	.001	−.064	.002	−.049
Size (ADA)	.006	.204	−.073	−.055
Total current expense per ADA	−.665	−.892	−.482	−.513
Ratio ADA in classes for adults to total ADA	−.243	.013	−.297	−.322
Ratio defined adults to total ADA	−.034	−.290	−.016	−.468

a.d.a., as one would expect. However, the basic aid grant has an adverse effect upon equalization objectives as shown in the positive correlation on local ability (r = .530). In other words, as districts become more able, a greater portion of their total current expenditures is funded from state basic aid. There are no significant correlations of state aid on local property taxes, including the Junior College tax rate. Further, there appears to be no relationship between the size of a district and the amount of state aid forthcoming.

TABLE 30

Variation in Expenditures and Program Characteristics for Colleges in First and Fourth Quartiles Ranked According To Assessed Valuation Per Average Daily Attendance 1963–64

Item	*First Quartile (Unweighted average)*	*Fourth Quartile (Unweighted average)*
Number of colleges	17	17
Assessed valuation per ADA	$99,241	$298,994
Junior college tax rate (%)	.4419	.3679
FTE Enrollment	2,993	2,850
Instructional Expenditure per SCH	$14.73	$16.80
Mean salary expenditure	3,872	3,906
Class Size		
Laboratory	21.5	21.1
Non-Laboratory	30.6	27.4
Total	26.8	25.2
Weekly faculty load		
Class hours	20.4	20.5
Preparation hours	22.5	25.4
Class hour ratios		
Lab. to total class hours	.410	.403
Contact to credit hours	1.38	1.33
Credit hour ratios (subject/total)		
"J C class"	.283	.323
Trade-tech	.086	.107
Life science	.043	.033
MPE science	.154	.142
Social sciences	.210	.209
Humanities	.255	.243

SOURCE: CCHE, Cost and Statistical Study, 1965.

Another method used to assess the results of the foundation method (with basic aid) is to examine the actual expenditures and program measures of colleges grouped according to ability and effort. In Table 30, Junior Colleges are grouped in first and fourth quartiles according to ability in 1963–64. Program characteristics exhibited during the Fall of 1963 are then examined. The less able colleges (in the first quartile) with substantially greater tax effort paid lower faculty salaries, reported larger class sizes and a lower instructional expenditure per student credit hour than did those more able colleges in the fourth quartile.

The same type of analysis is employed for both ability and effort in Table 31, but measuring relative levels of expenditures by districts during 1964–65, rather than program characteristics. It appears that the extra effort on the part of those in the highest quartile (ranked according to effort) was not for support of current expenses of education but rather in support of significantly larger capital outlay expenditures and, to a lesser extent, community services. The high-effort districts were, on the average, about one-half the student size reported by the low-effort districts In all other aspects, there were no significant differences, although the low-effort districts did receive slightly more state assistance. The "ability" comparison reveals that those more able districts (in the fourth quartile) with similar local tax effort, expended nearly 40% more on operating requirements (20% more for faculty salaries) and also significantly more for capital outlay than did the 16 less able districts (in the first quartile).

In summary, the existing foundation program has been shown not to be particularly stable and does not result, to any great extent, in either equity of educational opportunity or contribution as set forth in criteria numbers one and two.

TABLE 31

Comparison of Average District Income and Expenditure for First and Fourth Quartiles Ranked According to Ability (AV/ADA) and Effort (Junior College Tax Rate) 1964–65 [1]

Item	*Effort*		*Ability*	
	First Quartile	*Fourth Quartile*	*First Quartile*	*Fourth Quartile*
Number of Colleges	[2]13	[2]13	16	16
Average ADA	5,921	2,963	4,361	4,654
Junior College tax rate	.3432	.6234	.4261	.4148
Assessed valuation per ADA	$202,720	$179,061	$106,573	$284,402
Personal income per capita	$1,881	$2,187	$2,073	$2,057
Property tax rate for local services	8.07	8.00	8.12	8.02
Property tax rate for local less education	3.93	3.75	3.98	3.83
Ratio defined adults to total ADA	.192	.185	.183	.214
Ratio ADA in adult classes to total	.043	.041	.031	.049
Total current expense per ADA	$660	$666	$579	$766
Administration per ADA	57	61	40	123
Administration as percent of total	8.8%	8.2%		
Instruction	$460	$453	$415	$468
Teachers' salaries	328	327	300	354
Maintenance and operation of plant	99	73	71	110
General fund capital outlay expenditure	$138,616	$354,320	$149,110	$211,445
Capital outlay expenditure per ADA	35	216	44	181
Community services expenditure as percent of total current expense	1.4%	2.8%	3.0%	2.4%
State aid as percent of total current expense	29.2%	27.0%	42.5%	16.1%
State aid per ADA	$180	$174	$256	$121
Basic aid per ADA	129	124	129	116
Equalization aid per ADA	52	51	127	5

[1] Unweighted averages.
[2] Effort measured in terms of "junior college tax rate"; as a result, high school and unified districts maintaining junior colleges are excluded from sample.

CHAPTER IV

OPTIMUM RESOURCE ALLOCATION

INTRODUCTION

One of the most persistently difficult facts of life with which any organization must live is the scarcity of resources to achieve all it would like to do. This condition applies to the Junior Colleges at both the state and local levels.

At the state level, the program objectives of the individual districts require synthesis and restatement in a statewide context in competition with the resource demands upon state government from other branches of education and agencies of state government. On the one hand, the collective objectives of the Junior Colleges are limited by the amount of state funds likely to be provided. On the other hand, the extent to which the collective objectives of the Junior Colleges are accepted at the state level will influence the resources the state makes available to the Junior Colleges by taxation or by other means.

Similarly, local districts must compromise among their objectives. Vocational education, adult education, and general education programs vie for scarce resources. Quality compromises must be made among the various types of supporting services and expenses such as plant operation, academic salaries, administrative and library costs, and technical and clerical support. Thus, at the local level, institutional objectives are limited by the level of anticipated state funding and by the level "the market will bear" in property tax rates.

The budgetary process is the vehicle through which such compromise decisions are made. The present budgetary processes of the Junior Colleges are reviewed here in terms of certain principles of resource allocation and of certain criteria for state-local fiscal relationships. Comparisons are made with budgetary processes of four-year segments of public higher education in California. Processes reviewed cover the various levels of budget preparation and review, including the cost account structure, the performance information base, and the timing and nature of the decision-making process.

PRINCIPLES AND CRITERIA

Criteria for State-Local Fiscal Relationships

Since the problem of allocating scarce resources must be resolved at both the local and state level, three criteria appear applicable to the resource allocation decisions to be made.

First, the state-local fiscal relationship should assure the optimum utilization of available resources. A review of the present budgetary processes of the Junior Colleges is presented later in this chapter and apparent deficiencies in meeting this criterion at the local level are noted.

Second, the state-local relationship should afford maximum flexibility for educational and operational needs at the local level and also reflect broad state educational objectives. The most successful management embodies centralization of policy and decentralization of execution. Thus, enterprise and innovation are enhanced and inflexibility and stultification of initiative are minimized. Although certain policies are best promulgated at the state level, the long history of local control and the future evolvement of local objectives necessitate that many policies and operational decisions be made at the local level.

Third, the state-local fiscal relationship should be defined as simply and concisely as possible and be sufficiently stable to encourage long-range educational planning. Philosophical and financial objectives should either be stated explicitly or be immediately evident. All implications of proposed changes or adjustments in the formula should be easily identifiable.

Principles of Program Budgeting

The task of allocating scarce funds among competing demands is basically a management problem and a variety of strategies and tactics are used to make allocation decisions. A typical strategy is to allocate resources for next year in essentially the same pattern as they were allocated for the current year. Changes in an established pattern typically originate from pressures (either obscure or obvious) upon the decision-makers. Contributors may condition the allocation of their funds. An example in the Junior Colleges was the enactment of a law which limits the proportion of faculty salary costs to not less than 50% of the total current expense of education.

The "best" strategy, however, might be defined as that which is "most rational," i.e., that which can explain analytically why resources should be mixed and distributed in any given way. Such a strategy is program budgeting, supported where feasible by cost effectiveness studies.

The main requisites of program budgeting in the Junior Colleges might be stated as follows:

1. The clear definition of the objectives of a Junior College and translation of those objectives into operational terms.
2. The translation of Junior College objectives into a program structure for budget planning, e.g., each academic discipline or department may be considered a cost center or program element within the broad program of instruction.
3. The systematic analysis of alternative courses of actions for achieving objectives, to include a comparison of the benefits and costs of alternate choices.
4. The development of long range plans including the computation of all cost implications.
5. An information system to accumulate program output or performance data and resources input data, in order to measure and plan progress toward stated program objectives.

Program budgeting will not always provide definitive quantitative solutions to all problems of resource allocation, but it does raise the proper questions and directs attention to the relative payoffs of alternative choices.

THE PROGRAM INFORMATION SYSTEM

Cost Accounting

Colleges and universities usually have a fairly extensive accounting system to support their budgetary efforts. However, virtually all of them are concerned primarily with the legal and fiduciary responsibilities associated with the receipt and expenditure of funds. The Junior Colleges are no exception. For example, the *Education Code* requires that school districts limit expenditures to the amounts appropriated for each major expenditure class. Since the budget is thus used in large part as a fiscal control device, the State Department of Education has long required that Junior College budgets be prepared according to the same classification plan as that used in the accounting of expenditures. The result is that the expenditure classification plan is that generally used nationwide pursuant to U. S. Office of Education recommendations for elementary and secondary schools.

It is evident in Appendix D that with respect to the most vital area of Junior College expenditures—instruction—no meaningful information on program costs is reported. Not only are costs of the various academic disciplines and departments indistinguishable but also the costs of important student and educational services (library, admissions and records, counseling) are not broken down.

In terms of program budgeting and the criteria for state-local fiscal relationships stated above, the present accounting system is deficient on two counts. First, the most significant program cost centers are not separately accounted and reported. If memorandum accounts of resources consumed by each instructional department and supporting service activity are not maintained, the college administration lacks the information upon which resource allocation decisions can be related to educational program objectives.

Second, assurances cannot be provided to the state and the local taxpayer that available resources are being utilized to the maximum extent possible. One index of optimal use of resources is some demonstration of efficiency and economy of operation. Program cost information becomes essential in making unit cost comparisons, both internally of an historical nature and externally with costs of similar programs in comparable institutions elsewhere. From the standpoint of the local district and state government, it seems highly desirable that Junior College programs and program elements be subjected to analytical studies and that the results be reported on a statewide basis. For example, a local board conducting a vocational program at one location can have available data on vocational programs offered elsewhere. Such comparisons would enable a more enlightened evaluation of the cost performance of a given program and enable wiser management decisions.

Another difficulty of the present accounting system is that the account classification plan is oriented to the public schools rather than to higher education. Colleges and universities across the nation generally pattern their accounts on the functional and subfunctional classifications outlined in *College and University Business Administration Vol. 1.*[1] These institutions include the University of California and the California State Colleges. The U. S. Office of Education utilizes the national pattern in conducting its biennial report of *Financial Statistics of Institutions of Higher Education.*

The U. S. Office currently is undertaking several major revisions of its data collection policies and procedures. One revision will be to include all Junior Colleges in its data surveys on *higher education.* The pressure upon Junior Colleges to report in the format desired by the U. S. Office will be very great.

The following list of functional accounts to be used by the U. S. Office makes it evident that California's Junior Colleges will find it difficult to transpose their present cost data (in the format of Appendix D) into the form requested:

1. Educational and General
   a. Instruction and departmental research
   b. Extension and public service (includes community services)
   c. Libraries
   d. Physical plant maintenance and operation

[1] Compiled by the National Committee on the Preparation of a Manual of College and University Business Administration, (Washington, D. C., American Council on Educatiin, 1955). pp. 65–84.

e. General administration, student service, and general institutional expense (includes public relations, admissions and records, health service, auditing, catalogs, commencement, for example)
f. Organized activities relating to educational departments (includes farming, theater, home economics food services, etc.)
g. Organized research (not applicable to community colleges)
h. Other sponsored activities (such as training institutes financed by federal and other outside sources)
i. All other educational and general

2. Student Aid Grants
3. Auxiliary Enterprises
   j. Housing and food services
   Other auxiliary enterprises (such as parking and student unions)

Program Activity and Performance Information

Program performance is best measured, evaluated, and planned when program cost information is prepared in tandem with basic data on program activity and output. Junior Colleges currently collect a variety of data to fulfill both internal operational needs and external reporting requirements. While the Coordinating Council requires periodic reports on student enrollment, admissions, retention and probation and the Department of Education annually requires the submission of 121 forms limited largely to providing information on enrollments, finances, and courses offered, no systematic information on program activity and performance is routinely provided to any state agency.

No detailed survey was made of the types of information collected for internal management purposes. However, Junior Colleges have been actively engaged in up-grading the scope and quality of their institutional research efforts. A large majority have acquired small to mediurn scale electronic data processing equipment installations to facilitate the collection and manipulation of data. Nearly every college has assigned an officer (usually on a part-time basis) to act as the local institutional research director.

Ideally, the achievement of program objectives is best measured by quantifying and evaluating program *output*. The output of instructional programs in institutions of higher education, of course, is students who have completed their course of study. Unfortunately, although it is easy to quantify the number of graduates, effective means of evaluating their quality or measuring the extent to which any measurable characteristic of the graduate is the sole result of the educational environment are not available.

Rough indicators of program achievement, however, are applied by some institutions. For example, the success of vocational programs is measured in part by the subsequent performance of the graduate in his employment (assessed in terms of employer acceptance). The transfer program is evaluated in part through the subsequent upper division success of the transfer students. Finally, the use of "degrees granted" as a measure of output permits significant questions to be raised concerning the average elapsed time to a degree.

In the absence of sufficiently valid information on program output, program performance can be assessed in terms of various indices of program *activity*. For example, the performance of instructional programs can readily be evaluated in terms of student credit-hours and student contact hours produced per full-time equivalent faculty member, class contact nours per FTE faculty member distinguishing between laboratory and non-laboratory classes, average class sizes in relation to the number of courses offered, and non-teaching hour loads. Performance on these counts can be evaluated more effectively when comparable data on similar programs elsewhere is available. The performance of service programs (libraries, plant operation) can also be measured by conducting comparative studies. Effective program budgeting requires continual collection and analytical comparisons of performance data of the types suggested above, always expressed in terms of the degree of achievement of approved program objectives and plans.

Admirable progress is evident in the development of an institutional research capability in the Junior Colleges, but it is also evident that much remains to be done to achieve the type of program information system (covering both costs and performance) needed to effectively implement program budgeting. The ever increasing demand for program information to be used for decision-making purposes at both the State and local levels indicates an even more rapid rate of progress in this direction is needed.

THE BUDGETARY PROCESS

Junior Colleges currently are governed by the same education and administrative code that applies to all public schools. In a recent report prepared by special legislative advisory committee, the committee concluded that:

> "For some time in California the ability of some local school boards to properly review expenditure proposals put forth by school administrations has been questioned. To our knowledge, however, that ability has never been thoroughly explored despite the doubt which has existed concerning it.
> "The Advisory Committee on School Budgeting and Accounting has taken upon itself the task of determining whether the complex procedures detailed by the California Education and Administrative Codes, and presumably designed to insure this

adequate review, are indeed effective in terms of providing the tools which local school governing boards need for budgetary control. In general, we have found them to be woefully inadequate, hopelessly complex and snarled, and containing such a quantity of detail as to raise the question as to their original intent. The present system of school budgeting and accounting in California flies in the face of the well accepted governmental principle of centralization of responsibility and ease of understanding. So many agencies of local, regional and State government today have a portion of the responsibility of developing the local school budget that it is difficult to see how the taxpayer can make his views known should he happen to disagree with an expenditure proposal. In fact, we have concluded that it is far easier for the California citizen to make his disagreement over a spending plan known to agencies of State government than it is for him to make his objectives known to local school agencies." [2]

In the budget cycle, the structural process and the decision-making process are integrated. However, it appears useful to distinguish between the two in this section. The structural process is reviewed first as follows.

Decision Points and Timing of the Budgetary Process

The budget preparation cycle of the Junior Colleges generally fits within the following pattern.

Date	*Locus of Decision*	*Action Taken*
October (prior to budget year)	College Departments	Prepare statements of estimated budgetary needs.
November-December	Deans	Review and revise departmental requests.
December-February	Business Officer	Compile and analyze budget for presidential review.
January-March	President	With business officer, holds conferences with department heads and deans to evaluate questionable requests.
February-April	Business Officer	Formalizes a detailed "preliminary budget."
April-May	President and District Governing Board	President and business officer present preliminary budget and confer with Board (Not required by Education Code).
June	Governing Board	Transmits a "Tentative Budget" to County Superintendent of Schools. (Required by Education Code.)
July (of new budget year)	County Superintendents of Schools	Following notification to governing board of actual year-end financial data changes to Tentative Budget, a "Publication Budget" is included in a published notice for a public hearing. (Required by Education Code.)
In August (early)	Governing Board	Hold a public hearing following which a "final budget" is adopted and filed with County Superintendent of Schools and State Department of Education. (Required by Education Code.)

It is evident from this summary that the primary points for budgetary decisions are the requesting and reviewing officials within the local Junior College district. Decisions are made at the state level on the amount of total school district support to be provided through revision of the state support formula, but no state agency reviews either the composition, or the total expenditure level of a Junior College budget.

The length of the annual budget preparation cycle is approximately ten months, culminating in governing board budget approval after the budget year has already commenced. Within the present cycle, therefore, the lateness of governing board action precludes the compilation of statewide Junior College financial needs in time to provide a basis for the Governor or the Legislature to determine an adequate state contribution. Reliance is placed on a formula approach and this does not necessarily have any relationship to the actual needs of the colleges.

Simply by way of comparison, it may be helpful to note that the budgetary process for the University and the State Colleges differs in several significant respects. The points of budgetary decisions include not only most of those outlined above for the Junior Colleges,[3] but also two major additional levels of review. The budget is reviewed by the Department of Finance on behalf of the Governor and included in his budget for review by the Legislature. In order for these reviews to take place, the budget preparation cycle in the University and State Colleges commences in January, eighteen months prior to the budget year, with the last nine months reserved for review by the Department of Finance and the Legislature.

In evaluating the structural process of the Junior Colleges in terms of the principles of program budgeting, one criterion for state local fiscal relationships presented at the outset of this chapter should be kept

[2] *Final Report of the Advisory Committee on School Budgeting and Accounting to the Subcommittee on School Efficiency and Economy*, Assembly Interim Committee on Education, October, 1966, pp. 6–7. Significantly, the advisory committee stated in this context that ". . . a much more far-reaching approach is needed if school budgetary data are to be made truly understandable to the tax-paying public. Here, of course, we refer to the eventual adoption of a recognized and accepted plan of program budgeting for California public schools."

[3] Of course, the County Superintendent of Schools is excluded. Also each of the two governing boards reviews and acts upon only one budget instead of the three presented to a Junior College governing board.

in mind: "The state-local fiscal relationship should afford maximum flexibility of response to educational and operational needs at the local level and also reflect broad state educational objectives and policies." A strength of the present fiscal relationship is that with one important exception the Junior College governing board has maximum *flexibility* (greatly in excess of that of the State Colleges and the University). That exception is the statutory requirement that limits the proportion of teacher salary costs to not less than 50% of the total current expense of education. It was emphasized earlier that the task of allocating scarce funds among competing demands is a managerial decision and that program budgeting provides the appropriate decision-making bases. Within the total level of funds provided to a Junior College governing board, it must be permitted the flexibility and authority to maximize the achievement of its program objectives. The 50% law clearly violates this principle.

A major deficiency of the present relationship is the type of state educational objectives and policies currently reflected in the support formula. The present formula emphasizes distinctions between the geographical origin of students served, the decreasing sizes of those Junior Colleges below 1000 a.d.a., and distinctions between "adults" and all other students. The formula does not recognize nor implement broad state educational objectives and policies concerned, for example, with types of instructional programs to be stressed, the adequacy of the total level of support, or the sharing of support between the local property tax or the State General Fund. No decision points are provided within the present formula to permit the State Board of Education, the Governor or the Legislature to determine program objectives and policies.

With respect to the timing of the budgetary process, no time is available for additional decision points even if they were to be provided. By the time a local governing board has approved a tentative budget in June for the succeeding fiscal year, the Legislature has had to adopt a state budget for that fiscal year which does not consider the cumulative Junior College needs on a statewide basis.

In summary, a revision in the structural aspects of the budgetary process is necessary to ultimately move forward the present budget preparation cycle of the Junior Colleges in order to provide additional decision points at the state level by the State Board of Education, the Legislature and the Governor. Such state review should encompass the budgetary needs of the Junior Colleges in the light of their own cumulative statements of needs without undertaking detailed revision of individual college budgets.

Another more drastic revision in the time schedule should be considered by both the local and statewide governing boards. A complete program budgeting strategy requires that multi-year program planning be undertaken at both the local and state levels, to include the translation of program goals, as well as long range resource requirements, into quantitative terms. The question needs to be faced as to where the Junior College programs are—or should be—heading and where and how resources will be found to arrive there.

Decision-Making Bases in Budget Preparation and Review

In the area of financial administration the lay governing board must on the one hand be a citadel against external pressures in order to preserve the institution's integrity in meeting its social objectives and, on the other hand, it must represent the public in seeing that public funds are utilized efficiently and economically in pursuing these objectives. It is the latter role of the board with which the following descriptive and evaluative comments are concerned.

In the review of the cost accounting system above, it was pointed out that Junior College budgets must be prepared within the same account classification format used in the accounting of expenditures. Program cost estimates are presented only in gross terms and object expenditure detail is used to explain the gross program expenditures. No systematic statewide survey was conducted of the decision-making bases used by the Junior Colleges in budget preparation and review; however, sufficient review was made to indicate that Junior Colleges place almost exclusive reliance upon the prescribed account classification structure and supporting object expenditure detail in preparing and reviewing budget requests.[4] As an example of the *summary* nature of the budget that is finally reviewed by a governing board, Appendix E has been extracted from the Tentative Budget of one Junior College district.

Overall enrollment projections are made to provide some index of growth in budgetary needs. However, Junior Colleges generally do not refine these projections to the point that they can be used by each instructional department to show the academic load for which faculty and supporting expenses must be provided.

Early in this chapter, the main requisites of program budgeting were identified. These requisites provide a frame of reference for evaluating the decision-making bases of budget preparation and review within the Junior Colleges. The first requisite consists of the clear definition of the objectives of the Junior College expressed, if possible, in operational terms. The second requisite consists of translating these objectives into a program structure. It is important that each college official and governing board member review these objectives as part of the budget process through a discussion of questions such as the following:

[4] These and the following comments apply generally to most governmental and educational agencies, it may be worth noting. The Junior Colleges thus are not unique in emphasizing object expenditure detail and minimizing attention to program objectives and performance.

1. What are the long range objectives (in quantifiable as well as subjective terms if possible) and intermediate goals for each program and program element?
2. What is the current level of performance in achieving these objectives? e.g., what is not achieved quantitatively or qualitatively?

These are difficult questions to approach and are generally avoided in the budgetary process of the Junior Colleges.

Other program budgeting requisites include the systematic (cost-benefit) analysis of alternative courses of actions for achieving program objectives; the computation of long-range continuing cost implications of program changes in a budget; and an information system to accumulate program performance data. It is the latter system that enables fulfillment of the other two; that is, the joining of costs and performance data enables conduct of those analytical activities labeled cost effectiveness or cost-benefit studies. By subjecting alternative courses of action to a comparison of relative costs and benefits, the estimated payoffs become part of the basis for managerial decisions in allocating scarce resources.

Most Junior Colleges are not equipped to develop and utilize such an analytical capability. Not only are the computer requirements considerably beyond the present computer capacity, but to design the appropriate information systems and to staff an analytical studies office on each campus will necessitate a substantial addition in experienced personnel at great cost. By coordinating efforts and resources, the cost of developing such a capability can be greatly reduced.

An example of such a cooperative effort currently underway is the federally-financed Educational Data Processing Project of the Bureau of Systems and Data Processing, State Department of Education. Through the establishment of a series of regional computer centers and the design of a comprehensive automated cost accounting system, public school and Junior College districts throughout the state will have access to program accounting and budgeting services on a user fee basis. The fewer regional but much more sophisticated computer installations will prove much more productive, efficient, and economical than a separate lower scale computer installation on each Junior College campus.

Without a vastly improved basis for decision-making within the Junior Colleges (and appropriate state agencies responsible for them), instructional quality is likely to suffer in the long run unless critical data and information is made available to those individuals and agencies responsible for Junior College education in California.

CHAPTER V

THE COMPONENTS OF A STATE-LOCAL FISCAL RELATIONSHIP

In order to evaluate various state-local relationships in the financial support of Junior Colleges a thorough discussion of the possible elements within a structure of state-local participation is presented below. By examining possible components of such a relationship, alternatives are formulated and evaluated in terms of the five criteria presented in previous chapters. In addition, estimates of state-local-student cost sharing under alternative policies are examined.

CRITERIA

The five general criteria, used as a framework against which the various alternatives of state-local fiscal relationship are evaluated are as follows:

1. The state-local fiscal relationship should afford all eligible individuals within the state an equal opportunity for Junior College education.
2. Revenue to support the state-local fiscal relationship should be exacted equitably from those contributors involved; based primarily upon (1) ability-to-pay (as between districts and as between income classes) and, (2) to the extent appropriate, benefits received.
3. The state-local fiscal relationship should assure the optimum utilization of available resources.
4. The state-local fiscal relationship should afford maximum flexibility for educational and operational needs at the local level and also reflect broad state educational objectives.
5. The state-local fiscal relationship should be defined as simply and concisely as possible and be sufficiently stable to encourage long-range educational planning; all implications of proposed changes or adjustments should be easily identifiable.

No one plan will satisfy all the criteria or solve all the problems inherent in a complex fiscal relationship between two levels of government. The objective is to identify that plan which best satisfies the criteria taken as a group.

The analytical treatment in this chapter provides the basis for identification of the most appropriate statement on state-local fiscal relationship *in light of the criteria*. Changes necessary io make the plan operational are recommended in detail in the next chapter along with several other alternate plans.

ASSUMPTIONS

Before discussing the components of a plan, several underlying assumptions should be made explicit. If these assumptions are not accepted, certain modifications in the analysis must follow.

1. **The state general fund will participate in the support of Junior Colleges.**—Perhaps the best indication of the significance of this proposition is to examine the negative form, i.e., that the general fund will not support Junior Colleges and that the total support will come from the local property tax. The property tax is one of the most regressive taxes in use at either the state or local level. Complete use of the property tax would certainly violate the criterion (#2) for equity of contribution on the basis of ability-to-pay as between income classes. In addition, projections of future Junior College costs (Table 35) indicate that complete reliance upon the property tax would approximately double the current effective rate upon the average local property taxpayer from $0.297 per $100 of assessed valuation in 1964–65, to a level of about $0.60 per $100 of assessed valuation in 1974–75.[1] Finally, there seems little doubt that popular and political sentiment is increasingly against complete use of the property tax for Junior College operating purposes.
2. **The local property tax will participate in the support of Junior Colleges.**—Property is a substantial basis for taxation in California and one which will be utilized by local jurisdictions for some time to come. To abandon the property tax for any share of Junior College operations would mean that the portion of the state general fund required for such purposes would increase from less than 3% in 1964–65 to approximately 10% by 1974–75. In other words, by 1974–75 as much as an additional $250 million would have to be made available annually from the general fund. While this is possible, it is not necessarily probable, particularly if it were to be undertaken in one year under the existing tax structure. Nonetheless, if the existing tax structure were revised, greater state participation (even to 100%) would be within reason.

[1] In all cases, such comparisons are only as valid as the assumptions which underlie the projections. The assumptions and methods by which the projections were derived are discussed in Appendix F.

3. **The average level of expenditure by the Junior Colleges during 1963–64 was appropriate.**—An assumption of this sort is obviously tenuous because no one level of financial support can be said to provide adequate or quality educational programs since these terms remain essentially undefined. There is no basis for establishing an absolute standard for "adequacy" or attempting to derive a cardinal measure of quality. What may be an adequate level of program support in one district may not be sufficient in another because of differing demands and/or other local peculiarities.

Indirect measures (such as class size and faculty load) of the adequacy of statewide Junior College program may be examined in light of their comparison with the other public segments of higher education in California. In addition, data over a period of years may be analyzed for apparent increases or decreases in real expenditure levels. While the data are rather limited, a basis for projecting costs is necessary for analysis of differing methods of state financial participation as well as alternative state-local cost sharing possibilities.

Program characteristics reported for 1963 (fall) were examined in Table 3 of Chapter II. Average measures for the Junior Colleges were comparable to both the University and State Colleges' lower division instructional programs in terms of (1) average salaries paid teaching faculty, (2) class hour load per faculty member, (3) average class size, and (4) the amount of laboratory instruction included within the program. Higher teaching and instructional expenditures per student credit hour were reported by the State Colleges and University due primarily to differences in equipment, supporting staff and, in the case of the University, departmental research.

Library holdings are another, though less definitive, index of the "adequacy" of the instructional program. U.S. Office of Education data for 1963–64, indicate that 50 California Junior Colleges held an average of only 9.2 volumes per full time enrollment.[2] Further detailed analysis is required, however, before any firm conclusions may be drawn.

The allocation of funds among the various functions during 1963–64 was used to estimate future costs. While it is uncertain that this was an optimum allocation, it did remain essentially unchanged during 1964–65 in the face of a $22 per student increase, the bulk of which was derived from state funding.

Some evidence indicates that the real level of expenditure per student in the Junior Colleges has dropped slightly over the last 10 years. The average expenditure per student (constant 1964–65 dollars) in separate districts declined from $613 in 1954–55 to $609 in 1964–65 with considerable variation during intervening years (Table 4, Appendix B). Assuming the price indices utilized are reasonably accurate, the recent real level of expenditure appears to be much like that which existed in 1954–55, although higher levels were achieved between 1956 and 1961.

In the absence of a definite trend, the 1963–64 systemwide average expenditure pattern has been used as representing an appropriate support level. This level is used both for projecting long run expenditures and for developing the recommended program support for 1967–68.

4. **No tuition fees shall be charged regular resident students.**—This study was not designed to examine the "tuition-free" principle of higher education in California. This principle was the topic of an earlier Council study[3] and will again be reviewed in early 1967.

Tuition fees may currently be charged "defined adults" in both non-graded and graded classes. For the purposes of this study, and pending a major change in the policy regarding no tuition fees for "other than adults," it has been assumed that the status quo would continue.

5. **Federal funds for general expenditures in Junior Colleges will continue at approximately the same relative level as 1964–65.**—This assumption is significant in view of the general increase in federal funds available for most educational programs. During 1964–65, only slightly more than 2% of Junior College expenditures came from federal sources. There is no indication that federal funds will be significantly increased or decreased in the near future. On the one hand, a recent proposal would have eliminated federally impacted area aid (P. L. 874) to Junior Colleges. On the other hand, there are indications that attempts will be made to secure general federal assistance for current operations in Junior Colleges. In view of such conflicting trends, there was no reasonable alternative other than to project the level of federal funding at the current rate.

THE COMPONENTS OF A PLAN

Six necessary components of a state-local relationship are listed below. An understanding of these components is essential in considering alternative methods.

A. Measurement of program in financial terms
B. Measurement of student population

[2] *Library Statistics of Colleges and Universities*, 1963–64. U.S. Office of Education, OE 15023-64, 1965.

[3] CCHE, *An Evaluation of the Tuition Free Principle in California Public Higher Education*, No. 1019, May 1965.

C. Method of collection of "local" share
D. Method of distribution of "state" share
E. Location and extent of fiscal review
F. Source(s) of contribution to support

Components A and B are the necessary vehicles by which the educational program is translated into dollars. Without such translation it is impossible to determine the extent to which variation in educational need (financial) occurs between districts and between years.

The other components are largely self explanatory although possibly the most important (Component F) must indicate those interests that are to contribute to the support of the program and the relative extent to which each will participate. While there are many other details involved in a fiscal relationship, most such details fall under one or another of the six components.

Each component has a number of subcomponents. Those possibilities considered in the course of this study are listed in Table 32. Numerous alternative models (each encompassing six components) are possible by variously combining the 34 subcomponents. This unwieldly number of alternatives was reduced by one or more of several methods. Many of the subcomponents are mutually exclusive. For example, if the method of distributing the state share is to be a fixed flat-grant per student (D1), then there is no need for central receipt of individual budget proposals (A1). A number of the subcomponents are eliminated as being inappropriate. The use of "headcount" as a measure of student population (B1) was eliminated because it does not measure the actual instructional load. Program measurement by a "foundation amount with no variation" (A3) was eliminated because data relative to program costs indicates that, at the very least, size of district must be treated as a relevant variable in any formula.

Each component is examined below and conclusions are reached as to the most appropriate policy for accomplishing related criteria. The components dealing with the method of local tax collection and the method of distributing the state share, are reviewed together since they have a direct bearing upon one another. Levels of fiscal review are determined primarily by the method adopted and are discussed later in this chapter. Measurement of program and population and the identification of the sources of contribution are relatively independent of the other components and are examined separately.

Generally, four alternatives are discussed: (1) the existing foundation program; (2) a general modification of the existing program without basic aid; (3) use of a uniform local tax levy throughout the state; and (4) use of ability measures which recognize total local tax burden.

Measurement of Program in Financial Terms

Various factors relevant to measuring the cost of Junior Colleges programs were discussed in Chapter II. As indicated, the existing foundation amount, which

TABLE 32

Possible Variations of a State-Local Fiscal Relationship

A. MEASUREMENT OF PROGRAM IN FINANCIAL TERMS
1. Normal budget proposals (like University and/or State Colleges)
2. Formula
3. Foundation amount with no variation
4. Foundation amount with variation by type of program
5. Foundation amount with variation by type of student
6. Foundation amount with variation by size

B. MEASUREMENT OF STUDENT POPULATION
1. Headcount
2. Attendance (contact hours)
3. Enrollment credit hours
4. Enrollment contact hours
5. Distinction by area location of residence both in and out of California

C. METHOD OF COLLECTION OF LOCAL SHARE
1. Statewide tax
2. Local district levies, statutory maximum, no permissive overrides
3. Local district levies, statutory maximum, permissive overrides
4. Local district levies, no statutory maximum

D. METHOD OF DISTRIBUTION OF STATE SHARE
1. Fixed grant per student
2. Variable grant per student
3. Guaranteed minimum (foundation program) with basic and equalization aid
4. Guaranteed minimum (foundation program) with only equalization aid
5. Percentage equalizing with variable budgets
6. Percentage equalizing with fixed budget (or "adequate" level)

E. LOCATION AND EXTENT OF FISCAL REVIEW
1. Local junior college board
2. Statewide department or board for junior colleges
3. CCHE
4. Department of Finance
5. Legislature (through statutory changes)
6. Legislature (through program and/or item review as for UC, CSC)

F. SOURCE(S) OF CONTRIBUTION TO SUPPORT OF JUNIOR COLLEGE PROGRAM
1. Student only
2. State only
3. Local only
4. Student-local
5. State-local
6. State-student
7. State-local-student

distinguishes between "adults" and "other than adults," does not measure need accurately because it is not necessarily reflective of the actual costs involved in instructing the two groups of individuals.[4] Criteria number 1 (which implies comparable educational programs) and number 3 (optimum use of resources) are not met by such measurement. If "adults" are to con-

[4] See Tables 7 and 8 of Chapter II and Tables 1 and 2 of Appendix B.

tribute more toward their education than is required of "other than adults," this policy should be accomplished by adjustments in the level of adult tuition rather than by arbitrarily adjusting a foundation amount which is supposed to measure actual educational need in financial terms.

While the Education Code currently allows for variation of the foundation amount by size of institution, the method of computation is overly complex. Data relative to economies-of-scale in Junior College expenditures (Chapter II), indicate that one foundation amount for districts below 1000 a.d.a. would measure need as adequately as a graduated method containing ten different foundation amounts.

Determining what variables (other than size) should be the basis for differing foundation or program amounts is more difficult. Data in Chapter II shows that trade-technical instruction was the most expensive and the social sciences were the least expensive during the Fall of 1963. In view of the wide variation in such instructional costs, allocation of funds by program would be desirable. However, there is no way in which these distinctions may be derived from existing data. Those colleges exhibiting the largest emphasis in high-cost trade-technical offerings were also the institutions reporting high student loads and probably obtained considerable economies-of-scale in other parts of their total program due to large size. But, at the same time, larger colleges also paid the highest salaries to teaching personnel. These two factors tend to cancel each other when total district costs are examined. The data also indicate that smaller institutions emphasized social sciences.

These facts tend also to explain the lack of any significant economies-of-scale in operating costs for institutions between 1000 a.d.a. and 10,000 a.d.a. Thus, if distinctions by program were established, distinctions for size above 1000 a.d.a. would probably also be needed to measure need on an equitable basis between districts.

The alternative of utilizing the individual college's budget request as the best indicator of program cost was discarded for two reasons. First, analysis of individual budgets would inevitably lead to the establishment of norms or yardsticks upon which relative comparisons are based. Such yardsticks are the expression of certain important variables (class size, faculty load, etc.). Accurate program measurement is best obtained when the reviewing agency explicitly concentrates on these variables rather than attempting to evaluate the precise level of proposed expenditures in each district. Certainly, review and approval of individual college budgets by a state agency would reduce the discretion of local boards and limit a district's flexibility in meeting local educational demands. Second, an enormous amount of staff time would be required by a state agency to perform an objective analysis of the operating requests of all the individual colleges or districts. With less staff, the important systemwide cost variables could be considered with individual district variations handled by exception in the fiscal review procedure.

The existing foundation amount is apparently established by taking the recent average costs, which in turn were determined largely by the prior foundation amount. There is no provision for price increases, nor for possible increases in productivity or improvements in the real level of program. Since 1954–55, the foundation amount has been modified, on the average, every three years. There are several possible results: (1) there may be a surplus of funds resulting from the first year of the raised foundation amount which may be applied to price increases and/or program improvements in the second year; or, if there is no operating surplus, (2) the local board may draw upon additional local tax sources to fund at least the second year price increase; or, if an increase in the local contribution is not possible, (3) there is a drop in the real level of program in the second year to provide for necessary price increases.[5] None of these alternatives are desirable, nor do they provide the fiscal stability required in long range educational planning.

A method of program measurement needs to be established whereby changes in important program cost factors are examined annually. Those costs that are merely "price related" (such as equipment price increases, merit salary adjustments, and increases in the cost of required services) should be distinguished from cost changes which are due to variations in faculty or staff productivity or other changes in the real level of program. Development of such a "program amount" could be based upon a model comprising several relationships which explicitly highlight price related and policy related variables. Whoever is establishing the program amount would then be in a position to consider adjusting certain policy variables in order to effect the real level of program, as well as being forced to recognize that certain variables are increasing because of increasing prices even though there are no changes in the real level of program support.

The important relationships in such a model are listed in Table 33, and are divided into both price and policy variables. A number of variables are subject to both considerations. For example, if the amount of faculty turnover is relatively low, then even with no salary increase, average faculty salaries will rise due to the element of merit increases and promotions. In addition to this price increase, it may be determined that salary structure increases are desirable and thus a policy increase is added.

[5] These results are based upon relatively comparable annual percentage increases in (1) district student population and (2) local assessed valuation. If the growth rates of these variables diverge, the probable outcome is even less certain; i.e., the level of state assistance forthcoming may vary dramatically from year to year.

TABLE 33

Variables for Computation of Systemwide Support Level

	Trend Projection	*Policy*
Instruction		
Number of teaching FTE		
1. Number of students	X	
2. Average number of contact hours per student	X	
3. Average class size		X
4. Faculty load: course contact hours per FTE		X
Average compensation per teaching FTE		
5. Merit adjustments, promotions, staff benefits	X	
6. Salary structure increases		X
Related instructional (certificated) personnel		
7. Number (may be factor relating to teaching FTE)		X
8. Average compensation		
a. Merit adjustments, promotions, staff benefits	X	
b. Salary increases		X
Instructional support		
9. Level of support per instructional FTE[1] (includes clerical and technical salaries; supplies, expense, and equipment; and books)	X	X
Other		
Supporting individuals		
10. Number (factor related either to students or other appropriate measure)		X
11. Average compensation		
a. Merit adjustments, promotions, staff benefits	X	
b. Salary increases		X
Supporting expense and equipment		
12. Level of support per supporting individual or other measure[1]	X	X

[1] Both policy consideration of real factors and estimation of price adjustment are involved in establishing the level of this variable.

The variables used in this model are based upon existing budgetary account classifications used by the Junior Colleges. The methodology could, however, be adapted to the program categories suggested in Chapter IV. The number of variables may also be expanded or contracted depending upon the degree of accuracy, understanding and precision desired. For purposes of presentation, as well as interpretation, the number of variables used to develop the program amount should be held to a minimum. Once computed, the program amount could be expressed in terms of any unit which would facilitate the flow of dollars between the state and local districts.

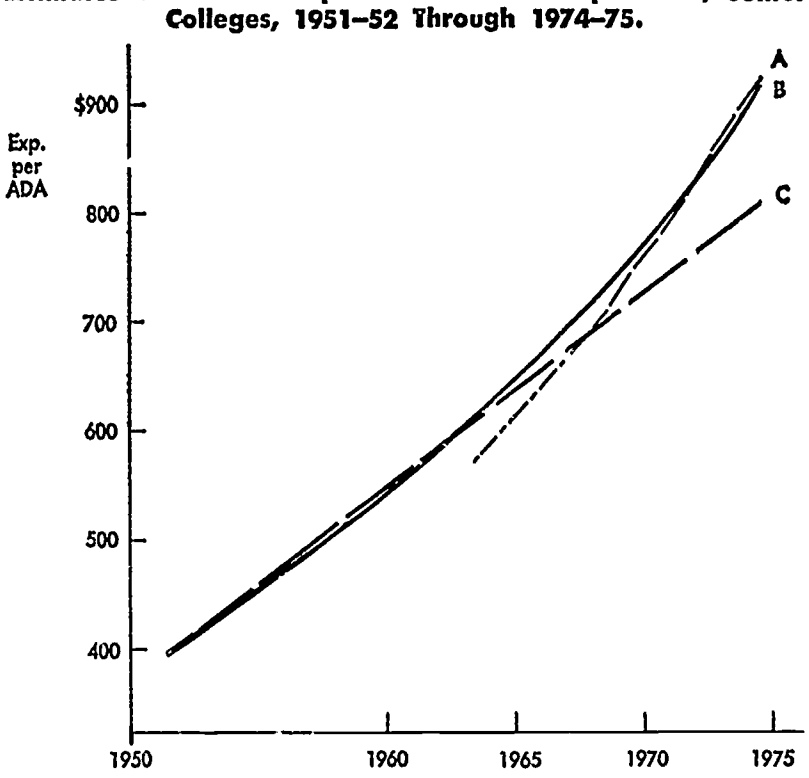
An application of this type of method (using the variables in Table 33) appears in Appendix F, Table 1. Assuming that the 1963–64 average level of support was appropriate, certain relationships and costs were computed and applied to future estimates of Junior College enrollment. Most "real" relationships of 1963–64 (average class size, faculty load, etc.) are held constant with costs increasing only on the basis of historical price trends, although historical salary structure increases were included. The result of this method is compared in Figure 3, with two other expenditure estimates (lines B and C) which are based upon time series trends of average Junior College costs since 1951–52. (see Appendix F, Table 2). The formula method of projection described above (maintaining the 1963–64 real level of support) results in a cost, by 1974–75, that exceeds the other two projections, both of which include historical changes in real program as well as prices. The rate of increase in expenditures estimated by the formula method is demonstrably greater than that rate exhibited by the other two methods. If the formula price indices are reasonably accurate, then under the existing method of adjusting the foundation amount, Junior College support levels have at *most* kept pace with price increases. They have not been increasing at a rate sufficient to allow any increases in the real level of program.

If the Governor, the Legislature or any other policy-making body desires to increase or reduce the real level of support for the Junior Colleges such intent should be explicit rather than an implicit (and possibly unintended) result of an inappropriate method of measuring program costs.

The proposed method of calculating a program amount more fully satisfies those criteria (Numbers 1, 3, and 5) related to program measurement than do either (1) the existing method of establishing a "foundation amount" or, (2) an impractical and inappropriate method of relying upon costs as contained in indi-

FIGURE 3

Estimates of Current Expense of Education per ADA, Junior Colleges, 1951–52 Through 1974–75.



A: Formula projection based upon 1963–64 real level of expenditure
B: Semi-logarithmic straight line trend of actual expenditures, 1951–52 to 1964–65
C: Arithmetic straight line trend of actual expenditures, 1951–52 to 1964–65

SOURCE: Tables 1 and 2, Appendix F.

vidual district budget requests. The proposed method would also make explicit those decisions which relate to the real level of program expenditures.

Measurement of Student Population

As pointed out in Chapter II, a student measure based upon course enrollment is a more appropriate way of measuring the educational workload of the individual Junior College than the current use of course attendance. Actual costs of presenting a program are more closely related to enrollment than to actual attendance. In addition, the administratively difficult and costly method of attendance accounting currently used could be eliminated if student measurement were based upon enrollment.

Either the course contact hour or the course credit hour may be used as an index of enrollment to compute the student measure. Generally, all unit cost data for higher education are expressed in terms of the credit hour. For the Fall of 1963 (see Table 13, Chapter II), there were approximately 1.3 hours of class contact recorded for each one hour of credit in California public higher education. Life sciences, physical sciences, and technical vocational display the highest ratio of contact hours to credit hours because they involve the largest amount of laboratory instruction.

While the student is measured in terms of the credit hour, the method of budget review for the University and State Colleges takes into consideration the differences in expenditures which relate to programs with heavy laboratory orientation. In the State Colleges such differences are recognized by a faculty staffing formula which (1) allows smaller section sizes for laboratory instruction as opposed to lecture and (2) adjusts the contact hour load per faculty member depending upon whether he teaches primarily laboratory or lecture courses. Equipment requirements are established by individual campus budgets. Under a costing method such as that proposed for the Junior Colleges, there must be safeguards which will insure that legitimate instructional costs of a district with a high laboratory emphasis are not understated. If the credit hour is used, the difference in costs between two districts (one with little laboratory and one with heavy emphasis on laboratory) may be misleading. If, however, the contact hour is used, the unit costs of such functions as student services, library, and administration may be understated in the district with the high contact-credit hour ratio because these activities are more related to numbers of students than to the number of hours such students spend in the laboratory.[6]

If it were possible to differentiate a program amount on the basis of major subject areas of instruction, the best measure would be based on the credit hour. However, as indicated earlier, the data currently available does not allow an accurate identification of such distinctions. Until valid distinctions are possible, it will be necessary to use the contact hour basis for statewide expenditure analysis and identification of the program amount.

Data provided by the Department of Finance show that the median attendance: enrollment ratio for the Junior Colleges in 1964–65 was 85.82; i.e., for each 100 class contact hours generated by the reported enrollment, there were 86 class contact hours of actual attendance. Conversion to a student measure based on enrollment contact hours, rather than attendance contact hours, would result in a significant redistribution of state funds to individual districts (assuming state assistance stayed at the same level). During 1964–65, State Center Junior College District would have received approximately the same amount of state funds in either case since it reported the median enrollment: attendance ratio for the system. Monterey Peninsula College, however, with one of the highest ratios (96.33) would have received considerably less (about 12%) and Rio Hondo, exhibiting one of the lowest ratios (76.73), would have received considerably more (about 12%) state funds. The impact on other districts would vary between these two extremes. Such variations indicate that a phasing-in period is necessary if the existing foundation program method were retained. However, if the program amount method were used, the need for such a phasing period would be far less urgent.

Elimination of the use of the defined adult has already been discussed and is recommended. The Council, on two previous occasions, has endorsed the elimination of this distinction.

Another distinction in student measurement required under the existing foundation program is that between (1) residents of district "A," (2) residents of other districts in the state who are attending district "A," and (3) those attending district "A" who do not reside in any district. If the measures of local need and ability were based at least partially upon students in enrollment, rather than resident students, distinctions (1) and (2) could be eliminated. Further, if taxpayers in non-district territory contributed to the cost of Junior College education to the same extent as those whose property is located within district boundaries, distinction (3) could be eliminated. Both changes will be discussed later in this chapter. Certainly, simplicity and understanding would be more fully attained if all such residence distinctions for California students were eliminated.

Finally, the current foundation program contains a provision by which the apportionment of funds to basic aid districts for resident adults is based upon the smaller of either the current or prior year's a.d.a. The need for funding growth in resident adults seems no less essential than for growth in students defined as "resident, other than adult". In fact, in 1964–65, 83%

[6] Data in Chapter II also indicated that the ratio of student class hours to credit hours (a general index of the above factors) was a significant determinant of the variation in total instructional costs between districts.

of such adults were attending the same graded classes as were "other than adults." One result of the existing procedure may be an understatement of need in those basic aid districts that exhibit large percentage increases in defined adults as compared to those basic aid districts in which the adult population is stable. (See Table 3, Appendix B.) All criteria would be better met by the elimination of this provision and the use of current student count for apportionment purposes.

Collection of Local and Distribution of State Contribution

The existing foundation program method of distributing state funds to Junior College districts generally contradicts the five criteria stated earlier. The following section reviews the two most important components of any state-local fiscal relationship: (1) the method for distributing state general tax funds; and (2) the method for collecting the local district contribution. In California, the latter has consisted almost entirely of property tax revenues.

The distribution of state funds may be accomplished by several methods, including flat grants and/or equalized grants for general or specific purposes. The wide variation between the ability of local Junior College districts (assessed valuation per a.d.a.) rules out a program of state distribution in which each district receives an equal flat grant per student. To do this would mean that poor districts must levy a much higher local property tax than the rich districts in order to insure sufficient revenues for comparable educational opportunity. If a flat grant method is used, the solution to the need for equalization would be to change to complete state general fund support.

Results of the current method of equalization reviewed in Chapter III, show that it only generally conforms to criterion number 2 (ability-to-pay as between districts). It was also noted, however, that wealthier districts received more basic aid as a percent of their total current expense of education than did the less wealthy districts. Equity of contribution, based upon ability-to-pay, would be more fully satisfied if basic aid were eliminated.

Examination of existing Junior College district tax rates indicates that the local collection aspect of the existing fiscal relationship satisfies the criteria no better than does the existing method of state distribution. The existing statutory maximum tax rate of 35¢ per $100 of assessed valuation was intended to place a partial limit upon local property tax rates. However, the variation of local tax rates proves that this has not happened. Districts, in order to support the current expense of education during 1964–65, were exceeding the 25¢ computational tax by a statewide average of about 7¢ (see Table 25). When other activities such as community services and numerous permissive and voted overrides are included, the total average (unweighted) levy rises to more than 40¢ (see Table 24). When individual district rates range from a low of 25¢ to a high of 85¢, it is clear the existing method does not result in an equitable tax contribution among property owners who reside in Junior College districts. The variation statewide is even more pronounced since property owners in non-Junior College district areas were taxed only 11¢ for the current expense of education during 1964–65 for Junior College purposes (see Table 25).

The existing method of local collection is confusing and not well understood by the local taxpayer.[7] There is a computational tax of 25¢, a statutory maximum tax of 35¢, and numerous permissive overrides which may be levied for special purposes. In addition to these levies, a district may request its voters to approve an override for either operating or capital purposes. This structure is complex and has resulted in significant inequities.

Elimination of Basic Aid, Permissive Overrides and Statutory Maximum—It becomes necessary to examine alternatives which would eliminate some of the objections raised above in connection with the existing foundation program. Specifically: (1) the elimination of basic aid and all state assistance taking the form of equalization; (2) the elimination of the existing limitation of $230 in state assistance for defined adults; (3) the elimination of all permissive overrides and the statutory maximum of 35¢. The basic formula for state assistance now becomes:

$$A_d = (F_s \times S_d) - (AV_d \times r_s)$$

where,

A_d = the state apportionment to the individual district

F_s = calculated cost per student unit for Junior College system

S_d = number of student units in the individual district

AV_d = assessed valuation within the individual district

r_s = systemwide computational tax rate

These changes result in more state funds for the less able districts, and less state funds for the more able districts. In computing what would have happened in 1964–65 under the proposed method, it was found that a correlation of state aid per student on local ability resulted in a coefficient (of correlation) of .935 [8]. This result may be compared with that correlation coefficient for the same two variables which was obtained from the actual 1964–65 distribution of state funds (.694).

In order to show the effect upon individual districts several were examined (Table 34) because of their

[7] R. W. Cox and A. L. McPherran, "Why Retain Statutory Maximum Tax Rates," *California Education*, III (November, 1965), pp. 15–18.

[8] This coefficient includes only those districts who would have received state aid under the new formula. Others, eligible for no state aid were not considered.

TABLE 34

Comparison of Alternative Methods of Distributing the State Share, the Effect Upon Selected Districts

1964–65

Item	*State*	*Yuba*	*San Francisco*	*Los Angeles*	*Fullerton*	*Vallejo*	*San Luis Obispo*
ADA (Attendance)	277,801	2,324	8,072	41,151	9,280	1,957	135
Population	18,234,000	40,800	755,700	[1]3,991,177	[1]145,006	--	--
Assessed Value ($000's)	--	$71,900	$1,692,568	$7,781,989	$326,938	$90,337	$248,349
State Aid per ADA	--	$207	$128	$129	$200	$379	$57
Percent of Actual Expense	--	37.1%	20.1%	19.8%	36.9%	86.5%	4
AV per ADA[3]	$115,790	$31,757	$203,303	$194,329	$34,488	$41,217	$1,740,733
AV per Capita	$1,764	$1,809	$2,172	[1]$2,004	[1]$2,207	N.A.	N.A.
Junior College Tax Rate[4]	--	$0.41	N.A.	$0.3279	$0.4088	N.A.	$0.49
Local Property Tax Rate	$8.31	$7.24	$9.15	$8.44	$8.16	$7.37	$7.57
Local Property Tax Rate Less Education	$4.22	$3.69	$6.55	$4.15	$3.99	$3.71	$3.30
Need ($600 per ADA)	--	$1,394,400	$4,843,200	$24,690,600	$5,568,000	$1,174,200	$108,000
A. "Elimination of basic aid"[2]							
State Aid	--	$1,157,130	$−742,274	$−989,964	$4,489,105	$876,088	$−711,552
Percent	--	82.9%	--	--	80.6%	74.6%	--
Per ADA	--	$498	--	--	$484	$448	--
Local Aid							
Percent	--	17.1	--	--	19.4	25.4	--
Per ADA	--	$102	$692	$624	$116	$152	$6,071
Local Tax Rate (based on $600 need)	--	$0.33	$0.33	$0.33	$0.33	$0.33	$0.33
B. "Increased contribution in nondistrict areas"							
State Aid	--	$1,180,857	$−183,727	$1,578,093	$4,596,994	$905,899	$−629,597
Percent	--	84.6%	--	6.0%	82.5%	77.1%	--
Per ADA	--	$508	--	$38	$495	$463	--
Local Aid							
Percent	--	15.4%	103.7%	94.0%	17.5%	22.9%	682.9%
Per ADA	--	$92	$623	$562	$105	$137	$4,697
Local Tax Rate (based upon $600 need)	--	$0.297	$0.297	$0.297	$0.297	$0.297	$0.297
C. "Adjustment for Population Factor:"							
State Aid	--	$1,136,436	$500,464	$5,020,422	$4,380,160	N.A.	N.A.
Percent	--	81.5%	10.3%	20.3%	78.7%	N.A.	N.A.
Per ADA	--	$489	$62	$122	$472	N.A.	N.A.
Local Aid							
Percent	--	18.5%	89.7%	79.7%	21.3%	N.A.	N.A.
Per ADA	--	$111	$538	$478	$128	N.A.	N.A.
Local Tax Rate (based on $600 need)	--	$0.3615	$0.2568	$0.2530	$0.3629	N.A.	N.A.

[1] Estimated; See Table 22.
[2] Foundation amount $600, computational tax $.0033; percentage equalizing based upon assessed valuation per student and 32% state share leads to same results.
[3] Based upon ADA of attendance.
[4] Tax rate for current expenditures excluding community services, but possibly including levies that are used for capital outlay purposes, all tax rates per $100 assessed valuation.

SOURCE: Bureau of School Apportionments and Reports; Bureau of Education Research, Department of Education; State Board of Equalization *Annual Report*, 1964–65.

variations in local ability, program size, and population. In eliminating basic aid, the example uses a computational tax of 33¢ which maintains the total amount of state assistance at the existing 32%. (No change in the existing 25¢ computational tax would have resulted in an increase of $34 million in state funds). Without basic aid, San Francisco, Los Angeles, San Luis Obispo and 14 other districts would not have qualified for state assistance due to relatively high local ability.

Two courses of action are open to the state at this point. These districts could be required to contribute local tax revenues to a central fund which would be utilized for apportionment purposes to other Junior Colleges and consequently hold tax rates relatively constant between districts. Or, such districts might be allowed to fund their total programs with the level of required local effort and not be required to contribute to the support of other districts. This latter alternative would substantially increase the state general fund share of the total program and allow the more able districts to decrease their tax rates. Los Angeles, for example, could have supported its reported 1964–65 expenditures of $650 per a.d.a. with a local rate of 33.6¢, rather than the 35.7¢ rate implied in Table 34; while San Luis Obispo could have operated on just over 7¢. Under either alternative, however, most local tax rates in more-able districts would be higher than under the existing foundation program and would correspond more closely to those rates in less-able districts.

No limit on adjustments in local tax rates is proposed. It is possible that local boards might decide to raise rates to meet programs costing more than the statewide program rate or to lower local tax rates in the converse situation. Given a local effort of at least 33¢, each district is assured of sufficient funds to operate at the computed program level for the system ($600 in the examples in Table 34). While districts would be induced to operate at not less than the program level, it is possible that a lower unit cost of operation might be arrived at and that the local tax rate could be set at less than 33¢.

In summary, the advantage of this method of equalizing Junior College programs is that given a stipulated level of local effort, each district would be guaranteed the funds to present an adequate program level and in some cases more. The distribution of the state contribution would be changed markedly with more of the total being allocated to the less-able districts than before. This method of collection and distribution is less complex than the existing foundation program and, if used in conjunction with the program measurement advocated earlier, would provide the basis for a more stable fiscal situation and a more nearly optimum allocation of available resources.

Equating the Contribution in Non-District Areas—Another major difficulty to be resolved is how to deal with the taxation of property in non-Junior College districts. An additional adjustment to the alternative presented above could insure that a similar contribution will be collected from non-district territory as is required of district areas.

Inclusion of territory within Junior College districts has grown rapidly since 1961, and by 1965–66 approximately 90% of statewide assessed valuation is within district boundaries. Inclusion of all state territory in Junior College districts, while encouraged is not mandatory, and it may be that total inclusion will not take place until well after 1970.

The wide disparity in rates of taxation between district and non-district territory may continue for some time unless specific measures are taken. It can be argued that this disparity is natural and should exist; i.e., the property owner in a remote county such as Mono, having no local Junior College, is removed from the benefit of the college and should not be required to contribute at the same rate as the property owner in Orange County. This argument is untenable for two reasons. First, it is impossible to determine the extent (if any) to which the Mono resident receives less benefit from general Junior College instructional programs than the resident of Orange County. It is thus impossible to base the burden of contribution for Junior College general educational expense upon benefits received by reason of geographical location. Secondly, many non-district areas are relatively close to existing Junior College facilities and benefit from the advantages of such nearness. Examples of the latter situation occur in Los Angeles and Orange counties.

The contribution of non-district areas could be equated in one of at least two ways: (1) local districts could levy and collect a standard tax rate while the same standard tax rate would be levied in non-district areas by the state and the funds deposited in a central fund for subsequent apportionment to Junior College districts, or (2) state collection of the local contribution from both district and non-district areas based upon a standard tax rate throughout the state. In either case, the local district would retain the authority to make subsequent adjustments in the local property tax rates. Either arrangement would be less complex than the existing method, especially in the non-district areas. Arrangement (2) may be the less complex of the two alternatives and, from the standpoint of those costs involved in tax administration, less expensive. As indicated in Table 34, under example B, there is no redistribution of state assistance as between districts but rather a general decrease in local tax rates (approximately 3¢ if the application were made to 1964–65) for all districts; and criterion number 2 (equity of contribution) is more fully satisfied.

Adjusting the Measure of Local Ability—Thus far, all references to local ability have been expressed

in terms of assessed valuation per student. As noted earlier, there are a number of other possible indices, ranging from the very theoretical personal income per capita to very complex indicators of economic activity.[9] Personal income can be used to assess the tax-paying ability of individuals because it is generally the source from which taxes are paid. To the extent that individuals draw upon fixed assets (such as savings accounts, property, etc.) to pay their tax bills, a better indicator is some measurement of "net worth." However, in determining the relative ability of a local district (a *group* of taxpaying individuals) to support its educational program, it seems more reasonable to use that basis from which the district obtains its revenues, i.e., property (the assessed valuation). Even if personal income were a good theoretical indicator of district ability (which it does not appear to be), it would be impossible to use until reliable statistics for personal income were available by Junior College district. A complex indicator of local economic activity does not appear sound because a particular district could display a high level of retail sales and other such activity, but contain relatively low property values and/or personal income. In actuality, the district would be relatively unable to provide the expected local share except with a high property tax rate.

While the use of assessed valuation to determine district ability seems both practical and theoretically sound, when used in conjunction with the number of students in the district, the measure may tend to confuse need with ability. As an illustration of this, compare two districts, both having the same number of students and equal assessed valuation, but with one district (A) having twice the population of district (B). As currently measured, both A and B would be equally able. However, the number of students in a Junior College district may have little or nothing to do with the tax paying ability of local property owners. Such ability might be better measured on the basis of those who must pay the tax, i.e., assessed valuation per property taxpayer. For purposes of simplicity and due to available data, one might assume that each district contains the same number of property taxpayers per unit of population. The relative abilities of A and B may then be measured in terms of the assessed valuation per capita; in which case, B has twice the ability of A. The essential difference in the two measures turns out to be the ratio of population to students.

The implication of moving from a student basis to a population basis in conjunction with local assessed valuation, is that the method of state distribution then becomes concerned with the cost of other local services as well as education. In the example above, district A must tax property at twice the rate of district B in order to obtain the same level of local governmental services other than education. Due to this relatively greater burden in district A, the Junior College has, in a sense, less of the property tax base from which to draw revenues than its counterpart in district B. The Board of Equalization's Annual Report relative to property taxes shows that the more populous urban counties generally exhibit higher total property tax rates than rural counties. The sample districts in Table 34 display much the same tendency. Districts such as Los Angeles and San Francisco had the highest total property levies of the group for 1964–65, while more sparsely populated districts such as Yuba, Fullerton, Vallejo, and San Luis Obispo reported levies below the statewide average.

Comparison of tax rates and estimated assessed valuation per capita for the districts in Table 34, indicates that the levels of local services other than education were not comparable during 1964–65, if such services are measured in terms of tax dollars of revenue per capita. This is the basis for one of the arguments against including factors in school equalization which recognize the cost of other local government activities. A district may receive more in state assistance for its schools than other districts simply because it desires to fund a higher level of other local governmental services. This is a valid objection, yet if the formula were to assume that each person throughout the state requires the same amount of municipal and county services, then variations in costs of such services between districts would not distort the distribution of state assistance.

Both student factors and population factors are important in the determination of local district ability, and any equalization method should not recognize one at the total exclusion of the other. A formula suggested by Lindman[10] provides a convenient vehicle for recognition of both factors. In Table 34, the population factor has been weighted at a considerably lower level ($n = 4$) than the student factor to reflect a moderate transition from the current measure of local ability that is based solely upon students. Any reasonable weighting factors could be used depending upon the extent to which population is to be recognized:

$$A_d = (F_s \times S_d) - r_s \left(\frac{(n)\, S}{(n-1)\, S + P} \right) AV_d$$

where,

A_d = the state apportionment to the individual district
F_s = calculated cost per student unit for Junior College system
S_d = number of student units in the individual district
r_s = systemwide computational tax rate
AV_d = assessed valuation within the individual district

[9] Florida's method of determining local district ability is one of the very few instances of such an indicator in use currently.

[10] Erick L. Lindman, "School Support and Municipal Government Costs," Long-Range Planning in School Finance, *Proceedings of National School Finance Conference*, National Education Association (St. Louis, 1963), p. 133.

variations in local ability, program size, and population. In eliminating basic aid, the example uses a computational tax of 33¢ which maintains the total amount of state assistance at the existing 32%. (No change in the existing 25¢ computational tax would have resulted in an increase of $34 million in state funds). Without basic aid, San Francisco, Los Angeles, San Luis Obispo and 14 other districts would not have qualified for state assistance due to relatively high local ability.

Two courses of action are open to the state at this point. These districts could be required to contribute local tax revenues to a central fund which would be utilized for apportionment purposes to other Junior Colleges and consequently hold tax rates relatively constant between districts. Or, such districts might be allowed to fund their total programs with the level of required local effort and not be required to contribute to the support of other districts. This latter alternative would substantially increase the state general fund share of the total program and allow the more able districts to decrease their tax rates. Los Angeles, for example, could have supported its reported 1964–65 expenditures of $650 per a.d.a. with a local rate of 33.6¢, rather than the 35.7¢ rate implied in Table 34; while San Luis Obispo could have operated on just over 7¢. Under either alternative, however, most local tax rates in more-able districts would be higher than under the existing foundation program and would correspond more closely to those rates in less-able districts.

No limit on adjustments in local tax rates is proposed. It is possible that local boards might decide to raise rates to meet programs costing more than the statewide program rate or to lower local tax rates in the converse situation. Given a local effort of at least 33¢, each district is assured of sufficient funds to operate at the computed program level for the system ($600 in the examples in Table 34). While districts would be induced to operate at not less than the program level, it is possible that a lower unit cost of operation might be arrived at and that the local tax rate could be set at less than 33¢.

In summary, the advantage of this method of equalizing Junior College programs is that given a stipulated level of local effort, each district would be guaranteed the funds to present an adequate program level and in some cases more. The distribution of the state contribution would be changed markedly with more of the total being allocated to the less-able districts than before. This method of collection and distribution is less complex than the existing foundation program and, if used in conjunction with the program measurement advocated earlier, would provide the basis for a more stable fiscal situation and a more nearly optimum allocation of available resources.

Equating the Contribution in Non-District Areas—Another major difficulty to be resolved is how to deal with the taxation of property in non-Junior College districts. An additional adjustment to the alternative presented above could insure that a similar contribution will be collected from non-district territory as is required of district areas.

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The wide disparity in rates of taxation between district and non-district territory may continue for some time unless specific measures are taken. It can be argued that this disparity is natural and should exist; i.e., the property owner in a remote county such as Mono, having no local Junior College, is removed from the benefit of the college and should not be required to contribute at the same rate as the property owner in Orange County. This argument is untenable for two reasons. First, it is impossible to determine the extent (if any) to which the Mono resident receives less benefit from general Junior College instructional programs than the resident of Orange County. It is thus impossible to base the burden of contribution for Junior College general educational expense upon benefits received by reason of geographical location. Secondly, many non-district areas are relatively close to existing Junior College facilities and benefit from the advantages of such nearness. Examples of the latter situation occur in Los Angeles and Orange counties.

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Adjusting the Measure of Local Ability—Thus far, all references to local ability have been expressed

n = weighting which determines the extent to which population is to be recognized
S = percent that students in the individual district are of systemwide student total
P = percent that population in the individual district is of total population for all districts

Table 34 applies this formula to the 1964–65 situation for several selected districts. Again, the total state share is 32%. The relatively large districts, San Francisco and Los Angeles receive 10% and 20%, respectively, of their operating needs from the state. The "sparse population" districts, on the other hand, receive a smaller proportion of state assistance than they did under the previous distribution alternatives which did not recognize population. Fullerton receives $472 in state aid per student as opposed to the $495 allocation when the ability measure is based upon students. Yuba also exhibits an increase in relative local ability using the new index. The common local tax rate of 29.7¢ for all districts in the previous alternative now varies as follows:

Yuba	36.15¢	per $100 of assessed valuation
San Francisco	25.68¢	
Los Angeles	25.30¢	
Fullerton	36.29¢	

The rates for other districts would have varied somewhere between 25¢ and 36¢ with the mean rate at 30¢. Even in this range there is less variation than is the case with existing Junior College tax rates (see Table 23). It is true that some districts, such as San Luis Obispo, would still be wealthy enough to support their program solely from local sources, but the number of such districts would be reduced from the level of self-supporting districts existent under the distribution and collection alternatives which do not recognize the "population factor".

If the above arguments relative to more exact measures of local ability are valid, then the new structure of local property tax rates in the last alternative effects a more equitable contribution based upon ability-to-pay as between districts and would be the preferred procedure.

While some recognition of population factors may be the most accurate index of local district ability, no reliable population figures for Junior College districts exist today and it will be necessary for the immediate future to continue with the student basis for measuring relative local ability.

Location and Extent of Fiscal Review

An essential component of any state-local fiscal relationship is the location and extent of the various budget reviews. Possible program measurement methods for the Junior Colleges were discussed in Chapter IV. Since the use of one or more program levels has been proposed for the allocation of funds among districts, provision must be made for those districts whose unit costs vary significantly from the average.

The primary budget task of a central state board or agency should be the establishment of a program unit level based upon explicit variables.[11] The board could then recognize the price variables and make adjustments in the policy variables, such as salary increase, class size, faculty load. Such decision-making would take place in the Fall prior to the session at which the Legislature would set the level of state-local sharing and appropriate sufficient funds to provide the state share.

If individual districts estimated they would be unable or unwilling to operate at the level estimated by the state board to be adequate, such districts could appeal for special consideration. An appeal might be made that local conditions require a higher unit cost in order to conduct an instructional program comparable to other districts which exhibit a lesser unit cost. Another appeal might be the desire of the district to establish an innovative program or otherwise improve existing offerings in such a way as to incur high costs initially, but provide the potential for long run economies or improvements.

When confronted with these budget appeals, the board could have discretion to act in one of three ways: (1) Deny the proposal on the basis that it is an unwarranted expenditure and/or not in the state interest, in which case the district would have the option of increasing its own local tax contribution to support the added expenditure. (2) Approve the higher unit expenditure, but only allow state funds in the same proportion as are allocated for the basic program. (3) Approve the higher unit expenditure and support it entirely with state funds.

Following establishment of the program unit amount and action on the various appeals, the state board would estimate the total funding required for all the colleges and recommend that these funds be appropriate in accordance with a specific state-local sharing ratio. The board, therefore, would recommend not only an adequate level for Junior College support based upon demonstrated needs, but also indicate the appropriate sources of revenue. This type of decision structure provides an improved basis for achieving the optimum allocation of resources and also provides the local district administration with a more reasonable and stable estimate of future state funding.

Once the Legislature appropriated funds for the specific program level on the basis of an established state-local sharing ratio, the unit amount could be applied to reported student units in the appropriate academic year for actual distribution of state general funds among districts.

[11] In defining the terms of program measurement, we have eliminated the possible alternative of review of individual district budget requests by a central state agency or board.

Cost Sharing

Nothing in Chapter III regarding sharing of Junior College costs explicitly indicated what an acceptable or appropriate ratio of state and local sharing might be. No particular sharing ratio will be considered by everyone to be the best, nor (probably) as being better than any other ratio. It is possible, however, to examine several relevant factors such as: (1) practices in other states; (2) effects of changes upon the equity of contribution between income classes; (3) effects of sharing adjustments upon educational decision-making; (4) effects of alternative sharing ratios with regard to primary revenue sources; and (5) appropriate contribution sources for certain non-educational services provided Junior College students.

Other States—The general pattern of state-local sharing of Junior College costs in other states differs from the California pattern in two important respects. First, the State share elsewhere is generally larger, though varying considerably from state to state. Second, in almost all cases, the student is charged a tuition. The result of these factors is a local share much lower than that currently exacted in California. Any effort to shift the California support pattern into more conformity with the national picture would require greater utilization of state level (i.e., general fund) tax revenues.

Equity of Contribution—The local property tax is notably regressive throughout the range of income levels, i.e., results in higher effective tax rates as income decreases. On the other hand, the state general fund tax structure, consisting primarily of the income and sales taxes, is generally proportional throughout the range of various income levels. As now constituted, the state and local sharing ratio for Junior College support results in a regressive tax structure. Any shift toward greater use of the state general fund would shift the total structure toward a more proportional position and result in more comparable effective tax rates for all income classes.

Effects on Decision Making—The argument stated above favors greater state participation than results from the current sharing ratio. Many people argue, however, that increased state support leads to greater state control and a loss of local determination. A decrease in local authority over educational matters is a possibility even under the present arrangement. It does not follow that increased state support automatically means a corresponding loss of local control. On the contrary, gains in local decision-making may occur in conjunction with greater amounts of state assistance. It is the method by which the state and local fiscal relationship is carried out (rather than a high or low sharing ratio) that will determine what impact fiscal decisions have upon educational decisions.

Effects of Alternate Ratios—Table 35 indicates the effects of alternative levels of state-local cost sharing. The projected rates of increase of general fund revenue, local assessed valuation and costs of education are such that even if the state were to participate at the *Master Plan* recommended rate of 45% by 1975, the average statewide property tax levy would approximate 32¢ per $100 of assessed valuation. This rate is comparable to the statewide average levy in 1964–65 upon property owners within Junior College districts. If the 1964–65 sharing ratio were maintained, however, the average statewide property levy would rise to 40¢ per $100 by 1975.

In examining the impact of alternative sharing upon the state general fund, it has been assumed that the existing tax structure and the effective ratio of general fund revenue to personal income estimated for 1966 will continue. As a result, the revenue estimates will be conservative. Realization of the *Master Plan* recommendation, would result in an approximate doubling of the share of the state general fund expended for Junior College support. Maintenance of the 1964–65 cost sharing ratio would result in the Junior College general fund share rising to 3.3% from the 1964–65 level of 2.3%. As measured in absolute current dollars, the difference in the *Master Plan* idea, as opposed to the extension of existing policy, would amount to approximately an additional $60 million from the general fund by 1974–75.

Student Contribution—Junior College students pay significantly less toward support of "non-educational student services" than do their lower division counterparts in the University or State Colleges. If the benefits of such services accrue primarily to the individual student and not to society in general (the apparent premise in the case of the State College and the University student fee charges), then criterion number 2 (equity of contribution based, to the extent appropriate, upon benefits received), would be better satisfied if Junior College students were charged for a greater portion of such services. In particular, student parking and health services could be totally supported by students. While there are permissive fees for these services currently, *very few* districts levy such charges.

The levy of tuition upon "adults" is equally as inconsistent. Less than one-fourth of the districts charge any tuition at all. The reported charges (in answer to a Council staff questionnaire) represented only a fraction of the actual cost of instruction during 1964–65. In an effort to properly recognize the state responsibility and introduce some uniformity (as compared with practices in the other segments), it would seem that a mandatory tuition charge for the costs related to instruction to persons attending Junior College nongraded classes (classes for adults) would be proper.

Another source of student contribution is the charging of tuition to out-of-state students. Such charges are based upon actual per unit costs which were reported two years previous to the year in which the rates are to be effective. In keeping with the practice of the other segments and the equity of contribution criterion, more current charges would appear in order. Specifically, the charge could be based upon estimates of instructional costs and established by the state board at the same time the program level is determined.

In summary, an increase in the level of state general fund participation in support of Junior College current operations is generally consistent with the five criteria, especially that for equity of contribution (by income class). However, the appropriate magnitude of such an increase is difficult, if not impossible, to determine. Certainly, no recommendation for a large increase is feasible for the long run (through 1974–75, for example).[12] Significant changes in the assumptions and variables upon which the analysis is based would render any such recommendation too rigid. For the immediate future, however, moderate increases in state general fund participation to not less than a *35%* share by 1967–68 appears reasonable. At that time, the sharing policy should be reviewed for adjustment in light of possible changes in tax structure, costs of education, and the general economy of the state. Adjustments in sharing policies should conform (whenever the fiscal situation permits) to established criteria citing educational objectives and equity of taxpayer contribution.

[12] This argument is based upon the existing tax structure. If the Legislature determines that substantial increases in general fund taxes are possible and necessary, the share of such taxes in support of Junior Colleges could be increased more rapidly. In fact, a fiscal relationship in which the state general fund contributed the entire Junior College cost would still be consistent with the criteria.

TABLE 35

Results of Alternative State-Local Sharing Policies [1]

Item	*State Share*			*Local Share*		
	Total ($000's)	*Percent of Junior Colleges Cost*	*Percent of general fund*	*Total ($000's)*	*Percent of Junior Colleges Cost*	*Average Statewide Levy ($ per $100 av)*
1964–65	$52,603	32%	2.34%	$108,995	66%	$0.2966
(1) "Continuance of existing policy"						
1967–68	85,288	32	3.04	175,906	66	.3629
1968–69	93,854	32	3.11	193,573	66	.3714
1970–71	110,256	32	3.15	227,403	66	.3775
1974–75	154,806	32	3.30	319,287	66	.3966
(2) "Slight state decrease"						
1967–68	66,631	25	2.37	194,563	73	.4014
1968–69	73,323	25	2.43	214,104	73	.4108
1970–71	86,137	25	2.46	251,521	73	.4175
1974–75	120,942	25	2.58	353,151	73	.4387
(3) "Master Plan Recommendation"						
1967–68	93,283	35	3.32	167,910	63	.3464
1968–69	105,585	36	3.49	181,842	62	.3298
1970–71	134,374	39	3.84	203,284	59	.3374
1974–75	217,696	45	4.64	256,398	53	.3185
(4) "Slight state increase, but less than Master Plan Recommendation"						
1967–68	93,283	35	3.32	167,910	63	.3464
1968–69	105,585	36	3.49	181,842	62	.3298
1970–71	127,483	37	3.64	210,175	61	.3489
1974–75	183,832	38	3.92	290,261	60	.3605
(5) "Even Split"						
1967–68	130,597	49	4.65	130,597	49	.2694
1968–69	143,714	49	4.76	143,714	49	.2758
1970–71	168,829	49	4.83	168,829	49	.2802
1974–75	237,047	49	5.06	237,047	49	.2944
(6) "State Predominant"						
1967–68	133,262	50	4.75	127,932	48	.2639
1968–69	152,512	52	5.05	134,915	46	.2589
1970–71	189,502	55	5.42	148,156	43	.2459
1974–75	266,073	55	5.67	208,021	43	.2584

[1] Of total costs, 2% is estimated to be derived from federal and other sources.
SOURCE: Appendix F.

CHAPTER VI

ALTERNATIVE PLANS FOR A STATE-LOCAL FISCAL RELATIONSHIP FOR THE PUBLIC JUNIOR COLLEGES

In the previous chapter the six components, and subcomponents, of a state-local fiscal relationship were analyzed to determine which of the many alternative plans they offer for the support of Junior Colleges, is most appropriate in view of the criteria and is within the restraints imposed by the assumptions.

The Plan that emerges most clearly from the analysis in Chapter V is presented below as the "Percentage Sharing Plan." Inherent in the plan, however, are certain disadvantages, some due to the restraints imposed by the assumptions and some of a political nature. When the restraints are relaxed, alternative plans are possible. Four of these alternative plans are also presented below. Although they eliminate some of the disadvantages and retain the benefits of the Percentage Sharing Plan, they also introduce certain other disadvantages.

PERCENTAGE SHARING PLAN

The "Percentage Sharing Plan" provides for the following:

1. Establishment of a financial measure of the cost per student unit of an adequate educational program in the Junior Colleges. This measure, identified as the "Program Amount," would be reflective of the actual costs of the educational program and would be adjusted annually on the basis of an examination of changes in both the price-related and policy-related cost factors.

   Two "Program Amounts" would be established—one for Junior College districts with less than 1000 a.d.a. (or the equivalent size in the student measure used) and one for all other districts. The "Program Amounts" would be established and adjusted as described in Chapter V and would be based upon the "current expense of education" as that amount is defined in the *Junior College Accounting Manual.*[1] It would include the expense of both graded and non-graded classes (classes for adults).

2. A student measure based upon a course class hour of enrollment, rather than attendance as the measurement of the educational workload. This measure, the "Weekly Student Class Hour" (WSCH), would make no distinction as to whether the students were resident in the district, were full-time or part-time, or were of any particular age; nor would the unit make any distinction as to whether the classes on which it is based were graded or non-graded (classes for adults). This measure would be the student unit in the Program Amount.

3. Elimination of state basic aid, the local statutory maximum property tax rate of 35¢ per $100 of assessed valuation and all permissive override taxes.

4. A division between the state and the local district of the "Program Amount," with the state's share based entirely upon equalization and the local share based upon a statewide computational property tax rate levied against an adjusted district assessed valuation. Adjustments to the district assessed valuation would include those currently in effect (the Collier factor and certain federal and miscellaneous funds) plus an additional adjustment based upon a formula described in Chapter V which recognizes a weighted relationship between two ratios: the ratio of the district student measure to the total student measure for the state; and the ratio of the total population of the district to the total population of the state. State apportionment to an individual district would be the difference between the cost of the district's educational program (as determined by the product of the Program Amount and the number of student units) and the district's income from the computational tax. Districts whose income from the computational tax exceeds the cost of the educational program would transfer the difference to the State General Fund.

5. Since the "Program Amount" is determined from an annual analysis of explicit price and policy variables, individual districts would be expected to maintain their programs within the limits of the "Program Amount." If a district desired to operate at a higher level the district governing board would have two options: a) increase the local contribution through a vote of the district electorate approving a higher tax rate; or b) request the state board for permission

[1] See Appendix D.

to operate at a higher level. If the request were approved, state funds would be provided to completely fund the increase or would be provided in the same proportion as allocated in the basic program.

6. The state board would estimate the total funding required for the Junior Colleges on a statewide basis and would recommend to the Governor and the Legislature a state apportionment in accordance with a specific state-local cost sharing ratio. This appropriation would then determine the statewide computational tax rate necessary to raise the local share.
7. The state-local cost sharing ratio for 1967–68 would be established to provide general fund participation of not less than 35%, and after that date the percentage would be subject to review and adjustment.
8. Tuition equal to the "Program Amount" be paid by full-time out-of-state students and prorated according to the number of units for which enrolled for part-time out-of-state students. (Districts could exempt non-residents who are both citizens and residents of a foreign country, or are military personnel or dependents of military personnel.)
9. Students attending non-graded classes (classes for adults) would pay a tuition that would cover the full cost of such classes.
10. Fees would be charged to cover the cost of student parking and health services.
11. Income from all tuition would reduce the state and district shares in the same ratios as the division of the Program Amount between the district and the state.

Advantages of the Plan

This Percentage Sharing Plan distinctly improves and simplifies the current Foundation Program. First, the plan provides a level of support for the total educational program based upon actual program cost factors, prescribes a method of annual review of these factors and provides for an adjustment in the support level if so indicated or desired.

Second, the plan provides for a student measure that reflects the educational workload based upon the enrollment rather than the attendance of students and without the need to divide the measure between in-district and out-of-district attendance, defined adults, etc.

Third, the plan equalizes local property tax effort throughout the state for Junior College operations.

Fourth, the plan requires the percentages of state and local support to be determined prior to establishment of the statewide property tax rate. This clearly and openly establishes the level at which the state is willing to support the Junior College educational program, rather than having this result from a pre-determined formula.

Finally, a tuition charge to those students attending non-graded classes (classes for adults), provides the same support for this type of class as provided for such classes in the University of California and California State Colleges.

Disadvantages of the Plan

The Percentage Sharing Plan introduces certain issues, mostly of a political nature, that could delay or even block legislative approval.

First, the elimination of basic aid will raise the question of whether or not such aid can be denied to the Junior Colleges through legislative action rather than constitutional revision. If basic aid is eliminated through legislation which removes the Junior Colleges as a part of the secondary schools, it is probable that they will not be entitled to a number of federal funds (vocational-technical, P.L. 874) which they now receive.

Second, the establishment of a statewide property tax will require some of the most populous districts to contribute, through a local property tax, to the support of other districts.

Third, budget review of those districts choosing to request additional state funds to meet a level above the Program Amount rather than choosing a local vote, raises the issue of local vs. state control.

Fourth, although the plan greatly simplifies the current method of supporting the Junior Colleges, it is still complex with respect to its equalizing factors and does not completely meet the criteria of simplicity.

Finally, the assumption that the existing State General Fund tax structure will be maintained without substantial change, limits the level of available state support to a percentage only slightly above the current percentage.

In view of these disadvantages the following alternatives to the Percentage Sharing Plan are presented. The alternative plans, through a relaxation of the assumptions of the study, provide for the retention of as many as possible of the advantages of the plan presented above while at the same time, eliminating some disadvantages.

ALTERNATIVE ONE--COMPLETE STATE SUPPORT PROVIDED THROUGH A PROGRAM AMOUNT

Alternative One includes many of the same components as the Percentage Sharing Plan, but in the interests of clarity the complete plan is presented below. Those components that are the same as in the Percentage Sharing Plan are identified with an asterisk. Alternative One provides for the following.

*1. Establishment of a financial measure of the cost per student unit of an adequate educational program in the Junior Colleges. This measure, identified as the "Program Amount," would be reflective of the actual costs of the educational program and would be adjusted annually on the basis of an examination of changes in both the price-related and policy-related cost factors.

Two "Program Amounts" would be established—one for Junior College districts with less than 1000 a.d.a. (or the equivalent size in the student measure used) and one for all other districts. The "Program Amounts" would be established and adjusted as described in Chapter V and would be based upon the "current expense of education" as that amount is defined in the *Junior College Accounting Manual*.[2] It would include the expense of both graded and non-graded classes (classes for adults).

*2. A student measure based upon a course class hour of enrollment, rather than attendance as the measurement of the educational workload. This measure, the "Weekly Student Class Hour" (WSCH) would make no distinction as to whether the students were resident in the district, were full-time or part-time, or were of any particular age; nor would the unit make any distinction as to whether the classes on which it is based were graded or non-graded (classes for adults). This measure would be the student unit in the Program Amount.

3. The "Program Amount" would be provided completely from the State General Fund. The state board would estimate the total funding required for the Junior Colleges on a statewide basis and would recommend that amount to the Governor and the Legislature.

4. All districts wishing or needing to operate at a level above the "Program Amount" would have the following two options:

   A. They could obtain the desired increase through voter approval of a district operational tax to be limited to a specific period of time, i.e., five years.

   B. They could make such a request of the State Board and if the increase were granted, the additional amount would be paid from the State General Fund.

*5. Tuition equal to the "Program Amount" would be paid by full-time out-of-state students and prorated according to the number of units for which enrolled for part-time out-of-state students. (Districts could exempt non-residents who are both citizens and residents of a foreign country, or are military personnel or dependents of military personnel.)

*6. Students attending non-graded classes (classes for adults) would pay a tuition that would cover the full cost of such classes.

*7. Fees be charged to cover the cost of student parking and health services. Such funds to be retained by the local district.

8. Income from all tuition would revert to the State General Fund.

Alternative One, presented above, maintains many of the advantages of the "Percentage Sharing Plan," but liminates certain important disadvantages. First, this Plan does not require the elimination of basic aid nor the separation of the Junior Colleges from the Secondary Schools.

Second, this plan would permit the Junior Colleges to remain eligible for all federal funds to which they are now entitled and receiving.

Third, this plan provides a simplified approach to State-local fiscal relationships and permits objective decision making.

Fourth, this plan provides equalized effort through the use of the State General Fund and provides a means of immediately and substantially reducing the property tax.

Finally, this plan assures every district in the State of receiving an adequate program amount and provides the flexibility to each district of exceeding that amount either through state funds or by a vote of the local electorate in the district. Local control and initiative are thus safeguarded.

ALTERNATIVE TWO—COMPLETE STATE SUPPORT OF JUNIOR COLLEGE OPERATIONS THROUGH BUDGET REVIEW

This alternative would provide for the complete support of Junior College operations through the State General Fund. Local districts would have no taxing power for operational costs. The procedure of support would follow that used to determine state support for the University of California and California State Colleges, with state review of all Junior College budgets.

ALTERNATIVE THREE—STATE LOCAL SHARING THROUGH PROGRAM AMOUNT

Alternative Three uses some of the components presented in the Percentage Sharing Plan, but fits this in with many current practices. In effect, it is a substantial modification of the current method. Alternative Three would do the following:

1. Establish a financial measure of the cost per student which would be the Program Amount described above.

[2] See Appendix D.

2. Establish a student measure based upon a course class hour of enrollment (Weekly Student Contact Hour) as described above.
3. Establish a state share of the Program Amount to consist of basic aid and whatever equalization aid to individual districts is required to fund the full Program Amount. The local share would be determined, as today, by a *systemwide* computational tax rate levied against the district assessed valuation adjusted only by the Collier factor and the factors related to federal and miscellaneous funds.
4. Establish a computational tax rate at a level that would maintain the same ratio of state-local support on a systemwide basis as existed in 1966–67.
5. Require tuition equal to the Program Amount to be paid by full-time out-of-state students and prorated according to the number of units for which enrolled for part-time out-of-state students. (Districts could exempt non-residents who are both citizens and residents of a foreign country, or are military personnel or dependents of military personnel.)
6. Require students attending non-graded classes (classes for adults) pay a tuition that would cover the full cost of education of such classes. (as provided above.)
7. Require that fees be charged to cover the cost of student parking and health services; such fees to be retained by the local district.
8. Income from all tuition would reduce the state and district shares in the same ratio as the division of the Program Amount between the district and the state.
9. Non-district territory would be assigned a tax rate not less than the computational tax rate assigned district territory. Income from non-district territory would be placed in the State General Fund.
10. Local districts could exceed the Program Amount through a local district property tax, but the statutory maximum of 35¢ tax rate would remain.

ALTERNATIVE FOUR
MODIFIED STATE-LEVEL SHARING THROUGH PROGRAM AMOUNT

Alternative Four would follow the same pattern as Alternative Three except:

1. The computational tax rate would be established at a level that would provide for equal (50-50) state-local sharing of the systemwide Program Amount.

SUMMARY OF ALTERNATIVES

The Percentage Sharing Plan suggests changes in existing methods of measuring program and students, several changes in tuition and fee charges, nearly uniform property tax levies statewide, and elimination of basic aid with all state grants in the form of equalization. This latter change probably requires a constitutional amendment and could jeopardize the receipt of certain federal funds. The utilization of a Program Amount to establish the state-local sharing of costs would be made on a policy basis rather than as a result of changes in certain formula variables (such as student enrollment, assessed valuation, costs, etc.).

Alternative One, Percentage Sharing with Complete State Support, would effect the most radical changes in existing methods and most fully satisfies the criteria set forth in this study. It would require the largest increase in state general fund support and would provide the greatest reduction in the local property taxes.

Alternative Two, Complete State Support Through Budget Review, requires an inordinate amount of centralization of fiscal decision-making, for Junior Colleges at the State level with a consequent loss of local control, flexibility and initiative.

Alternatives Three and Four, State-Local Sharing Through Program Amount, use the program measurement, tuition charges and student fee features of the other alternatives, require less general fund revenue than Alternatives One and Two, but make *no* changes in the existing foundation program method of apportioning state funds which only partially equalizes local district financial ability.

As indicated in Table 36, Alternatives One and Two advocate 100% state general fund support, Alternative Three is the only plan to continue the existing state-local sharing ratio, and Alternative Four provides for equal state-local sharing.

In Table 37 (and depicted graphically by Figure 4) several "model" districts representing varying levels of local wealth (assessed valuation per a.d.a.) are examined to determine the local tax rates that would be required under the alternative plans, given equal size and program expenditures. The alternatives are, in

TABLE 36

Estimated State and Local Expenditures for Current Operations of Public Junior Colleges Under Alternative Plans [a] (in thousands of dollars)

Plan	1967–68				1974–75			
	State		*Local*		*State*		*Local*	
	Amount	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*
1. Current Plan	[b]$88,734	34	[b]$167,028	64	•		•	
2. Percentage Sharing [d]	93,283	35	167,910	63	$217,696	45	$256,398	53
3. Alternative One	261,193	98	[e]		474,094	98	[e]	
4. Alternative Two [f]	261,193	98	--		474,094	98	--	
5. Alternative Three	90,618	34	170,575	64	164,481	34	309,612	64
6. Alternative Four	130,597	49	130,597	49	237,047	49	237,047	49

[a] Assumes that 2% of expenditures will be derived from federal funds, out-of-state tuition, and tuition for either "adults" (in existing program) or for non-graded instruction (in alternative plans).
[b] Represents approximation based upon historical trends in costs, assessed valuation, and enrollment estimates (by Department of Finance). The structure of foundation formula is such that shifts in the trends of these or other variables could result in an entirely different outcome. If, for example, the one-year drop in the growth rate of attendance experienced during 1966–67 continued into 1967–68 and assessed valuation continued to grow at an annual rate of nearly 10 percent, the 1967–68 result could well be a decrease in state aid toward 30% of current costs, rather than the 34% estimated above.
• Cannot be projected.
[d] Assumes increase in state share as recommended by Master Plan. Allows increased local support if approved by district electorate. Local share could therefore be larger.
[e] Plan permits levy of local tax if approved by district electorate. Local share is therefore possible.
[f] Program Amount used as estimate. This plan calls for detailed budget review, however, and expenditures would vary as determined by the Legislature.

other words, examined to determine the extent to which each satisfies criteria number one (equal educational opportunity) and number two (equity of contribution—as between districts). It is assumed (under all plans) that criterion one is satisfied by an equal expenditure ($680 per a.d.a.) by all districts. The variation (slopes of curves in Figure 4) in local tax rates then becomes an index to the relative satisfaction of criterion numbe two.

As seen in Table 37 and Figure 4, it is obvious that Alternative One (100% state share) and the Percentage Sharing Plan most fully satisfy the criteria. Alternative Four is more equitable than the existing "foundation program" for those districts with less than $200,000 of assessed valuation per student; above this level, the two methods are comparable in effect. Had Alternative Three been examined, its "slope" would have been similar to Alternative Four below the $200,000 wealth level but with higher local tax rates (due to the smaller state share, 34%). Above $200,000, local tax rates required under Alternative Three would be comparable to those under both "Four" and the existing "foundation program". Alternative Four fits the criteria better than "Three" simply because of the larger state share. The inequities inherent in the existing foundation-program method are evident once again.

TABLE 37

Local Tax Rates to Maintain Comparable Expenditure Under Alternative Plans

($/$100 Av)

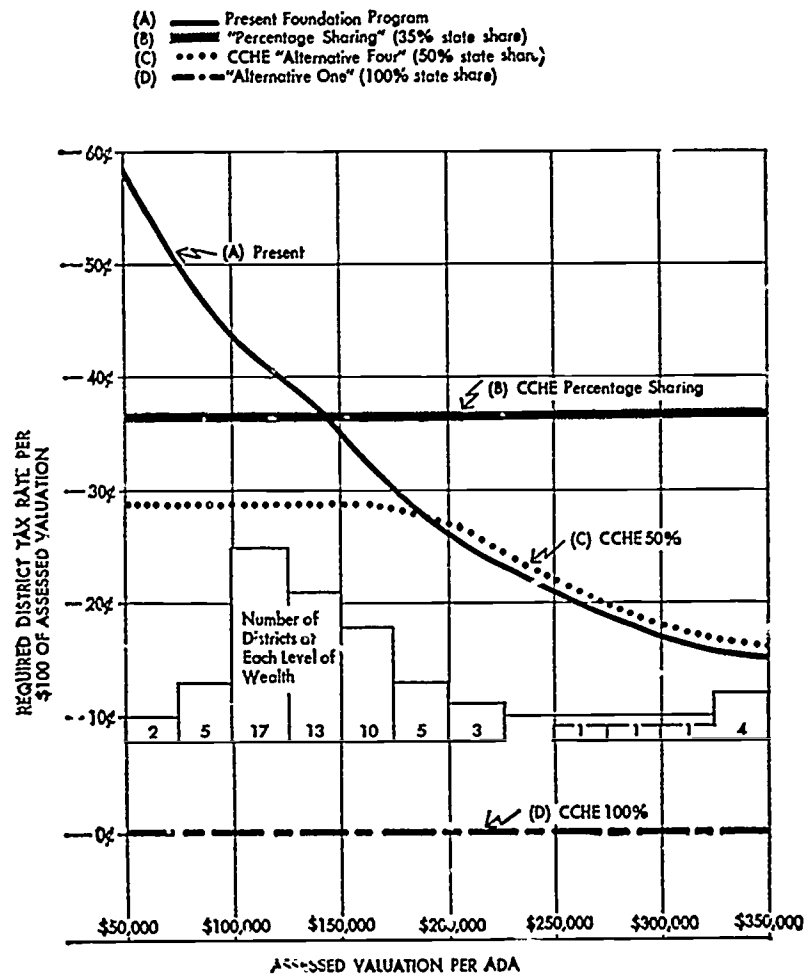
Assessed Valuation Per Unit of Average-Daily-Attendance	*Present Foundation Program*	*Percentage Sharing (35%)*	*Alternative One (100%)*	*Alternative Four (50%)*
$50,000	$.59	$.37	$.00	$.29
100,000	.43	.37	.00	.29
125,000	.40	.37	.00	.29
150,000	.35	.37	.00	.29
200,000	.26	.37	.00	.27
250,000	.21	.37	.00	.22
300,000	.17	.37	.00	.18
350,000	.15	.37	.00	.16

Constants: (1) 4,000 total ada in each district.
(2,785 resident minors)
(653 resident adults)
(562 nondistrict students)
(2) Expenditure of $680 per ada.
(3) Statewide assessed valuation (1967–68): $45 billion. Assessed valuation in junior college districts (1967–68): $40.5 billion.

FIGURE 4

Comparison of Alternate Proposals for Financing California's Public Junior Colleges

(Local Tax Rate Required to Fund an Expenditure of $680 per ADA in Districts of Varying Wealth)



PART TWO

CAPITAL OUTLAY

CHAPTER VII

THE HISTORICAL PATTERN OF SUPPORT FOR CAPITAL OUTLAY

As early as 1932, a study of higher education known as the "Suzzallo Report" recommended that the state provide one-half the costs of the Junior Colleges. However, later studies (the Strayer Report in 1949 and the Restudy in 1955) paid relatively little attention to Junior College capital construction problems —no recommendations were made on this matter in either of these major statewide studies.

The Master Plan for Higher Education in 1960 took a very different and positive approach in respect to capital outlay support. It recommended that:

> A continuing program be devised and adopted by the Legislature that would distribute construction funds, either through grants or loans or both, for capital outlay purposes annually to junior colleges as determined by growth, this program being for the purpose of assisting junior colleges to meet the facility needs of projected enrollments and of the students to be diverted to the junior colleges.

In 1961, the Legislature, under the leadership of Senators George Miller, Hugo Fisher and Randolph Collier, established a temporary program, the Junior College Tax Relief Act, and appropriated $5 million to fund it. The following year (1962–63) an additional $5 million was appropriated. This program provided grants to local districts to be used:

(a) For payment of interest and redemption of outstanding bonds issued for Junior College purposes or for loans from the County School Service Fund for Capital Outlay purposes.

(b) For purchase or improvement of Junior College sites or the planning or construction for Junior College buildings on a matching basis not to exceed one part State funds for four parts district funds.

This program, established on a relatively simple formula basis to provide some funds to every Junior College district in the state, was never intended as a permanent means of distributing state funds to Junior Colleges. It established an entitlement distribution to all districts based on existing resident enrollment (a.d.a.) weighted to reflect an equalization factor relating a district's assessed valuation per a.d.a. to the average assessed valuation per a.d.a. for all districts in the state.

While the 1962 Legislature was appropriating the second $5 million for this temporary plan, it was also adopting a bond issue proposal for $270 million to be used for higher education capital construction purposes. Twenty million dollars was reserved for the Junior Colleges—the first time they had ever been included in a statewide bond issue. This bond proposal (Proposition 3) was defeated at the June primary, slightly revised by the Legislature, and finally approved (as Proposition 1-A) by the voters at the November, 1962, general election.

One significant revision between these two propositions was made in respect to the Junior Colleges. Proposition 3 would have permitted the expenditure of state funds for existing bond redemption by local governing boards; this possibility was excluded in Proposition 1-A and this method of support has not been seriously suggested again.

In discussions leading to inclusion of the Junior Colleges in the bond issue, it was recognized that a program for the allocation of such funds needed to be developed. The Governor pointed this out in his 1962–63 Budget Message and called upon the Council to assist in advising on this matter. Repeated meetings by the staffs of the Council and the Department of Education, together with representatives of other state agencies and the California Junior College Association, resulted in the Council's adoption in April, 1963, of a set of guidelines to be used in evaluating any plan for the distribution of funds.

The Department of Education proposed a specific plan and it was presented as Senate Bill 1515 (Stiern). With some legislative modifications, the bill, known as the Junior College Facilities Construction Law of 1963, was enacted (Chap. 1790, Statutes of 1963). This Act, however, clearly stated that its only purpose was to distribute the $20 million immediately available.

> SEC. 2. In adopting this act, the Legislature recognizes that it does not constitute a satisfactory means of providing continuing state assistance . . . for the construction of junior college facilities and that its sole purpose is to provide for the allocation of bond funds reserved for junior college construction in Proposition 1-A. . . .

The statute also directed the Department of Education, together with a representative from the Department of Finance, the Legislative Analyst, the Coordinating Council, the California Junior College Association, the California School Boards Association, and the California Junior College Faculty Association, to study:

(1) the needs for Junior College facilities during the next ten years,
(2) the ability of Junior College districts to meet the determined needs, and
(3) the extent to which state assistance is necessary.

The Department was directed to recommend to the 1965 Legislature a satisfactory means of providing state assistance on a continuing basis.

Meanwhile in Washington, Congress late in 1963 passed the Higher Education Facilities Act, which for the first time made federal funds available for general college construction purposes. In 1964, Congress appropriated approximately $3.8 million to California to be used for Junior College construction. In 1965 that amount increased to $7.8 million, and the year 1966–67, $6.9 million was available for this purpose.

It is expected that funds equivalent to the current amount will continue over the next several years. Congress has passed large authorizations for this Act, but has maintained the current level of appropriations which are far below the authorizations. Available funds could increase markedly, however, if the expenditures and requirements necessitated by Vietnam were reduced significantly.

These federal construction funds are distributed in California by the U.S. Commissioner of Education, upon the advice of the Coordinating Council which serves as the State Commission. The program operates under federal rules and regulations, as well as criteria contained in a State Plan adopted annually by the Council. Federal rules and regulations are obviously not subject to change by the Council, nor the State of California; changes in the State Plan can be made by the Council as long as the changes conform to the Act and the federal rules and regulations used to implement it.

During 1963 and 1964, Dr. Ronald Cox, on behalf of the Department of Education, headed a committee composed of representatives designated in S.B. 1515. This committee met on 16 different occasions in an attempt to prepare the continuing capital outlay program the Legislature had requested. While the committee was toiling, the Legislature approved another bond issue proposal (Proposition 2) which the voters adopted in November, 1964. This $380 million bond construction Act earmarked $50 million for the Junior Colleges.

The Department of Education submitted its report and proposed plan to the Legislature at the beginning of the 1965 session. Even though the committee had worked on a consensus basis, the Office of the Legislative Analyst, the Department of Finance, and the California Junior College Faculty Association all filed statements indicating reservations on one or more parts of the proposal. This did not indicate smooth legislative passage. The main elements of the plan, which were incorporated into Senate Bill 318 (Stiern) were as follows:

(1) A continuing program of state assistance to the Junior Colleges for capital outlay purposes.
(2) Substantial state support—amounting to one-half of the statewide construction needs of the Junior Colleges.
(3) Enrollment projections by the Department of Finance as a basis for the capital outlay needs of the Junior Colleges and which recognize the diversion of students from the University and the State Colleges.
(4) Establishment of entitlement funds based upon estimated enrollment growth but the actual provision of State funds based upon need.
(5) Built-in equalization factors which recognized the varying abilities, effort, and needs of the separate districts supporting Junior Colleges.
(6) Prohibition of the use of state funds for redemption of existing bonded indebtedness, the planning or construction of dormitories, student centers (other than cafeterias), stadia, single purpose auditoriums, and parking facilities.
(7) A requirement that a district becoming operative on or after July 1, 1960, expend 1% of its assessed valuation for facilities prior to receiving state funds.
(8) Defined "federal funds" as any monies provided by the federal government for any project which the Department of Education had determined were available to a district for expenditure and the inclusion of federal funds as part of a local district's financial ability when determining entitlement to state funds.[1]
(9) Designated the Department of Education as the state agency to administer the program.

After extended debate S.B. 318 was enacted into law as the Junior College Construction Act of 1965. Less than three months had elapsed before complaints and reservations were raised as to the adequacy of the plan. In October of 1965, the Legislature passed Senate Bill 9 which: 1) liberalized the requirement that a district in operation after July 1, 1960, expend 1% of its assessed valuation on facilities so that this amount could be expended, committed, or dedicated. 2) limited the federal funds that could be counted as part of a district's financial ability in determining an entitlement to state funds to those funds from the federal Higher Education Facilities Act of 1963.

In the 1966 Budget Session, Senate Bill 4 (Rodda) attempted to further amend the Junior College Con-

[1] Following passage of the Act, this definition of federal funds was interpreted to include *all* federal funds (NDEA, MDTA, vocational programs), not just those designated for construction purposes such as the Higher Education Facilities Act.

struction Act of 1965 in an effort to correct some of the problems which had arisen.

Senate Bill 4 proposed changes in the timing of the submission of applications, permitted districts to submit projects for district-wide facilities, and made several other minor revisions.

During the legislative hearings on S.B. 4, however, other problems and questions were brought out that were not being resolved; such as, should entitlements be rejected in favor of a project by project determination? Were the equalization factors contained in the program adequate or appropriate? Was the Act so restrictive that state bond funds already authorized by the electorate were not being made available to the districts as quickly as many had anticipated? Were the means of determining the actual needs of the Junior Colleges accurately reflected by the factors contained in the Act? Were key factors, particularly utilization standards similar to those applied to the other segments of public higher education, absent from the current program?

Senate Bill 4 was finally adopted, but its provisions were specifically limited to June 30, 1967. Senate Concurrent Resolution 14 (Stiern and Rodda) was also adopted and it interestingly drew the following conclusions:

> WHEREAS, Experience shows that the provisions of Senate Bill 318 are not adequate to fulfill the purposes of the bill in that the bill: (1) fails to coordinate the state and the federal programs of aid for junior college construction, (2) fails to coordinate the programs of state aid for junior college construction with other state programs of aid to education, (3) contains a method of calculating district entitlement which is unrelated to the need for a particular construction project at a particular junior college district, which hinders the Legislature from making flexible judgments regarding the relative financial needs of the three segments of higher education, and which encourages administrative agencies to calculate junior college growth and the cost of junior college construction in a manner which underestimates the needs, (4) fails to allow sufficient time for state administrative agencies to review and to evaluate . . . junior college construction proposals, and (5) fails to combine into one junior college construction program previous legislation on this subject . . . money from which is still available to some . . . districts. . . .

Senate Concurrent Resolution 14 went on to direct the Council to:

> (1) study the program of state aid for junior college construction assistance, (2) advise . . . as to the purposes and objectives of this program, (3) recommend changes . . . (4) prepare statutory proposals to carry out the recommendations . . . and to . . . give consideration to the inadequacies of Senate Bill 318, by considering the following factors, and any other factors the Council deems relevant: (1) the need for state administrative review of junior college projects and proposed financing before funding by the Legislature, (2) the utilization of existing and new facilities, (3) the need to develop construction allowances based upon actual project costs, (4) the need for long range construction planning, (5) the need for equalization of district ability, (6) the assessment of relative district need, (7) the amount of student growth, (8) the existence of inadequate or obsolete facilities, (9) the coordination of the state . . . program with federal construction assistance programs and, insofar as possible, other state construction and support programs, and (10) the need to consider all capital outlay requirements, including site acquisition, site development, new construction, initial equipment, renovation, and project planning. . . .

The 1966 Legislature also adopted a proposed $270 million bond issue (Proposition 2) for construction at the University and the State Colleges. It was adopted by the voters on November 8, 1966. The Governor's original proposal included Junior Colleges, but did not earmark any exact amount for them, as had been done previously. In testimony before legislative committees, Junior College representatives expressed concern that very little would actually be available to them and that either an amount for Junior Colleges should be specified at not less than $60 million, or the Junior Colleges should be eliminated from the bond issue altogether.

Since approximately $25 million in state funds was still available to the Junior Colleges from previous legislation and since the entire matter of continuing construction assistance was to be studied again, the Legislature decided to eliminate the Junior Colleges from the bond issue.

An analysis of the current program (Senate Bill 318 and Senate Bill 9) and proposals for changes in the present program are presented in the following chapters. They are based to a very large extent upon the specific directives that were set forth in Senate Concurrent Resolution 14.

CHAPTER VIII

JUNIOR COLLEGE FACILITY REQUIREMENTS

During the 1965 Fall term California's public Junior Colleges enrolled 258,593 students in daytime graded courses.[1] This enrollment will have increased to 449,700 in 1975 and to 534,400 by 1980. Classroom and laboratory facilities must be available to meet the instructional needs of this rapidly expanding student population. Facilities other than classrooms and laboratories, such as offices, libraries, auditoriums, gymnasiums, cafeterias, maintenance shops, storage, etc.—which generally account for about one-half of the total facilities of an institution—must also be expanded to meet the needs of the projected enrollment increases.

This chapter will (1) determine and consider the enrollment capacity available in Junior College classrooms and laboratories in the Fall of 1965 and the capacity soon to be available through facilities now under construction, funded, or approved through Entitlements I and II of the Junior College Construction Act of 1965; (2) consider the enrollments projected for the Junior Colleges by the State Department of Finance; (3) ascertain the degree to which the capacity in the Fall of 1965 in Junior College districts, both individually and collectively, met the enrollment needs of 1965; (4) ascertain the ability of Junior College districts, with the additional capacity generated by facilities now under construction, funded, and available through Entitlements I and II, to accommodate the enrollments of 1969, 1975 and 1980; (5) determine, to the extent possible, the need for facilities other than classrooms and laboratories; and (6) present data on the costs of needed facilities and the state and federal funds available for such construction.

ENROLLMENT CAPACITY

The enrollment capacity of California's institutions of public higher education is determined by the degree to which existing classroom, seminar, and laboratory facilities are utilized and the net square feet of floor space per student station allowed for these facilities. The University of California and the California State Colleges have long applied space and utilization standards to determine the enrollment capacities of their physical facilities and have expressed this capacity in terms of "full-time-equivalent" students. The Junior Colleges have seldom used such standards, but have employed other methods and procedures and have expressed their capacities in various terms—average daily attendance, total enrollment, full-time students, student stations, etc. In the 1948 Strayer Report,[2] University and State College capacities were calculated in terms of common standards, but Junior College capacities, were taken to be the current enrollment plus estimates by individual superintendents as to the additional number of students that could have been enrolled. In the *Restudy of the Needs of California in Higher Education,*[3] in 1955, detailed analyses of plan capacity and plant utilization for all three segments were presented and recommendations were made that (1) each segment of public higher education pay particular attention to the relationship between room capacities and the size of class sections when planning new facilities, and (2) continuously study the standards of space assignment and utilization, and the extent to which available facilities are utilized. Again, however, the main purpose and intent of the recommendations and standards were directed toward the University and the State Colleges. In the 1960 *Master Plan*[4] the standards of utilization and space developed by the Strayer Report and the *Restudy*, were carefully reviewed and then modified. As seen in the following recommendation from the *Master Plan* the Junior Colleges this time were specifically included with the University and the State Colleges.

It is recommended that:

1. The standard utilization of classrooms in the junior colleges, state colleges, and the University of California be at the maximum practicable levels, but in no case shall (use of classrooms) average less than 30 scheduled hours per week, with class enrollments after the first month of the term averaging 60 percent of room capacity.
2. The standard room utilization of teaching laboratories in the junior colleges, the state colleges, and the University of California be at the maximum practicable levels, but in no case shall (use of laboratories) average less than 20 scheduled hours per week, with class enroll-

[1] Courses (classes) beginning before 4:30 p.m. See Appendix H for criteria and standards for graded courses.

[2] Monroe E. Deutsch, Aubrey A. Douglass, and George D. Strayer, *A Report of the Survey of the Needs of California in Higher Education,* Berkeley: University of California Press, 1948.

[3] T. R. McConnell, T. C. Holy, and H. H. Semans, *A Restudy of the Needs of California in Higher Education,* Sacramento: California State Department of Education, 1955.

[4] *Master Plan for Higher Education, 1960–75,* (Sacramento: State Department of Education, 1960), p. 7.

ments after the first month of the term averaging 80 per cent of room capacity.

3. In determining the need for instructional facilities in the junior colleges, state colleges, and campuses of the University of California, the following factors be taken into account:
   a. The two recommended standards of utilization
   b. The space standards as found in Tables 33, 34, and 36 of *A Restudy of the Needs of California in Higher Education* (with such modifications as changes in the present differentiation of functions among the public segments may justify)
   c. The number of FTE (full-time equivalent) students used in projecting building requirements be limited to those to be instructed in the day program, that is, from 8:00 a.m. to 5:00 p.m.
4. In the scheduling of classes greater use be made of the late afternoon and evening hours and when possible of Saturday, thereby making the achievement of the foregoing utilization standards easier.

The *Master Plan* further recommended that the Coordinating Council undertake:

a. A complete study of the current utilization in the junior colleges, state colleges, and the University of California (no such study has been made since 1953–54) for the specific purpose of making such modification in the above recommended standards of utilization as are justified by the findings

The Council, in order to implement this recommendation, directed its staff in 1962 to institute a cost and statistical analysis of California's public institutions of higher education which would include a study of physical plant utilization. The space and utilization standards for classrooms and laboratories which evolved from this study,[5] were recommended by the Council in September 1966, to the State Board of Education which in turn adopted them in December 1966. They are presented in Tables 38 and 39, and are applicable to each of the three segments of higher education. The standards allow 15 square feet of assignable space per student station for classrooms and seminar rooms and specify that these facilities be used, on the average, not less than 34 hours out of a 45 hour (8 a.m. to 5 p.m.) week, and that when used, an average of not less than 66% of the stations be occupied. With respect to laboratories the standards specify that at the lower division they be used, on the average, not less than 25 hours out of a 45 hour (8 a.m. to 5 p.m.) week, and that where used, an average of not less than 85% of the stations be occupied. The space allowed per laboratory station varies by subject field from 30 square feet in the Mathematical Sciences and Business to 200 square feet per station for Junior College Auto Mechanics. Small Junior Colleges (in existence for five years without attaining a full-time enrollment of 1000 during the 8 a.m. to 5 p.m. period) are allowed 20% additional space per weekly student class hour for both classrooms and laboratories.

The facilities inventory prepared by each Junior College in the Fall term, 1963 for the Council's cost and statistical study, provided a measure of the assignable square feet of space in classrooms, seminar rooms and laboratories with the space in laboratories shown by subject field areas. These inventories were updated in 1965 by the Junior Colleges at the request of the Department of Education and data were thus made available from which enrollment capacity in 1965–66 could be determined. Further information provided the Department of Education by the Junior Colleges made data available through which the Council staff could determine the additional enrollment capacity to be generated by classrooms and laboratories under construction in 1965–66, those funded in that year, and those to be available from Entitlements I and II of the Junior College Construction Act of 1965. Capacities were derived through the application of the standards shown in Tables 38 and 39 against the assignable square feet of classroom and laboratory space existing in 1965–66 and to be provided through space then under construction or soon to be authorized for construction, and are shown on a statewide basis in Table 40.

The capacity is indicated in terms of "Weekly Student Contact Hours" which is the basic student unit for measuring space needs. One weekly Student Contact Hour (WSCH) is an approximately 50-minute period of time when one student is in a classroom or laboratory and occupying a student station. For example, a Junior College that consisted of one classroom with 15,000 square feet of assignable space would provide 1000 student stations (using the space standard

[5] *California Public Higher Education Cost and Statistical Analysis*, Fall Term, 1963.

TABLE 38

Utilization Standards for Classrooms, Seminar Rooms and Laboratories, California Public Segments of Higher Education [1]

Type of Room and Level of Instruction	*Hours of Use Per Week*[2]	*Occupancy of Stations*[3]
Classrooms and Seminars		
All Levels of Instruction	34	66%
Laboratories		
Lower Division	25	85%
Upper Division	20	80%

[1] These standards are components of the assignable square feet per 100 WSCH, as adopted by the Coordinating Council for High Education, September 27, 1965.
[2] Average hours of use per week, 8 a.m. to 5 p.m., not to be less than that indicated.
[3] The percent of stations occupied when room is in use not to be less than that indicated.

TABLE 39

Space Per Station Standards for Classrooms, Seminar Rooms and Laboratories, California Public Segments of Higher Education [1]

Type of Room, Level of Instruction and Subject Field	*Assignable Square Feet Per Station*
CLASSROOMS & SEMINARS	
All Levels and Subject Fields	15
LABORATORIES	
Life Sciences	
Agriculture	
LD	60
UD	60
Biological Sciences	
LD	55
UD	60
MPE Sciences	
Physical Sciences	
LD	60
UD	70
Mathematical Sciences	
LD	30
UD	30
Engineering Sciences	
LD	90
UD	110
Social Sciences	
Psychology	
LD	40
UD	60
All Other Soc. Sci.	
LD	30
UD	30
Humanities	
Art	
LD	65
UD	65
Other Humanities	
LD	40
UD	40
Professions (U.C. & C.S.C.)	
Business Administration	
LD	30
UD	30
Education	
LD	--
UD	40
LABORATORIES—Continued	
Professions—continued	
Journalism	
LD	60
UD	60
Health Sciences	
LD	--
UD	50
Home Economics	
LD	60
UD	60
Junior College Classification	
Agriculture	150
Business	30
Home Economics	60
Applied Graphic Arts	80
Health Sciences	50
Public Personnel Service	50
Aero. Tech.	175
Air Conditioning	130
Building Trades	175
Ceramic Technology	40
Chem. Technology	70
Drafting Tech.	60
Electrical Tech.	70
Electro-Mechanical	100
Electronic Technology	60
Engin. Gen.	90
Engin. Tech.	70
Industrial Tech.	75
Mechanical-Auto	200
Metallurgical Tech.	65
Metal Trades	130
Textile Tech.	120
Welding	90
Other Trade Tech.	75

[1] These standards are components of the assignable square feet per 100 W.S.C.H. standards as adopted by CCHE, September 27, 1966. See *Space and Utilization Standards, California Public Higher Education*, (CCHE, No. 66-11, Revised), September 27, 1966, pp. 17-18.

Notation for Table 39

Utilization components for space standards computation.

	Hrs. Wk.		*Stn. Occ. %*		*Stn. Use*
Classrooms and Seminars:	34	×	.66	=	22.4
Laboratories:					
LD	25	×	.85	=	21.3
UD	20	×	.80	=	16.0

Abbreviations

ASF/Stn. = Assignable Square Feet per student station.
Hrs./Wk. = Number of hours out of a 45-hour week, 8 a.m. to 5 p.m. a classroom,/or laboratory, on the average, should be used.
Stn. Occ. = The percent of expected student station occupancy when rooms are in use.
Stn. Use = The number of hours per week (out of the 45-hour week) which a student station, on the average, should be used.
WSCH = Weekly Student Contact Hour.

Formula for deriving the ASF/100 WSCH:

$$\frac{\text{ASF/Stn.}}{\text{Hrs./Wk.} \times \text{Stn. Occ.}} \times 100 = \text{ASF/100 WSCH}$$

Example A. For determining ASF/WSCH in Classrooms and Seminars:

ASF/Stn. = 15

$$\text{Hrs./Wk.} = 34 \quad \frac{15}{34 \times .66} \times 100 = 67 \text{ ASF/100 WSCH}$$

Stn./Occ. = .66

Example B. For determining ASF/WSCH in Lower Division Biological Science Laboratory:

ASF/Stn. = 55

$$\text{Hrs./Wk.} = 25 \quad \frac{55}{25 \times .85} \times 100 = 260 \text{ ASF/100 WSCH}$$

Stn./Occ. = .85

for classrooms and ignoring the increase for a small college). If the room was used 34 hours each week and 66% of the stations were occupied by students when the room was used, (using the utilization standards) the capacity of the college would be 22,400 Weekly Student Contact Hours (1000 × 34 × .66). The college could thus accommodate 100 students if each of these students attended class 22.4 hours each week or 1000 students if each attended class 2.24 hours each week.

Table 40 shows that the combined capacity of all Junior Colleges as of the Fall term, 1965,[6] could accommodate 5,565,612 student contact hours each week. Actual enrollments in the combined Junior Colleges during the 1965–66 school year generated an average of 3,741,046 student contact hours each week. On a statewide basis, therefore, the capacity of California's public Junior Colleges in the school year 1965–66 was 149% of the actual enrollment.

Although the statewide capacity in 1965 exceeded the statewide enrollment by almost 50%, it could be expected that in some districts the reverse would be true, and enrollment would exceed capacity. The Council Staff, therefore, compared the capacity and enrollment of individual Junior College districts in 1965–66.[7] This comparison revealed that when capacity was expressed as a percentage of the enrollment, the percentages in the 64 Junior College districts varied from 93 to 530, with individual districts falling in the ranges shown below in Table 41.

Enrollment in the five districts where enrollment exceeded the classroom and laboratory capacity, represented almost 10% of the statewide enrollment. However, classroom and laboratory facilities to accommodate only 20,402 WSCH would be required to bring the capacity to the same level as the enrollments.

PROJECTED ENROLLMENTS

The statewide "annual-average"[8] weekly student class hours (8 a.m. to 5 p.m.) projected for the Junior Colleges through 1980–81 by the Department of Finance are shown in Table 42. Corresponding projections by the Department for individual Junior College districts are only available through 1969–70, and these projections are shown in Table 1 of Appendix I. The individual Junior College projections are based upon students in attendance at the college 8 a.m. to 5 p.m. and include those students who reside outside the district.

NEEDED ADDITIONAL ENROLLMENT CAPACITY

Table 40 indicated the Junior College capacity existing in 1965–66 and the additional capacity to become available through facilities under construction in 1965–66, those funded but not under construction, and those

[6] Includes all of the 66 Junior College Districts listed in Appendix L, except Fremont-Newark which did not have facilities in 1965.

[7] Excludes College of the Redwoods for which 8 a.m. to 5 p.m. enrollments were not available. Excludes Fremont-Newark.

[8] The average of the Fall and Spring terms.

TABLE 40

Daytime Enrollment Capacity of California Public Junior Colleges in 1965–66 [1] and the Capacity to Become Available Through Projects Under Construction, Projects Funded and Projects Approved Through Entitlements I & II of Senate Bill 318

(Capacity expressed in terms of Weekly Student Contact Hours)

Existing Capacity	*To Become Available*					*Existing Capacity to be Replaced*	*Net Capacity*
	Under Construction	*Funded*	*Entitlement I*	*Entitlement II*	*Total*		
5,565,612	223,696	126,561	679,455	187,056	1,216,768	249,452	6,532,928

[1] Includes all of 66 Districts listed in Appendix L, except Fremont-Newark which did not have facilities in 1965.

TABLE 41

Capacity Computed from Standards Compared with Enrollment—California Public Junior College [1] (1965–66)

Item	*Capacity as a Percent of Enrollment (1965–66)*				
Range	Less than 100%	100 to 120%	121 to 150%	151 to 200%	More than 200%
Number of J.C. Districts	5	12	16	17	14

[1] Excludes College of the Redwoods for which 8 a.m. to 5 p.m. enrollments were not available. Excludes Fremont-Newark.

TABLE 42

Projected Weekly Student Contact Hours for Public Junior Colleges [1] (Annual Average—8 AM to 5 PM)

YEAR	*ANNUAL AVERAGE*
1965–66	3,741,046
1969–70	5,418,152
1970–71	5,651,100
1975–76	7,082,775
1980–81	8,416,800

[1] From Projection Provided by Department of Finance, September, 1966.

approved through Entitlements I and II. As indicated in the table, the capacity for almost 250,000 WSCH (of the 1,216,768 WSCH to become available) will replace existing facilities. Assuming that the additional capacity will be available not later than 1969–70, the net capacity in that year, (1969–70) 6,532,928 WSCH, would almost equal the 6,501,600 WSCH statewide enrollment projected for 1973–74.

The enrollment capacity on a statewide basis appears extremely favorable. However, statewide excess capacity does not imply that there will be no need for additional facilities. On the contrary, some Junior Colleges, as shown earlier, lacked space in 1965 even though statewide excess capacity existed. As will be shown later, the number of districts lacking adequate facilities will increase in 1969 even though excess capacity will continue to persist at that time. Construction of facilities in these colleges will be required. An accurate determination of the need for any additional capacity must be based on an analysis of individual Junior College districts.

As indicated earlier, data for each Junior College available for 1965–66, enabled the Council staff to determine the capacity if any, under construction, funded, and to become available through Entitlements I and II. Assuming that this additional capacity will become available by 1969–70, it is possible to compare, on a district by district basis, 1969–70 capacity with 1969–70 projected enrollments. Such a comparison, with capacity expressed as a percentage of the projected enrollment, is shown in Table 43.

As shown in Table 43, 17 districts will have less capacity than enrollment in 1969–70 and will need additional capacity. The analysis of individual districts also indicated that by 1969–70 ten districts will have to replace leased or rented capacity for the 364,775 WSCH which they reported as existing in 1965–66 (Table 40).[9] The total need for laboratory and classroom capacity in 1969–70, therefore, will equal 593,758 WSCH.

It is apparent from the above data that in some districts additional laboratory and classroom facilities will be required even though on a statewide basis, capacity is adequate for the projected need.

NEEDED FACILITIES OTHER THAN CLASSROOMS AND LABORATORIES

The assignable square feet in facilities other than classrooms and laboratories accounted for about one-half of the total assignable square feet of Junior College physical facilities in 1963–64.[10] Consideration must be given to the need for such additional facilities in order to meet the projected enrollments.

Office Space

Since about 11% of the physical facilities of the Junior Colleges consists of office space for administration, faculty and instructional departments, the development of standards to determine the need for this type of facility is essential. Office standards were recommended for the University and The State Colleges in both the *Restudy* and the *Master Plan*, but neither study recommends standards for planning offices in Junior Colleges. Junior Colleges have historically used a standard number of square feet per single-man office as a guideline in planning facilities, but have not used a standard comparable to the "percentage of the total instructional staff space" standard recommended in the *Restudy* and *Master Plan* and currently used for planning purposes in the State Colleges and University.

Data from the 1963 Junior College facility inventory and the 1963 *California Public Higher Education Cost and Statistical Analysis*, provided information from which the Council staff developed a standard of 140 assignable square feet per full-time equivalent

[9] Does not include Fremont-Newark since they did not report capacity in 1965.

[10] *A Progress Report on The Study of Utilization of Physical Facilities of California's Public Institutions of Higher Education;* (CCHE, No. 65-2A), 1965, p. 10.

TABLE 43

Capacity Computed from the Standards Compared with Projected Enrollment [1]—California Public Junior College—1969–70

Item	*Capacity as a Percent of Enrollment (1969–70)*				
Range	Less than 100%	100 to 120%	121 to 150%	151 to 200%	More than 200%
Number of J.C. Districts	17	16	18	9	4

[1] Excludes College of the Redwoods for which the projected WSCH were not available. Exclude Fremont-Newark.

instructional staff for determining the overall office space required on a college-wide basis. ("Overall office space" includes academic office, other offices—including administrative office, office service and conference rooms.) A standard for small Junior Colleges was also developed and the assignable square feet per full-time equivalent instructional staff member was increased to 160. These office standards for Junior Colleges have been adopted by the State Board of Education as recommended by The Coordinating Council.

When the office standards are applied against the total full-time equivalent instructional staff in California's Junior Colleges during the fall of 1963,[11] they indicate a statewide need for 1,227,100 square feet of assignable office space. This compares with a reported 1,341,800 square feet of existing space in all Junior College facilities. These data, by themselves, would indicate that with respect to office space, the Junior Colleges in 1963 were in a favorable position with some 114,700 square feet of excess space. An analysis of individual Junior College districts, however, revealed (see Table 44) that this excess space was concentrated in 32 of 61 districts.[12]

Almost one-half (29) of the districts were deficient in office space in 1963, and this deficiency amounted to 127,340 assignable square feet.

Data are not available to show any additional office space under construction or funded in 1963. However, Entitlements I and II contained projects that would increase the office facilities by some 322,000 assignable square feet. Unfortunately, only a little more than 40% (130,756 assignable square feet) of this additional capacity is scheduled for those districts with deficient office capacity in 1963.

As shown below in Table 45 there will be only 10 districts with excess office capacity in 1969–70, as compared with 32 in 1963–64. The remaining 52 districts will require 648,507 assignable square feet to meet the demand generated by increased enrollments.

Seven Junior College districts plan to replace about 36,400 assignable square feet of office space reported as existing in 1963. This space is in temporary or rented facilities.

By 1975–76 approximately 662,060 more assignable square feet will be required and by 1980–81 an additional 530,460 will be needed.[13]

Library Space

At the time this study was completed, no definitive planning standards for junior college library buildings had yet been adopted by the Council. At the March 28, 1967 meeting, however, the Council adopted a set of standards recommended by the staff with the following resolution:

> RESOLVED, That the State Board of Education and the State Department of Finance be advised that the following guidelines should be considered in planning space provisions for Junior College library functions: (1) .10 assignable square feet per volume for housing the library collection; (2) reading stations for 15% to 20% of full-time enrollment depending upon the

[11] From data reported in the *California Public Higher Education Cost and Statistical Analysis—1963.*

[12] Based on 61 districts reporting capacity in 1963, Excludes Barstow, Redwoods, West Valley, San Luis Obispo, Fremont-Newark.

[13] F.T.E. Instruction staff required in 1975–76 and 1980–81 is based on projected WSCH and on faculty load data in the *California Public Higher Education Cost and Statistical Analysis—1963.*

TABLE 44

Actual Office Space Compared with Space Calculated According to Office Standard [1]

(1963–64)

Item	*Actual Assignable Square Feet as a Percent of Calculated Assignable Square Feet*				
Range	Less than 75%	75 to 99%	100 to 120%	121 to 150%	More than 150%
Number of J.C. Districts	15	14	15	12	5

[1] Based on 61 districts reporting capacity in 1963. Exculdes Barstow, Redwoods, West Valley, San Luis Obispo, Freemont-Newark.

TABLE 45

Actual Office Space Compared with Space Calculated According to Standard

(1969–70)

Item	*Actual Assignable Square Feet as a Percent of Calculated Assignable Square Feet*				
Range	Less than 75%	75 to 99%	100 to 120%	121 to 150%	More than 150%
Number of J.C. Districts	32	21	6	2	2

relative emphasis in trade and technical instruction, with 25 assignable square feet provided for each station; and (3) a basic complement of 400 assignable square feet plus 140 assignable square feet per full-time equivalent staff member for library service needs; plus additional areas (sized for individual needs) for audio-visual and programmed learning activities if they are to be housed in the library facility. The assignable square feet include those areas which are "useable" for the functions described. Not included in this useable category would be such areas as the main lobby, (excluding card catalogue area), elevators, stairs, walled corridors, restrooms, and areas accommodating building maintenance services.

If the guidelines suggested in this resolution are subsequently adopted by the State Board of Education, they will form the basis for the planning and review of junior college library buildings. For the purposes of this study, however, it was necessary to assume some rather arbitrary space measures (see Table 46) for analysis of existing and future library facility need.

If the measures as shown below in Table 46, are assumed and used to examine the Fall, 1965 space inventories of Junior Colleges, the examination shows (Table 47) that on a statewide basis some 102,000 assignable square feet of library space are needed.[14]

TABLE 46

Hypothetical Library Measures for Junior Colleges

1.) No. of Student Stations equal to 15% of full-time enrollment
2.) 25 square feet per station
3.) 0.1 square feet per volume
4.) 125 square feet per library staff member

The examination further shows that on an individual college basis, the assignable square feet needed exceeds the existing square feet in 34 of the 64 Junior College districts and in these districts the library space needed amounts to almost 246,000 assignable square feet.

Library space needs in individual districts from 1965–66 to 1969–70 were also examined on the basis of the 1969 enrollment projections made by the Department of Finance and increases in library space resulting from projects approved through Entitlements I and II. This examination, on a statewide basis, indicated an even greater deficit in library space in 1969 than in 1965—increasing from the 101,165 assignable square feet in 1965 to 359,913 in 1969–70. The total need in 1969, based on the examination of individual colleges was 514,673 assignable square feet, and this additional space was needed in 44 of the 64 districts (see Table 47).

[14] It should be noted that the planning guidelines, adopted by the Council at the March 28, 1967 meeting, provide more area than do the measures assumed for the purposes of this study. The projected deficit would, therefore, be much greater under the planning guidelines.

TABLE 47

Assignable Square Feet of Library Space Existing in 1965 and 1969 Compared with the Space Required by the Standards at Each Junior College District

Item	*1965*	*1969*
Existing statewide assignable square feet	883,457	[1]1,065,974
Statewide assignable square feet required by the standards	984,622	[2]1,425,887
Statewide needs for additional space (ASF)	101,165	359,913
Total need based on examination of individual colleges	245,934	514,673
Number of districts needing additional space	34	44
Total districts examined	64	64

[1] 1965 space plus that to be available from projects included in Entitlements I and II of Junior College Construction Act of 1965.
[2] Based on WSCH projected for 1969–70 converted to full-time students on the basis of data in the 1963 *California Public Higher Education Cost and Statistical Analysis*. Each Junior College library assumed to have 11 volumes per full-time student and to require one staff member per 336 full-time students.

In addition to the 359,913 square feet deficit in 1969–70, nine districts will need to replace 31,253 assignable square feet of leased or rented library space they reported in 1965.

Beyond 1969–70 only statewide enrollment projections are available. If the calculated need is based upon these statewide projections, in 1975 the Junior Colleges will require 548,082 assignable square feet of library space in addition to that needed in 1969, and in 1980 will require 371,793 square feet in addition to that needed in 1975.

Support Space

The remaining Junior College facilities are grouped under the heading "Support Space". In 1963 this accounted for 32.8% of assignable square feet and was equal to 65.28% of the instructional space. Included in this category are auditoriums, theaters, gymnasiums, food and health service facilities, student lounges, bookstores, locker rooms, audio-visual facilities, maintenance and repair shops, storage facilities, etc.

If the ratio of support space to instructional space—68.3%—existing in 1963 is assumed to continue, the enrollments projected for 1969–70 will require 502,664 assignable square feet of support space in addition to that existing in 1963. Enrollments projected for 1975–76 will require an additional 465,496 assignable square feet beyond that existing in 1969–70, and the projection for 1980–81 will require another 1,129,374 square feet.

SUMMARY OF FACILITIES NEEDED BY 1969, 1975 AND 1980

The assignable square feet of facilities required by the Junior Colleges to meet the enrollment growth projected for 1969, 1975 and 1980 are estimated below, in Table 48 by type of facility. The estimates for 1969–70 are based upon an analysis of the enrollments

projected for individual Junior Colleges. The estimates for 1975–76 and 1980–81 are based on statewide enrollment projections since individual college projections were not available beyond 1969–70.

The possibility of under-estimating need when statewide data are used, has been well illustrated by material in this report which has shown that in 1965–66 five Junior College districts needed additional facilities even though statewide capacity greatly exceeded the enrollment. In 1969–70, statewide capacity will still be well above the statewide enrollment projections, but the number of districts needing additional capacity will be increased to 17 (Table 43).

It is and will continue to be very difficult to make more precise estimates than those shown in Table 48, until enrollment projections are available for individual districts for a longer period of time.

TABLE 48

Estimated Non-Residential Junior College Facilities Needed to Meet the Enrollment Growth Projected for 1969–70, 1975–76, and 1980–81

(Assignable Square Feet)

Type of Facility	*Required Assignable Square Feet*		
	1965–66 through 1969–70	*1970–71 through 1975–76*	*1976–77 through 1980–81*
Classrooms[2]	[1]262,948	243,511	590,799
Laboratories[2]	[1]473,017	438,035	1,062,750
Office	[1,3]684,907	662,060	530,460
Library	[1]791,860	548,082	371,793
Support[4]	502,664	465,496	1,129,374

[1] Includes capacity for those districts replacing leased or rented facilities.
[2] The total need for classroom and laboratory capcity in 1965–66 through 1969–70 equaled 593,758 W.S.C.H. (Including capacity for those districts replacing leased or rented facilities.). These W.S.C.H. were divided between the classroom and laboratory categories in the same ratio as classroom and laboratory W.S.C.H. were shown to be divided in 1963. (Based on the California Public Higher Education Cost and Statistical Analysis). The classroom W.S.C.H. were then converted to assignable square feet by means of the formula ASF/100 WSCH = 67 sq. ft. (From utilization and space standards).
The laboratory WSCH were converted to assignable square feet according to the formula ASF/100 WSCH = 235 sq. ft. (From utilization standards and using an average of 50 square feet per station for laboratories).
[3] 1963–64 to 1969–70.
[4] Based on 68.3% of classroom and laboratory assignable square feet.

ESTIMATED COST OF FACILITIES

The only data on Junior College construction costs available to the Council staff for estimating the cost of the required facilities listed in Table 48 were provided by the School Planning Division of the Los Angeles City School District. These estimated costs were from the district's Master Plan Building Program prepared for their most recently planned Junior College. The Los Angeles data and the procedures used by the Council staff to extract from the data the cost figures most appropriate for projecting the statewide expenditures for Junior College capital outlay are attached to this report as Appendix J.

The estimated cost of the Junior College facilities listed in Table 48 as developed from the Los Angeles data, are shown in Table 42, in terms of constant 1966 dollars and in terms of current dollars.[15] Since the estimates are based upon costs for the Los Angeles area they are not reflective of costs in other parts of the state.

The costs estimated in Table 48 for 1965–66 through 1969–70 reflect the necessity for districts with deficit facilities, to "catch up" with their needs, particularly in the "office" and "library" categories and in the replacement of rented and leased facilities. The need for additional "office" and "library" facilities is also apparent in the 1970–71 through 1975–76 period. The reduced expenditures for classroom and laboratories from 1970–71 through 1975–76, results from the gradual diminishment of excess capacity. The use of state-

[15] 1966 dollars adjusted to reflect price increases to the year of projection.

TABLE 49

Estimated Cost of Non-Residential Facilities Needed by Junior Colleges to Meet the Enrollment Growth Projected for 1969–70, 1975–76 and 1980–81 *

(In thousands of dollars)

Type of Facility	*1966–67 Through 1969–70*		*1970–71 Through 1975–76*		*1976–77 Through 1980–81*		*Total Period 1966–67 Through 1980–81*	
	Constant 1966 Dollars	*Current Dollars*	*Constant 1966 Dollars*	*Current Dollars*	*Constant 1966 Dollars*	*Current Dollars*	*Constant 1966 Dollars*	*Current Dollars*
Classrooms	10,801	11,284	10,003	12,061	24,268	34,641	45,072	57,986
Laboratories	28,302	29,532	26,089	31,390	63,588	90,072	117,979	150,994
Office	31,084	32,467	30,047	36,260	24,075	34,002	85,206	102,729
Library	42,647	44,522	29,518	35,505	20,024	28,086	92,189	108,113
Support	19,855	20,741	18,387	22,211	44,610	63,059	82,852	106,011
Total	132,689	138,546	114,044	137,427	176,565	249,860	423,298	525,833

* Based on data provided by the School Planning Division, Los Angeles City School Districts. See Appendix J.

wide data, without an analysis of individual district needs, has also reduced the estimated expenditures.

The projected expenditures for the 1976–77 through 1980–81 period, indicate a more normal distribution of expenditures among the types of facilities and a more normal magnitude of expenditures within each category, since statewide excess capacity will have been largely eliminated by 1975.

Total estimated expenditures for the 15 year period 1966–80 based on 1966 dollars, is approximately $423 million, or an average annual cost of about $28 million. Based on current dollars, the total expenditure amounts to almost $526 million, or an annual average of about $35 million.

The total estimated expenditures for the ten year period, 1966–67 through 1975–76 yields lower average annual estimated expenditures—$24.7 million in 1966 dollars and $27.6 million in current dollars. It should be pointed out that estimated expenditures in this report for 1965–75 are considerably lower than estimates for the same period in the Department of Education's 1965 report to the Legislature on the need for Junior College facilities,[16] even though the enrollment projections used in the current report are almost 5% greater. The higher estimates in the 1965 report were, in part, the result of not being able to take into account excess capacity (space standards were not available) and basing the estimates solely on growth. The method used in the 1965 report to compute costs also provided a higher estimate.

The expenditure based on current dollars for the period 1975–1980 in the present study yields an average annual estimated expenditure of almost $50 million which is much closer to the $67 million average annual expenditure in the 1965 report.

Data from the cost guide (see Appendix K) used by the California State Colleges to estimate the costs of their five-year building program, were also available, and cost estimates for the Junior Colleges based upon these data resulted in a total estimated expenditure of $480 million (1966 dollars) for the 15 year period.[17] This expenditure compares with the $423 million expenditure based on Los Angeles District data.

COST FOR SITES AND SITE DEVELOPMENT

Estimated expenditures in Table 49 include costs related to site development. Costs for campus sites and total campus site development are not estimated in this report inasmuch as data are not available to show what part of the projected growth can be accommodated by the expansion of existing facilities and what part must be accommodated through the establishment of additional campuses.

[16] *The Need for Junior College Facilities During the Next Ten Years 1965–1975.* A report to the Legislature by the California State Department of Education, January, 1965.
[17] Appendix K.

AVAILABLE STATE AND FEDERAL FUNDS

As of December 1, 1966, almost $6 million of the $20 million provided by the 1963 Legislature has not been applied for by those Junior College districts having entitlement to it, and another $19.6 million remains from the $50 million in state bonds that became available in 1964.

FEDERAL FUNDS AVAILABLE TO MEET THE JUNIOR COLLEGE CAPITAL OUTLAY NEED

In 1964–65, California received $3,770,269 under the Higher Education Facilities Act for Junior Colleges construction and the capacity resulting from these funds has been included in the capacity figures used in this report. In 1965–66 California Junior Colleges received $7,762,896 and facilities resulting from these funds have *not* been included in the capacity figures used in this report. California has been allotted $6,953,420 for 1966–67. It is reasonable to assume that federal support for Junior College capital outlay will continue at a level of approximately $7 million per year.

ESTIMATED NEED FOR STATE FUNDS 1966–67 THROUGH 1980–81

State funds already committed to Junior College capital expenditures, federal funds already available or anticipated, and the estimated expenditures for Junior Colleges construction are summarized in Table 50. The table indicates that over the 15-year period 1966–67 to 1980–81 an average annual net expenditure of

TABLE 50

Estimated Junior College Capital Expenditures, State Funds Committed to Junior College Capital Outlay, Federal Funds Committed and to Become Available, and the Estimated Net Expenditures to be Met by Future State and Local Funds

(In thousand of dollars)

Item	*1966–67 through 1969–70*	*1970–71 through 1975–76*	*1976–77 through 1980–81*
Estimated Expenditure for Junior College Capital Outlay	[1]$132,689 [2]138,546	[1]$114,044 [2]137,427	[1]$176,565 [2]249,863
State Funds Committed to Junior College Capital Outlay and Currently Available	$25,484	None	None
Federal Funds Already Available and Anticipated	$35,716	$42,000	$35,000
Net Estimated Expenditures for Junior College Capital Outlay	[1]$71,489 [2]77,346	[1]$72,044 [2]95,427	[1]$141,565 [2]214,863
Net Estimated Average Annual Expenditure	[1]$17,871 [2]19,336	[1]$12,007 [2]15,904	[1]$28,313 [2]42,973

[1] Constant 1966 dollars.
[2] Current dollars.

19.0 million constant 1966 dollars (or slightly over 25.8 million current dollars) will be required. Under existing legislation these funds would tend to be equally shared by the state and local district.

The average annual net expenditures for each of the three time intervals in the table are, in terms of 1966 dollars, $17,871,000 for 1966 through 1970, $12,007,000 for 1970 through 1975, and $28,313,000 for 1976 through 1980. Using current dollars, the average annual estimated amounts would be $19,336,000, $15,904,000 and $45,973,000 respectively.

Again, under existing legislation, these annual expenditures would, on a statewide basis, tend to be divided equally between state and local funding.

CHAPTER IX

A PROPOSED PLAN FOR STATE SUPPORT OF JUNIOR COLLEGE CAPITAL OUTLAY EXPENDITURES

Currently the Junior College Construction Act of 1965 (Senate Bill 318 of the 1965 Regular Session) is the avenue for providing state support to Junior Colleges for capital outlay expenditures. In adapting SCR 14 in 1966, however, the Legislature stated that it finds the following provisions of the Act to be inadequate:

1. The Act fails to coordinate state and federal programs of support.
2. The Act fails to coordinate the state program of aid for Junior College construction with other state programs of aid to education.
3. The Act contains a method of calculating district entitlement to state support which is unrelated to the need for a particular construction project at a particular Junior College district, which hinders the Legislature from making flexible judgments regarding the relative financial needs of the three segments of higher education, and which encourages administrative agencies to calculate Junior College growth and the cost of Junior College construction in a manner which underestimates the needs.
4. The Act fails to allow sufficient time for state administrative agencies to review and to evaluate for the benefit of the Legislature, Junior College construction proposals.
5. The Act fails to combine into one Junior College construction program previous legislation on this subject, money from which is still available to some Junior College districts.

Because of these deficiencies the Legislature directed the Council to advise the Governor and the Legislature on the purposes and objectives of this program and to recommend any needed changes. The Council was also directed to give consideration to the inadequacies listed above by specifically considering the following factors and any others the Council deemed relevant:

1. State administrative review of projects and proposed financing prior to funding by the Legislature.
2. Utilization of existing and new facilities.
3. Need to develop construction allowances based upon actual project costs.
4. Need for long-range construction planning.
5. Need for equalization of district ability.
6. Assessment of relative district need.
7. Amount of student growth.
8. Existence of inadequate or obsolete facilities.
9. Coordination of state and federal programs of capital outlay support.
10. Need to consider all capital outlay requests, including site acquisition, site development, new construction, initial equipment, renovations, and project planning.

The following pages of this report present an alternate plan to the Junior College Construction Act of 1965. The plan proposed below continues many elements of the current program which have not been found deficient, but substantially modifies those elements which have been deemed inadequate. In the following discussion of the proposed plan, recognition is given to all the factors the Council was directed to consider.

THE CURRENT PROGRAM

The current program provides for the acquisition and improvement of sites; the planning, construction, reconstruction, or remodeling of classrooms, laboratories, libraries; or related facilities necessary for instruction, administration or maintenance; and the initial acquisition of equipment. Assistance is not provided for dormitories, student centers (other than cafeterias), stadia, single-purpose auditoriums, or parking.

The extent of state assistance is determined through the following procedure. The Department of Finance makes an annual three-year and four-year enrollment projection for each Junior College district, based upon classes taught between 8 a.m. and 5 p.m. and expressed in terms of weekly student class hours. The projections exclude students who do not reside in the district, but include students who reside in the district but are in attendance in another district.

If the projections indicate that the district's weekly student class hours will increase from the third year to the fourth year (enrollment growth), each unit of such growth is multiplied by the cost of providing Junior College facilities for such a unit and the product becomes the cost of providing facilities for the district

for that year. This cost is divided into state and district shares on a basis which equalizes district financial ability. The district share is computed by multiplying one-half of the cost of providing facilities for the district by a factor which indicates the district's financial ability in relation to the State as a whole. The factor used is the quotient obtained by dividing (1) the assessed valuation of the district in the preceding year, divided by the estimated weekly student contact hours for the fourth projection year, by (2) the total of the assessed valuation for all Junior College districts in the state in the preceding year, divided by the estimated weekly student contact hours in all Junior College districts of the state for the fourth projection year. The state share is the difference between the district share (as computed above) and the total cost of providing facilities for the district. If the factor computed above is equal to "one" the state and district share equally; if the factor is less than "one" (district assessed valuation per WSCH is less than state assessed valuation over WSCH) the state share will exceed the district share; if the factor is greater than "one" the state share will be less than the district share.

The state share becomes an "entitlement" to the district which may request state funds for eligible capital outlay projects. The cost of the projects is divided between the state and the district in the same ratio as the entitlement was computed. The state share of the projects, however, may not exceed the amount of the entitlement.

District requests for state assistance are submitted to the Department of Education and include information which enables the Department to evaluate the project in terms of eligibility and need. Approved projects are forwarded to the Department of Finance for review and possible inclusion in the Governor's budget. The Legislature considers the requests and determines the extent to which state assistance is to be provided.

Districts becoming effective on or after July 1, 1960, must expend, or have committed, not less than one percent of their assessed valuation before they can qualify for any state assistance.

If federal funds are provided for a project and if the federal funds and the district funds used to match the federal funds are not sufficient to cover the total cost of the project, the balance may be considered as a separate project and state assistance requested in the above manner. Federal funds received from the Higher Education Facilities Act are not deducted from the district's entitlement to state funds.

Projects for state funds are submitted in October and state funds are appropriated by the Legislature for these projects the following July. This permits a period of approximately nine months for review and evaluation by the Department of Finance and the Legislature.

ELEMENTS TO BE CONTINUED

Those elements of the present program that are continued in the proposed plan for the support of Junior College capital construction are:

1. A continuing program of state support.
2. State financial support should be provided for the acquisition and improvement of Junior College sites, the planning, construction, reconstruction, or remodeling of any permanent structure necessary for use as a classroom, laboratory, library, related facilities necessary for the instruction of students or for administration of the educational program, maintenance or utility facilities essential to the operation of the foregoing facilities, and the initial acquisition of equipment.
3. State financial support should not be provided for . . . the planning or construction of dormitories, student centers (other than cafeterias), stadia, the improvement of site for student or staff parking, or single-purpose auditoriums.
4. Provision that one-half of the expenditures for eligible capital projects will be provided by the state in those Junior College districts whose financial ability is at the average for all Junior College districts. Those districts with greater than average financial ability will receive less than one-half of the capital expenditure in state assistance. Conversely, those districts with less than the average financial ability will receive more than one-half of their capital expenditure in state assistance.
5. Provision that enrollment projections for individual Junior College districts be made by the State Department of Finance, except that such projections should be made immediately for a five year period, and for a ten year period as soon as practicable.

ELEMENTS TO BE DISCONTINUED

The main elements of the current program that are to be discontinued are:

1. The provision of an "entitlement" to state support which is based on student growth without regard to need as determined by the relationship of plant capacity and student growth.
2. The requirement that a district expend, commit, or dedicate one percent of its assessed valuation prior to the receipt of state assistance for capital construction projects.

ELEMENTS TO BE MODIFIED

The main elements of the current program to be substantially modified are:

1. The time between the original application by a district and the inclusion of that project in the Governor's Budget for legislative review is ex-

tended to allow adequate time for review and evaluation by state administrative agencies.

2. The submission of requests for state assistance for projects should be made in two phases: the first phase to permit program review within the framework of educational programs and policies and the second phase to permit architectural review and estimation of cost.
3. A more explicit statement of utilization and space standards to be used to determine the capacity for specific types of facilities—classrooms, laboratories, offices, library, and supporting facilities.
4. The need for facilities should be related to the number of students expected to be in attendance in the district during the 8 a.m. to 5 p.m. period, rather than to the number of students who reside in the district and are in attendance at any Junior College.
5. The relationship of federal, state and local funds is modified so that any federal funds received by the district for the construction of a specific project are deducted from the cost of that project prior to the establishment of the funding required by the state and the local district.
6. As the required data becomes available the "relative district ability," as defined in the current program, should be modified by a factor that recognizes the relationship of the ratio of a district's Junior College population and a district's total population to the ratio of the state's Junior College population and the state's total population.

NEW ELEMENTS

New elements of the proposed plan are:

1. The requirement that each Junior College district develop a continuing ten-year capital construction plan and that such a plan be reviewed annually by the Department of Education.
2. A provision that permits the governing board of each Junior College district to levy a district tax sufficient to provide the district share of a project approved by the Legislature for state funding.
3. Provision for funding of projects in phases, i.e., preliminary planning, working drawings, construction and equipment, over as many years as are required to complete the project.

Senate Concurrent Resolution 14 stated that one of the particular inadequacies of the current program was the failure to allow sufficient time for state administrative agencies to review and to evaluate, for the benefit of the Legislature, Junior College construction proposals. In order to remedy this inadequacy, and provide for adequate review and evaluation, the "timing" for the proposed plan is such that the implementation would begin in September 1967 but would not be fully completed until July 1, 1969.

Timing for the proposed plan will require the current program of state support for Junior College capital outlay—the Junior College Construction Act of 1965 (Senate Bill 318, 1965 session) as amended—to be continued until July 1, 1968. This extension of the current program will allow a "phasing in" of the proposed plan without interruption of state assistance for Junior College capital construction. The 1967 and 1968 sessions of the Legislature will consider projects under the current program, and the 1969 session will consider projects under the proposed plan.

The Proposed Plan is described below in terms of the annual cycle of important procedural steps.

THE STEPS IN THE PROPOSED PLAN

Step One—Long-Range Planning

Each Junior College district should be required to develop a continuing ten-year plan for capital construction and submit this plan to the Department of Education by September 1, 1967, and each year thereafter. The district's plan should, at a minimum, be based upon the following factors:

1. The district academic master plan.
2. Enrollment projections for the district provided by the Department of Finance.[1] Enrollments should be expressed in terms of Weekly Student Contact Hours (WSCH) based on 8 a.m. to 5 p.m. classes and include both in-district and out-of-district students.

   Projections by type of instruction and subject field classification developed by an individual district would not exceed the Department of Finance projection for the district.
3. The district's capacity as determined by the space and utilization standards for classrooms, laboratories, offices, libraries, and supporting facilities,[2] adopted by the State Board of Education. (Upon recommendation of the Council, the State Board of Education on December 8, 1966, adopted utilization standards for classrooms, laboratories and office space similar to the other segments of higher education. In March 1967, the Council will consider library standards and it is hoped that the State Board will also adopt the standards emanating from that consideration. It is expected that these standards will be used in the implementation of the proposed plan. Standards for supporting facilities should be developed by the Department of Education and adopted by the State Board as soon as possible.)

[1] Such projections for a four-year period are now being made by the Department of Finance. These projections should be extended to ten years.

[2] Auditoriums, theaters, gymnasiums, food and health service facilities, student lounges, bookstores, locker rooms, audio-visual facilities, maintenance and repair shops, storage facilities, etc.

4. An annual inventory of all district facilities using standard definitions, forms and instructions as adopted by the State Board of Education. (In order to provide a uniformity of information between all segments of public higher education in California, and since the State Board has already endorsed the definitions, forms and instructions prescribed in the Coordinating Council's Cost and Statistical document *"Instructions for Forms P-1 and P-2"*, it is expected that these forms, definitions and instructions will be used in the implementation of this proposed plan.)

In order to obtain an indication of the degree of long-range planning at the district level, the Council staff asked each district to submit a copy of its master plan for capital construction.[3] Of the 42 districts replying to the request, 14 had well-developed plans that took into consideration enrollment projections, capacity measures, and the district's academic Master Plan. Seventeen districts had master plans consisting of one to five pages and a map of the campus showing the location of current and planned buildings. Eleven districts indicated they had no Master Plan at the present time.

It would appear that the Department of Education could provide a service to the Junior Colleges by offering guidance and technical assistance in the development of techniques and procedures for long-range planning of capital construction.

Step Two—Review of Long-Range Plans

The second step of the proposed plan requires the Department of Education to review and evaluate annually each district's capital construction plan and report to the district on the result of such review not later than December 1 of 1967 and each year thereafter.

One major reason for Departmental review will be to coordinate statewide planning for the orderly growth of Junior Colleges by helping local districts ascertain that the plans of their district are not in conflict with others, particularly adjacent districts.

Step Three—District Submission of a Construction Project

The third step of the proposed program requires districts to submit to the Department of Education a project program for each project for which they desire state approval, not later than January 1, 1968 and each year thereafter. The project program should contain all necessary specifications for a review of the project within the framework of the educational program.

The project must be a part of, and justified by, the district capital construction plan. It must be a project eligible for state assistance as currently defined by *Education Code Section 20015*.

"Project" means the purpose for which a junior college district has applied for assistance under this chapter. A project may include the acquisition and improvement of junior college sites, the planning, construction, reconstruction, or remodeling of any permanent structure necessary for use as a classroom, laboratory, library, related facilities necessary for the instruction of students or for administration of the educational program, maintenance or utility facilities essential to the operation of the foregoing facilities, and the initial acquisition of equipment. A project shall not include the planning or construction of dormitories, student centers other than cafeterias, stadia, the improvement of site for student or staff parking, or single-purpose auditoriums.

Step Four—Department of Education Review of District Requests

Step four of the proposed plan will require the Department of Education to review each district's proposed project to determine if it comes within the district's capital construction program, if the need for the project is established in terms of capacity standards and projected enrollment and if it is an eligible project.

It is not practical to plan a facility to be fully occupied as soon as constructed, especially if the facility is of a highly specialized nature and expensive to duplicate, and consequently projects are normally built to be fully occupied several years after completion. Instructional facilities in the State Colleges and University are often built for the occupancy level expected two to three years after completion; libraries may exhibit an even greater lead time. Similar lead times should be incorporated into the planning of Junior College facilities. Several examples of the timing involved in the total process are shown in Table 51.

Department of Education review should give consideration to the timing of the construction of project and the appropriate lead time. Once these have been determined, the size of the facility may be determined by evaluating the following "program inputs" and translating them into assignable square feet.

Facility	*Program Inputs*
Instructional	Student load (weekly student contact hours) Faculty Departmental staff
Libraries	Student load Collections Library staff
Administrative	Administrative staff Maintenance equipment

The translation of such inputs should be accomplished by using the space and utilization standards recommended by the Coordinating Council and adopted by the State Board of Education in December,

[3] See Appendix L.

1966, and the library and supporting facility standards yet to be adopted by the Board. The standards already adopted are derived for the purpose of determining total floor area requirements based upon functional inputs representing the particular program to be housed. Review of an instructional facility need be no more specific than a determination of total useable area required, perhaps broken down into the functional requirements of classroom, laboratory, office, library and support areas. A more detailed, room by room, review is neither warranted nor necessary and would prove inefficient and uneconomical.

Once the project program review is completed and the building size approved, there must be an additional review to consider construction and cost aspects. This review takes place in Step VII.

The Department's review of proposals should be completed by April 1, 1968, and each year thereafter. Approved proposals should be forwarded to the Department of Finance for review.

Appeal from a decision of the Department may be made by the governing board of the applicant district to the State Board of Education. Such appeal shall be made through the executive officer of the State Board of Education and shall be placed on the agenda of the State Board of Education in accordance with general agenda practices. The decision of the State Board of Education in such appeals shall be final.

Step Five—Department of Finance Review of District Requests

The fifth step requires the Department of Finance to review the approved proposals forwarded by the Department of Education. Department of Finance review should determine that projects are needed and justified, appropriately "sized," and appropriately "timed." Following such determination, the Department should give written approval to a Junior College district to prepare preliminary plans and submit them to the Department of Education. The Department of Finance should complete its review by July 1, 1968, and each year thereafter.

TABLE 51

Timing Patterns on Capital Outlay Proposals

	65–66	*67–68*	*68–69*	*69–70*	*70–71*	*71–72*	*72–73*	*73–74*
Large, specialized facility	P	W	C	E	Occ.			ILs
Medium, general facility	P	WC	E	Occ.		ILg		
Medium, specialized facility	P	W	CE	Occ.			ILs	
Small, general facility	P	WCE	Occ.		ILg			

Occ. = year of occupancy.
ILs = year of input level for highly specialized facility.
ILg = year of input level for general facility.
Other letters indicate years in which funding would be required for:
P = district planning and programming.
W = working drawings.
C = construction.
E = equipment.
NOTE. The above are only examples of possible sequences, and do not necessarily relate to any particular project. Obviously many other sequences are possible. The period between occupancy and the input level upon which the building is sized is of major importance.

Step Six—Preparation by the District of Preliminary Plans

The sixth step is the preparation by the district of the project's preliminary plans. These plans should contain the architect's schematic drawings and all other data required to establish detailed cost estimates. Preliminary plans should be submitted to the Department of Education by October 1, 1968 and each year thereafter.

Step Seven—Department of Education Review of Preliminary Plans

The seventh step requires the Department of Education to review the preliminary plans. This review should be divided into a number of sub-steps.

The first sub-step should be an architectural review to determine the costs of the various phases of the project as determined by the time schedule for completion. The second sub-step should be the review of any federal funding of the project. The third sub-step should be the determination of the state and district shares of the total estimated cost of the project. The fourth sub-step should be the determination of the State funds immediately needed for the project at the next legislative session and those funds that would have to be provided by the district.

A. **Review of Preliminary Plans and the Determination of Phase Costs and Total Costs**—This review might be accomplished in a variety of ways, but is generally performed with a set of schematic drawings of the projected facility. At least three aspects of the project should be considered: (1) type of construction (2) unit costs of the project and (3) efficiency of the facility (if a building, the efficiency is measured by the ratio of assignable (useable) square feet to outside-gross-square feet). The Department of Education should endeavor to obtain unit construction cost figures for as many recent Junior College projects and other similar facilities as possible in order that relevant cost comparisons may be established. In its review, the Department should also be vested with the authority to adjust the costs and type of construction for those facilities and portions of facilities for which state matching support is sought.

Review of the amount and cost of the initial increment of equipment should be accomplished on a general rather than specific basis. Using unit costs as

guidelines, the initial increment of equipment for a facility may be examined for: (1) the overall ratio of equipment cost to total cost of the facility, (2) unit cost of equipment per faculty or other staff measure, (3) unit cost of equipment per floor area. Such unit equipment costs are undoubtedly much higher in the technical-vocational and natural science programs than in those facilities housing social sciences and humanities; this type of functional difference should always be taken into account.

B. **Federal Funds For the Project**—The existing statutory reference to receipt of federal funds for Junior College capital expenditure is vague in its intent. In Section 20043 of the Education Code, it is indicated that such funds are not to be used to match state funds. The same section further notes that the state and local sharing ratio for each project is based upon the entitlement procedure which is calculated without reference to federal contributions. It is not clear whether the project, is that portion of the construction cost which remains after the federal contribution is deducted or the total project as originally conceived. Such a procedure is questionable since both state and federal agencies are interested in funding facilities for similar functions and assess need factors in much the same way.

Once the need for a facility has been determined, the scope and size of the project should not be changed unless the needs vary. The relative state and local responsibilities having been established, there is no reason to change this ratio because of the receipt of funds from the federal government. Thus, once the project scope is established, and an estimate or actual authorization of federal funds determined, the federal contribution should be deducted from the total cost of the project with the state and local sharing ratio applied to the remainder. Both the state and local districts are thus subsidized on a proportionately equal basis.

In order to provide the information to the Department of Education to enable this substep to be accomplished and to coordinate federal and state programs as much as possible, the Council staff will recommend that the State Plan for administering the Higher Education Facilities Act be revised so that the final date for Junior Colleges to submit applications will be August 15 rather than December 15. This will permit Council review and approval of projects at the October Council meeting.

C. **Determination of State and District Expenditure**—The third substep is the determination of the the state and district share of the total cost (less any Federal funding for the project) of the project. The need for equalization processes in programs of matching grants is well known. If state grants to Junior Colleges for capital purposes represent less than 100% of the project cost, recognition must be given to the fact that individual districts are not equal in their ability to raise the remainder of the project cost, which must come from the local property tax. Recent data from the Department of Education indicate that the "most able" Junior College district (in terms of assessed valuation per average daily attendance) during 1965–66 was 14 times more able than the "poorest" district:

	av/ada
Mt. San Jacinto	$423,373
Statewide average	139,313
Yuba	29,664

By providing differential matching levels, inversely related to some measure of local district financial ability, the state may allocate funds to the areas of greatest need and encourage more uniform local tax rates among Junior College districts.

Continuation of a "seat fee" for students from non-district territory and an inter-district tuition for students from other Junior College districts will reimburse districts for capital expenditures for such students made from district funds.

The current program measures local ability in terms of actual assessed valuation per unit of projected weekly student contact hours (WSCH). The use of assessed valuation as a financial index seems reasonable since it is the actual base from which local tax revenues are derived. Projected weekly student contact hours, however, should be discarded because this is an unnecessary variable in a program which is already heavily dependent upon the accuracy of long-run student enrollment estimates. A student measure based upon recent actual weekly student contact hours should be used.

The existing program requires a district to have committed at least one percent of its assessed valuation for the construction of facilities in order to be eligible for state assistance. This requirement is designed to insure that each district makes a minimum local effort. This provision unnecessarily penalizes a district that has been unable to commit capital outlay expenditures due to an inability to obtain approval by the electorate of either bond proposals or tax overrides for capital purposes.

In summary, it is proposed that:

1. Relative district ability no longer be based upon *estimated* future weekly student contact hours but, rather, upon those contact hours reported for the same year in which the assessed valuation is measured.
2. The requirement that a district commit or expend one percent of its assessed valuation prior to full participation in the state program be eliminated.

Two procedures are generally utilized to accomplish equalization in a grant program. One method, known as the "foundation program," is currently used

to compute state grants for current operations. This method employs a set foundation amount and a uniform local district computational tax which is applied to the local assessed valuation to derive the local share. The difference between this local share and the foundation amount becomes the state grant. This method is effective in accomplishing equalization and maintaining a relatively stable state-local sharing ratio when the program cost does not vary dramatically among individual districts. Expenditure proposals for individual capital projects, however, vary significantly even when the district student growth rates in the long-run are similar and the total state share may be quite unlike that level intended and equalization could well become a function of project size.

A more effective procedure when costs fluctuate widely is the "percentage-equalizing" method. This method is essentially that employed by the existing program but with significant differences in measuring local financial ability and handling federal grants. In this method the average state share of all projects may be established by introducing a factor (1-k in the formula below) which is applied to the total expenditure for an individual project. Equalization is then accomplished by introducing an additional factor which relates individual district ability to average ability system-wide. The general formula is as follows:

$$G = (P_d - F) \cdot \left[1 - k \left(\frac{AV_d / wsch_d}{AV_s / wsch_s}\right)\right]$$

where,

G = total state grant for individual project

P_d = total project cost

F = federal funds (HEFA) authorized for the project

k = constant between 0 and 1, which determines the aggregate state share; i.e., if $k = .6$, the state share becomes 40% of total system expenditures

AV_d = assessed valuation in the district proposing the project

$wsch_d$ = total weekly student contact hours reported in same district for year in which the assessed valuation is reported

AV_s = total system-wide assessed valuation

$wsch_s$ = total weekly student contact hours reported in the Junior College system for year in which assessed valuation is reported

The average district ability is subject to the average state-local sharing ratio. Obviously, if only above-average districts apply for construction grants in any given year, the state share will be lower; conversely, if all districts that apply for state grants are below average in ability the total share will be higher. Over a period of years, however, sufficient numbers of "wealthy" and "poor" districts should participate so that the aggregate state share will be nearly the amount intended.

Figure 5 indicates graphically the result of this formula based upon several alternative sharing policies and ability data for 1965–66.[4] If the state share is set at 50% ($k = .5$), the average district ($7,961 in assessed valuation per wsch) receives one-half of the cost (after federal contributions are deducted) of its proposals for the year from the state. Those districts with more than $15,922 AV/wsch would not be eligible for any state funding. In order for all districts to have participated in 1965–66, the state would have had to contribute at a rate of approximately 67% ($k = .33$).

While the use of assessed valuation to determine district ability seems both practical and theoretically sound, when used in conjunction with the number of student contact hours in the district it may in fact tend to confuse need with ability. For example, compare two districts, both reporting the same number of student contact hours and equal assessed valuation, but with one district (A) having twice the population of district (B). Under the current program, both A and B would be deemed "equally able." However, the number of student contact hours in a Junior College district may have little or nothing to do with the

[4] See statement by Ronald W. Cox before the Senate Fact Finding Committee on Education, Sacramento, California, August 29, 1966. While this statement utilized average daily attendance figures, these were converted to weekly student contact hours for Figure 5, by the factor of 17.5 wsch/ada which was recorded during the Fall, 1963, and reported in the Council Cost *and Statistical Study*, 1965.

FIGURE 5

Results of Alternative Sharing Policies

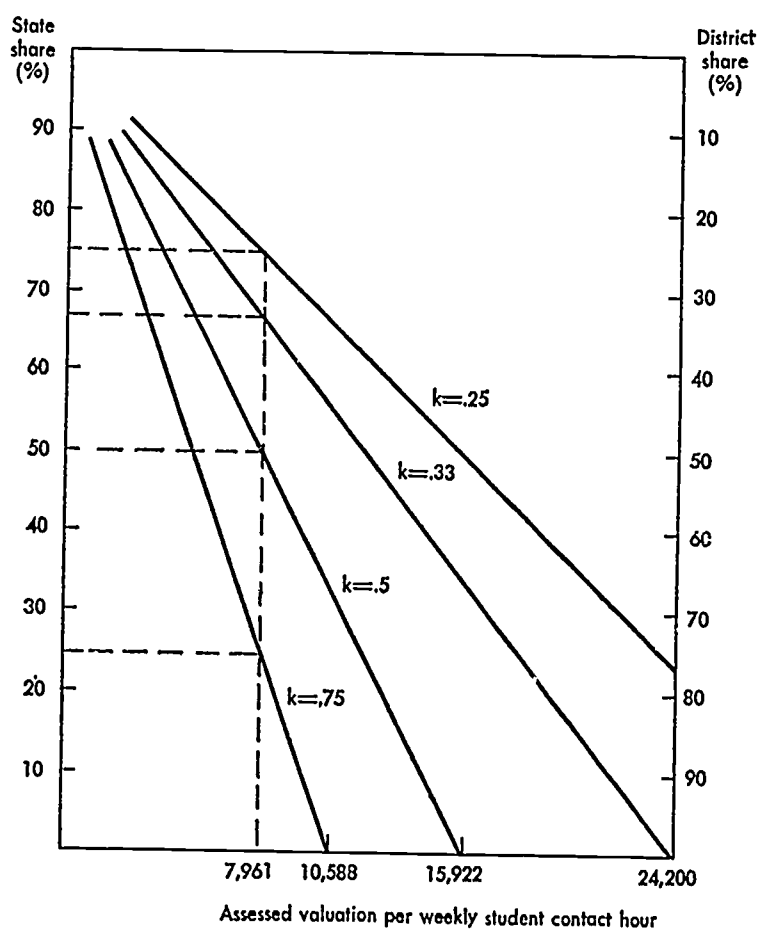
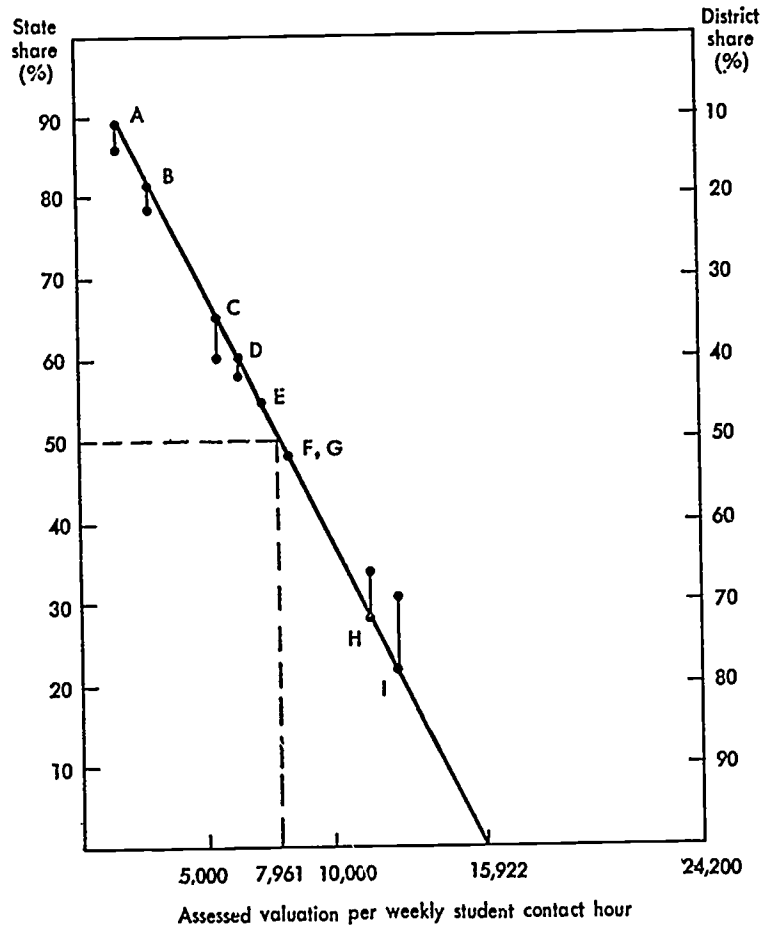


FIGURE 6

Effect of Density Factor Upon State-Local Sharing, Selected Districts, 1965–66 (50% sharing)



Letters denote districts in Table 52.

Change in state-local sharing ratio due to application of density factor:

tax paying ability of local property owners. Such ability would be better measured on the basis of those who must pay the tax, i.e., assessed valuation per property taxpayer. For purposes of simplicity assume that both district A and B contain the same number of property taxpayers per unit of population. The relative abilities of A and B may then be measured in terms of the assessed valuation per capita, in which case B has twice the ability of A. The essential difference in the two measures turns out to be the ratio of population to students.

Moving from a student basis to a population basis in conjunction with local assessed valuation means that the method of state distribution becomes concerned with the cost of other local services as well as education. In the example above, A must tax property at twice the rate of B in order to obtain the same level of local services other than education. Due to this relatively greater burden in A, the Junior College has, in a sense, less of the property tax base from which to draw revenues than its counterpart in B. The Board of Equalization's Annual Report relative to property taxes shows that the more populous urban counties generally exhibit higher total property tax rates than rural counties.

Both student factors and population factors are important in the determination of local district ability, and any equalization method should not recognize one at the total exclusion of the other. A formula suggested by Lindman [5] provides a convenient vehicle for recognition of both factors. As shown below, the population factor may be weighted at any level considered reasonable depending upon the extent to which population is to be recognized.

$$P_f = \frac{(n)\ S}{(n-1)\quad S + P}$$

where,

P_f = population factor to be multiplied by the local ability index in the percentage equalizing formula.

n = weighting which determines the extent to which population is to be recognized.

S = percent that students in the district are of system-wide student total.

P = percent that population in the individual district is of total population for all districts.

An application of the formula to selected districts using 1965–66 ability data appears in Table 52 and Figure 6. This application is based upon a 50% state sharing level, n = 4, and estimates of district population contained in Table 22. State participation tends to be reduced for low density districts (such as Yuba and Shasta) while increasing in the case of districts with very large urban populations (San Francisco and Los Angeles).

TABLE 52

Effect of Density Factor Upon State-Local Sharing, Selected Districts, 1965–66

		Normal State Share	P_f	Adjusted State Share
A	Yuba	89%	1.22	87%
B	Pasadena	82	1.18	78
C	Shasta	65	1.15	60
D	Santa Rosa	61	1.04	59
E	San Joaquin	55	1.02	55
F	Marin	49	1.01	49
G	Contra Costa	48	1.01	48
H	San Francisco	28	.91	34
I	Los Angeles	22	.87	32

The new structure of local property levies (after the "density" adjustments) required to fund the local share of capital expenditures represents more equitable pattern of taxpayer contribution based upon ability-to-pay as between districts and would be the preferred procedure.

While some recognition of population factors may be the most accurate index of local district ability, no reliable population figures for Junior College districts currently exist and it will be necessary to continue with the student basis for measuring relative local

[5] Erick L. Lindman, "School Support and Municipal Government Costs, Long-Range Planning in School Finance, *Proceedings of National School Finance Conference*, National Education Association (St. Louis, 1963), p. 133.

ability until they are available. Such population figures should be estimated by the Department of Finance at the earliest practical date.

D. **Determination of Immediate State and Local Funding**—The fourth sub-step should be the determination of funds for the project immediately needed from the state through legislative appropriations and from the district. This determination will depend upon the timing established and the expenditure for the various construction phases of a project. This will provide for the funding of Junior College construction projects in phases, i.e., preliminary planning, working drawings, construction and equipment. The state and local share of the cost of any phase of a project will be in the same ratio as the state-local share of the total project.

Step seven should be completed by the Department of Education not later than November 15, 1968 and each year thereafter, at which time the preliminary plans together with the Department of Education's review of each project should be transmitted to the Department of Finance.

Step Eight—Department of Finance Review of Preliminary Plans and State-Local Funding

The eighth step will be a review by the Department of Finance of the preliminary plans together with a review of the estimated State-district funding proposed by the Department of Education. Following such review and approval the projects should be included within the Governor's Budget.

Step Nine—Consideration of Expenditures for Junior College Capital Construction by the State Legislature

Early in 1969 and each year thereafter the Governor's Budget will be submitted to the Legislature and it should include projects for Junior College construction. The Legislature should review these projects and the amount of state-district funding proposed by the Department of Education and Finance and in finally approving the Budget will make state funds available for those projects no later than July 1, 1969 and each year thereafter.

Step Ten—Provision for Obtaining District Funds

The tenth, final, and highly important step is that authorization should be made by the Legislature for Junior College governing boards to levy a district tax sufficient to cover the district share of the cost of a project without requiring a vote of the district electorate—when such funds are not otherwise available. The tax to be levied should be limited to the district share of the cost of a project approved through the above procedure, which has sufficient safeguards both as to the desirability and need for a construction project (determined at both district and state level) to justify this new financial flexibility to a local governing board.

4—95673

APPENDIX A

ADVISORY COMMITTEE ON JUNIOR COLLEGE FINANCE

APPENDIX A

ADVISORY COMMITTEE ON JUNIOR COLLEGE FINANCE

Cox, Ronald
Associate Superintendent of Public Instruction
State Department of Education

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Bureau of Junior College Vocational-Technical Education
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Evans, Jerome
Associate Administrative Analyst
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Harris, Robert
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Chairman, Junior College Section
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Marshburn, Arthur
Teacher
Santa Monica City College

McGrath, Thomas
Dean of Institutional Relations and Student Affairs
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Morgenroth, Edwin C.
President
Pacific Oaks College

**Shepard, William
Assistant Vice President and University Dean of Educational Relations
University of California at Berkeley

Tyler, Henry
Executive Secretary
California Junior College Association

* Mr. John Dunn, President and Superintendent, Peralta Junior College District, substituted for Mr. Marsee.
** Dr. Frederick Kintzer, Chairman, Relations with Schools, U.C.L.A., substituted for Mr. Shepard.

APPENDIX B

TABLES FOR CHAPTER II

TABLE 1

State Support by Type of Enrollment and by Type of Class
1964–65

Item	Average Daily Attendance	Cost of Class	State Support	
			Amount per ADA	Percentage of Cost
Graded Classes	266,902	$602.28	$190.53	31.6
Adults	45,628	--	143.90	23.9
Other than adults	221,274	--	200.14	33.2
Nongraded Classes	10,899	$447.68	$160.62	35.9
Adults	9,091	--	152.43	34.0
Other than adults	1,808	--	201.82	45.1
Total	277,801	$596.21	$189.36	31.8
Adults	54,719	576.59	145.32	26.1
Other than adults	223,082	601.03	200.16	33.3

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 2

Systemwide Costs by Type of Enrollment and Type of Class
1964–65

Item	A.D.A.	Cost	Cost per A.D.A.
Defined adults	54,719	$31,549,544	$576.57
Nongraded classes	10,899	4,879,236	447.68
Other than defined adults	223,082	134,078,410	601.03
Graded classes	266,902	160,748,618	602.28

SOURCE: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 3

Systemwide Apportionment for In District Defined Adults Under Existing Code Provisions and Under Use of Total Current Average Daily Attendance
1964–65

Item	A.D.A.	Basic Aid	Total Aid	Amount Per Current A.D.A.
Apportionment ADA (under existing Code Provision)	43,852	$5,481,500	$6,847,947	$150.11
Current (1964–65) ADA	45,618	5,702,250	7,068,697	154.95
Difference	----------	$220,750	----------	$4.84

SOURCF: Bureau of School Apportionments and Reports, State Department of Education.

TABLE 4

Expenditures for Instruction and Other Current Activities, Separate Junior College Districts, 1954–55 to 1964–65; in Current and Constant (1964–65) Dollars [1]
(Per Average Daily Attendance)

Year	Instruction		Other Activities		Total
	(Current Dollars)	(Constant 1964–65 Dollars)	(Current Dollars)	(Constant 1964–65 Dollars)	(Constant 1964–65 Dollars)
	(1)	(2)	(3)	(4)	(5)
1954–55	$293	$459	$118	$153	$613
1955–56	314	478	122	154	633
1956–57	339	495	135	165	660
1957–58	356	487	139	164	651
1958–59	377	491	143	165	656
1959–60	418	520	157	178	698
1960–61	414	492	155	170	662
1961–62	421	476	155	163	639
1962–63	448	489	156	161	650
1963–64	440	461	152	156	618
1964–65	458	458	151	151	609

[1] Expenditures for instruction are adjusted by an index weighted for price changes in faculty salaries and non-academic salaries. Expenditures for other activities are adjusted by a weighted index composed of the "consumer price index" and price changes in nonacademic salaries.

SOURCE: Bureau of Education Research, State Department of Education; U.S. Bureau of Labor Statistics; U.S. Bureau of the Census, *Annual Report of State Distribution of Public Employment*, 1955.

TABLE 5

Ratio of Average Daily Attendance to Full Time Teachers, Junior Colleges
1954–55 to 1964–65

Year	Average Daily Attendance	Full-Time Teachers	Ratio ADA per Full-Time Teacher
1954–55	117,376	3,244	36.28
1955–56	125,467	3,589	34.96
1956–57	136,290	3,969	34.34
1957–58	151,305	4,136	36.68
1958–59	164,227	4,637	35.42
1959–60	166,219	5,006	33.20
1960–61	182,378	5,150	35.41
1961–62	201,588	5,542	36.47
1962–63	215,108	6,074	35.42
1963–64	245,994	6,464	38.16
1964–65	277,801	7,294	38.19

SOURCE. State Department of Education, Bureau of Education Research, Bureau of School Apportionments and Reports.

APPENDIX C

TABLES FOR CHAPTER III

TABLE 1

Sources of Income for Support of Junior Colleges, Selected States 1960–61, 1963–64, 1964–65 [1]

Item	*New York*	*Florida*	*Texas*	*Arizona*	*Wisconsin*	*Illinois*	*Oklahoma*	*California*
State								
1964–65	33%	61%	27%	44%	68%	37%	80%	29.1%
1963–64	33	61	29	44	63	41	NA	24.9
1960–61	33	66	28	15	NA	45	85	22
Local								
1964–65	34	14	31	36	0	45	0	67.3
1963–64	30	15	31	42	0	45	NA	72.3
1960–61	33	14	37	75	NA	45	0	78
Student Tuition and Fees								
1964–65	26	22	18	7	31	16	20	1.1
1963–64	31	22	17	11	37	12	NA	0.3
1960–61	33	20	35	10	NA	10	15	NA
Federal								
1964–65	0	3	3	8	0	2	0	2.5
1963–64	0	2	2	0	0	2	NA	2.5
1960–61	NA	NA	NA	NA	NA	NA	NA	NA
Other								
1964–65	7	0	21	5	1	NA	NA	NA
1963–64	6	0	21	3	0	NA	NA	NA
1960–61	NA	NA	NA	NA	NA	NA	NA	NA

[1] 1960–61 Shares represent formula allowances, other years indicate actual income.
SOURCE: CCHE Questionnaire; Bureau of Junior College Administration and Finance, State Department of Education; USOE Bulletin 1962–14.

TABLE 2

Relative Nationwide Contributions Toward Current Support of Junior Colleges 1960–61

Item	*State*	*Local*	*Student Tuition*
Number of States with Junior College Systems	46	46	46
States in which no contribution was recorded	7	17	2
Unweighted average of contribution for States in which contributions were recorded	42%	22%	35%
Median	33	26	33
Range of contribution:			
High	95	100	100
Low	4	4	5

SOURCE: State Formulas for Support of Public 2-Year Colleges, U.S. Office of Education Bulletin No. 1962–14.

TABLE 3

Junior College District Bond Elections 1960–61 through 1964–65

	1960–61	*1961–62*	*1962–63*	*1963–64*	*1964–65*
Total Districts	30	39	43	51	55
Districts holding Elections	5	17	7	12	4
Percent holding Elections	16.7%	43.6%	16.3%	23.6%	7.3%
Elections approved	3	10	4	8	4
Percent approved	60%	59%	57%	67%	100%
Total proposed (in thousands)	$19,750	$111,563	$64,670	$108,545	$28,454
Total approved (in thousands)	11,500	61,808	41,700	70,695	28,454
Approved as Percent of proposed	58.2%	55.4%	64.5%	65.1%	100%

SOURCE: Bureau of Education Research, State Department of Education.

APPENDIX D

JUNIOR COLLEGE ACCOUNT CLASSIFICATIONS

APPENDIX D

PUBLIC SCHOOL (AND JUNIOR COLLEGE) ACCOUNT-CLASSIFICATIONS [1]

I. EXPENDITURES

A. Current Expense

100. Administration
- 110. Certificated Salaries of Administration
  - 111. General Administration
  - 112. Educational Administration
  - 113. Business Administration
  - 119. Other
- 120. Classified Salaries of Administration
  - 121. General Administration
  - 122. Educational Administration
  - 123. Business Administration
  - 129. Other
- 190. Other Expenses of Administration
  - 191. General Administration
  - 192. Educational Administration
  - 193. Business Administration
  - 199. Other

200. Instruction
- 210. Certificated Salaries of Instruction
  - 211. Principals' Salaries
  - 212. Supervisors' Salaries
  - 213. Teachers' Salaries
  - 214. Other Certificated Salaries of Instruction

    The full-time salaries and prorated portions of salaries for all other certificated personnel performing services which aid in the teaching of pupils, improving the quality of teaching, or in the pupils' adjustment to the educational program. Included are school librarians, assistant librarians, audio-visual personnel, counselors, psychologists, psychometrists, guidance and welfare and attendance personnel, school social workers, and all certificated personnel performing pupil-personnel services.
- 220. Classified Salaries of Instruction
- 230. Textbooks
- 240. Other Books
- 290. Other Expenses of Instruction
  - 291. Instructional Supplies
  - 292. Miscellaneous Expenses of Instruction

400. Health Services
- 410. Certificated Salaries of Health Personnel
- 420. Classified Salaries of Health Personnel
- 490. Other Expenses of Health Services

500. Pupil Transportation
- 520. Classified Salaries of Pupil Transportation
  - 521. Supervisors
  - 522. Bus Drivers
  - 523. Mechanics and Other Garage Employees
  - 524. Clerical Personnel
- 590. Other Expenses of Pupil Transportation
  - 591. Payments to Contractors
  - 592. Payments to Another School District
  - 593. Payments to Common Carriers
  - 594. Payments in Lieu of Transportation
  - 595. Payments for Bus Rental
  - 596. Replacement of Vehicles
  - 597. Other Expenses for Pupil Transportation

    Operation and Maintenance
    - 597.1 Fuel
    - 597.2 Oil
    - 597.3 Tires and Tubes
    - 597.4 Lubrication
    - 597.5 Repairs, Materials, and Labor of Other than District Employees

[1] *California School Accounting Manual*, State Department of Education, October, 1961, pp. 22–27.

597.9 Other Transportation Expense

590CR Payments from Another School District

600. Operation of Plant
- 620. Classified Salaries for Operation of Plant
  - 621. Salaries for the Care of Buildings
  - 622. Salaries for the Care of Grounds
  - 629. Other Salaries
- 690. Other Expenses for Operation of Plant
  - 691. Utilities and Fuel
  - 692. Supplies
  - 699. Miscellaneous Expense

700. Maintenance of Plant
- 720. Classified Salaries for Maintenance of Plant
  - 721. Salaries for the Repair of Buildings
  - 722. Salaries for the Upkeep of Grounds
  - 723. Salaries for the Repair of Equipment
- 730. Replacement of Equipment
  - 731. Instructional Equipment
  - 732. Noninstructional Equipment
- 790. Other Expenses for Maintenance of Plant
  - 791. Expenses for the Repair of Buildings
  - 792. Expenses for the Upkeep of Grounds
  - 793. Expenses for the Repair of Equipment

800. Fixed Charges
- 810. District Contributions for Certificated Employee Retirement
  - 811. Annuity Fund
  - 812. Permanent Fund
- 820. District Contributions for Classified Employee Retirement
  - 821. State Employees Retirement
  - 822. Old Age and Survivors Insurance
- 890. Other Fixed Charges
  - 891. Insurance and Judgments
  - 892. Rental Expense
  - 893. Interest Expense

899. Miscellaneous

Subtotal—Total of current expense reported in major classes 100 through 800 designated as "Current Expense of Education."

900. Food Services
- 910. Certificated Salaries of Food Services
- 920. Classified Salaries of Food Services
- 930. Food
- 990. Other Expenses

1100. Community Services
- 1110. Certificated Salaries of Community Services
  - 1111. Salaries of Recreational Services
  - 1112. Salaries of Civic Center Activities
  - 1113. Salaries of Child Care Centers
  - 1119. Other Salaries of Community Services
- 1120. Classified Salaries of Community Services
  - 1121. Salaries of Recreational Services
  - 1122. Salaries of Civic Center Activities
  - 1123. Salaries of Child Care Centers
  - 1129. Other Salaries of Community Services
- 1190. Other Expenses of Community Services
  - 1191. Expenses of Recreational Services
  - 1192. Expenses of Civic Center Activities
  - 1193. Expenses of Child Care Centers
  - 1199. Other Expenses of Community Services

Total Current Expense (Classes 100 through 1100)

B. Capital Outlay

1200. Capital Outlay
- 1230. Sites
- 1240. Improvement of Sites
- 1250. Buildings
- 1260. Equipment
  - 1261. Books
  - 1269. Other Equipment

Total Expenditures (Classes 100 through 1200)

II. OTHER OUTGO

1300. Debt Service
- 1330. Annual Repayment on Account of Public School Building Apportionment
- 1340. Annual Repayment on Account of State School Building Apportionment
- 1350. Bond Redemption
- 1360. Bond Interest
- 1370. Repayment of State School Building Fund Aid by Warrant to the State Treasurer Out of Proceeds from Sale of Bonds
- 1390. Other

1400. Outgoing Transfers
- 1430. Tuition
  - 1431. Junior High Tuition
  - 1439. Other Tuition
- 1440. Transfers
  - 1441. Interfund Transfers
  - 1449. Other Transfers

Total Expenditures, Debt Service and Transfers (Classes 100 through 1400)

APPENDIX E

EXCERPT FROM A JUNIOR COLLEGE BUDGET

APPENDIX E

EXPENDITURES	*1964–65 Actual*	*Budget for 1965–66*	*Estimate for 1965–66*	*Budget Forecast 1966–67*
—200 INSTRUCTION				
a. Certificated Salaries				
(1) Presidents, Deans, Assistant Deans	$220,068	$275,800	$254,027	$286,879
Comment				
For budget purposes, one Assistant Dean position in 1965–66 changed to Coordinator in 1966–67. $8,000 for sabbatical leaves included. Salary increments and increases provided.				
(2) Directors, Coordinators, Department Chairmen	178,564	271,500	257,124	305,288
Comment				
One 1965–66 Assistant Dean position, and one classified student-personnel position reclassified as coordinators. Adult Education Coordinator (0.5) position, and Department Chairmen (0.4) position added. Fifty extra days of coordination added and salary increments and increases included.				
(3) Classroom Instructors	2,972,500	3,776,200	3,705,710	4,228,256
Comment				
14.7 regular program instructors and 5.8 adult education instructors added. $55,000 for sabbatical leaves, increments, salary increases, and $15,000 for upgrading included.				
(4) Counselors, Librarians, and Other Assigned Time	329 609	461,300	443,924	529,798
Comment				
1.8 regular program Counselor positions, one Adult Education Counselor, and one Adult Education "Other Assigned Time" position added. 265 hours for hourly counselor salaries added for Adult Education. Salary increments and increases are included.				
TOTAL CERTIFICATED SALARIES	$3,700,741	$4,784,800	$4,660,785	$5,350,221

APPENDIX F

TABLES AND FIGURES FOR CHAPTER V

TABLE 1

Projection of Total Current Expense of Education in California Junior Colleges, 1967–68 through 1974–75, Based Upon Formula Described in Chapter V

Year	A.D.A.	Weekly student contact hours	Faculty			Instructional Support			Other Support			Total	Cost per A.D.A.
			Number of teaching faculty	Teaching salaries	Other faculty salaries	Classified salaries	Supplies and expense	Books	Salaries	Expenses	Staff benefits		
				($000's)	($000's)	($000's)	($000's)	($000's)	($000's)	($000's)	($000's)	($000's)	
1963–64	245,994	4,307,355	7,832	$73,256	$9,738	$12,125	$6,263	$601	$21,603	$12,245	$5,272	$141,114	$574
1964–65	277,801	4,864,296	8,844	86,937	11,563	14,212	7,155	725	25,280	14,168	6,237	166,277	599
1967–68	392,300	6,869,173	12,489	142,524	18,956	22,443	10,516	1,224	39,924	20,819	10,118	266,524	679
1968–69	413,700	7,243,887	13,171	157,973	21,010	24,564	11,235	1,383	43,703	22,249	11,176	293,293	709
1969–70	428,900	7,510,039	13,655	172,135	22,894	26,436	11,812	1,516	47,029	23,371	12,136	317,329	740
1970–71	446,200	7,812,962	14,205	188,202	25,031	28,538	12,444	1,690	50,786	24,635	13,224	344,550	772
1971–72	466,900	8,175,419	14,864	206,966	27,526	31,006	13,199	1,873	55,164	26,118	14,494	376,340	806
1972–73	488,500	8,553,635	15,552	227,588	30,269	33,670	13,981	2,084	59,910	27,688	15,885	411,075	842
1973–74	506,700	8,872,317	16,131	248,111	32,999	36,262	14,695	2,291	64,503	29,099	17,261	445,221	879
1974–75	527,200	9,231,272	16,784	271,313	36,085	39,157	15,508	2,551	69,664	30,678	18,813	483,769	918

The formula method utilized to derive the costs in Table 1 is based upon the variables and considerations described in Chapter V. The method begins by converting average daily attendance figures for 1963–64 into weekly student contact hours. The number of teaching faculty is then derived by applying the factors of (1) class size and (2) course contact hours per faculty member. Average faculty salaries and other unit cost data were developed using actual 1963–64 expenditure data. The following unit measures were derived for that year:

weekly student contact hours per ada	17.5
average class size	28
course contact hours per teaching faculty	20
weekly student contact hours per teaching faculty	550
average teaching faculty salary	$9,353
ratio of other faculty salaries to teaching salaries	13.3%
instructional support	
classified salaries (per teaching faculty)	$1,548
supplies and expense (per teaching faculty)	799
books (per teaching faculty)	77
other support	
salaries (per student)	88
expenses (per student)	50
staff benefits (percent of salaries)	4.52%

These base figures are then projected utilizing estimated future average daily attendance (supplied by the Department of Finance) along with the following price increases (annual):

teaching salaries	5.1%
other faculty salaries	5.1
classified salaries	3.8
supplies and expense	1.3
books	6.4

The academic salary increase is based upon the actual trend over the last fifteen years as reported by the State Department of Education. Classified salary increases were based upon an index of the recent seven year increase in salaries of "other than instructional personnel" in local schools reported by the Department of Commerce, Bureau of the Census. Supplies and expense increases were based upon recent trends in the consumer price index for all items and the book price increase was based upon recent trends as reported in Publishers Weekly.

This method resulted in a formulated expenditure per ada of $599 in 1964–65. The actual unit expenditure was $596.

To facilitate the projection process, we eliminated some of the variables advocated in Chapter V. However, if a program cost is to be utilized in the future, all those factors that were included in Chapter V (and more, if relevant) should be part of the formulation.

The cost of $679 per ada estimated for 1967–68 may be expressed in the revised student unit of contact hour of enrollment: either (1) in terms of weekly student contact hours, i.e., $38.80 per wsch; or (2) in terms of a "student contact equivalent" based upon the "full time equivalent" of 15 credit hours and the ratio of 1.338 contact hours per credit hour, i.e., $779 per sce.

TABLE 2

Estimates of Junior College Attendance, Expenditures, Assessed Valuation, State Personal Income and General Fund Revenues Through 1974–75

(000's)

Year	*ADA*	*Total Current Expense of Education*		*Statewide Assessed Valuation*	*District Assessed Valuation*	*Statewide Personal Income*	*State General Fund Revenues*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1967–68	392,300	$266,764	$277,254	$48,468,930	$46,142,421	$68,153,000	$2,807,904
1968–69	413,700	288,742	307,019	52,112,705	51,122,564	73,333,000	3,021,320
1969–70	428,900	307,058	325,582	56,030,409	56,030,409	78,907,000	3,250,968
1970–71	446,200	327,462	351,039	60,242,632	60,242,632	84,904,000	3,498,045
1971–72	466,900	351,043	380,682	64,771,525	64,771,525	91,357,000	3,763,908
1972–73	488,500	376,062	412,782	69,640,882	69,640,882	98,300,000	4,049,960
1973–74	506,700	399,178	443,749	74,876,312	74,876,312	105,771,000	4,357,765
1974–75	527,200	424,802	478,487	80,507,011	80,507,011	113,810,000	4,688,972

SOURCES: State Department of Finance; State Senate, Fact Finding Committee on Revenue and Taxation, *Property Taxes and Other Local Revenue Sources*, March 1965; State Department of Education, Bureau of Education Research; State of California, *Governor's Budget for Support and Local Assistance*, 1966–67.

The estimates of total current expense of education in Table 2 were developed by trending the unit expenditures recorded during the years 1951–52 through 1964–65. These unit expenditures were then applied to estimates of average daily attendance (supplied by the Department of Finance) to derive total expenditures. The unit expenditure time series from which column 2 is derived was based upon an arithmetic straight line trend of the value, $Y_x = 392.46 + 17.97X$, where x_o = 1951–52. This equation results in an annual growth rate of 3.17 percent. The expenditures in column 3, were derived from the equation, $\log Y_x = 2.60094 + 0.01552X$, where $x_o = 1951–52$; with an annual growth rate of 3.64 percent. The constants in both equations were calculated by the method of least squares.

The district assessed valuation (column 5) was developed on the assumption that the proportion of valuation in districts would continue to increase in the following fashion:

1967–68 95.2% of total statewide assessed valuation
1968–69 98.1%
1969–70 100.0%

Estimated general fund revenues were derived by taking that percentage estimated in the 1966–67 Governor's Budget for general fund revenue/personal income (4.12%) and applying it to annual estimates of statewide personal income (column 6); i.e., an assumption that there will be generally no change in the general fund tax structure. The lack of information regarding the income elasticity of state general fund taxes led to the choice of using a constant, rather than increasing, (or decreasing) percentage. The personal income estimates were derived from estimates supplied by the Department of Finance.

APPENDIX G

SENATE CONCURRENT RESOLUTION NO. 14

APPENDIX G

Senate Concurrent Resolution No. 14

Chapter 68

Senate Concurrent Resolution No. 14—Relative to junior college capital outlay.

(Filed with Secretary of State May 11, 1966.)

WHEREAS, The Master Plan for Higher Education recommended that "a continuing program be devised and adopted by the Legislature that would distribute construction funds either through grants or loans or both, for capital outlay purposes annually to junior colleges as determined by growth, this program being for the purpose of assisting junior colleges to meet the facility needs of projected enrollments and of the students to be diverted to the junior colleges"; and

WHEREAS, A program of continuing state aid for junior college construction was enacted by the Legislature by the passage of Senate Bill 318 at the 1965 Regular Session (Chapter 1272 of the 1965 Statutes); and

WHEREAS, Experience shows that the provisions of Senate Bill 318 are not adequate to fulfill the purposes of the bill in that the bill: (1) fails to coordinate the state and the federal programs of aid for junior college construction, (2) fails to coordinate the program of state aid for junior college construction with other state programs of aid to education, (3) contains a method of calculating district entitlement which is unrelated to the need for a particular construction project at a particular junior college district, which hinders the Legislature from making flexible judgments regarding the relative financial needs of the three segments of higher education, and which encourages administrative agencies to calculate junior college growth and the cost of junior college construction in a manner which underestimates the needs, (4) fails to allow sufficient time for state administrative agencies to review and to evaluate, for the benefit of the Legislature, junior college construction proposals, and (5) fails to combine into one junior college construction program previous legislation on this subject (i.e., the Junior College Tax Relief Act and the Junior College Facility Construction Law of 1963) money from which is still available to some junior college districts; now, therefore, be it

Resolved by the Senate of the State of California, the Assembly thereof concurring, That no later than January 31, 1967, the Coordinating Council for Higher Education shall: (1) study the program of state aid for junior college construction assistance, (2) advise the Governor and the Legislature as to the purposes and objectives of this program, (3) recommend changes in the present program, and (4) prepare statutory proposals to carry out the recommendations; and be it further

Resolved, That in carrying out the directions specified in this resolution the Co-ordinating Council for Higher Education shall give consideration to the inadequacies of Senate Bill 318, by considering the following factors, and any other factors the council deems relevant: (1) the need for state administrative review of junior college projects and proposed financing before funding by the Legislature, (2) the utilization of existing and new facilities, (3) the need to develop construction allowances based upon actual project costs, (4) the need for long-range construction planning, (5) the need for equalization of district ability, (6) the assessment of relative district need, (7) the amount of student growth, (8) the existence of inadequate or obsolete facilities, (9) the coordination of the state junior college construction program with federal construction assistance programs and, insofar as possible, other state construction and support programs, and (10) the need to consider all capital outlay requirements, including site acquisition, site development, new construction, initial equipment, renovation, and project planning; and be it further

Resolved, That the Secretary of the Senate is hereby directed to transmit a copy of this resolution to the Director of the Coordinating Council for Higher Education.

APPENDIX H

CRITERIA FOR GRADED CLASSES

APPENDIX H

Graded Courses. Courses (classes) meeting the course criteria and standards as approved by the California State Board of Education.

The criteria and standards are as follows:

Criteria (California Administrative Code, Title 5, Section 131.5 (b)). A graded course (class) in grade 13 or grade 14 shall possess one or more of the following characteristics:

1. The course provides credit toward an associate degree; is normally considered of collegiate level; and is approved by the State Board of Education as a component of, a prerequisite to, or eligible as a required or elective course within, a course of study which leads toward an associate degree.
2. The course is approved by the State Board of Education and is part of an occupational course of study of beyond high school level within the scope of the term "vocational and technical fields leading to employment" as the term is used in Education Code Section 22651 which leads toward an associate degree, an occupational certificate, or both.
3. The course is approved by the State Board of Education and is recognized upon transfer by the University of California, a California state college, or an accredited independent college or university in California as a part of: (a) the required preparation toward a major; (b) the general, or general education requirement; or (c) the permissible or recommended elective credits.

Standards (California Administrative Code, Title 5, Section 131.5 (c)). Any course meeting one or more of the above criteria shall meet all of the following standards:

1. It is a course, approved by the State Board of Education, the content of which is organized to meet the requirements for the associate degree as specified in the California Administrative Code, Title 5, Section 131.7, or the requirements for an occupational certificate and is a part of a course of study not exceeding 70 units in length.
2. It must be offered as described in the college catalog or a supplement thereto which provides an appropriate title, number, and accurate description of course content. A course outline is available at the college. Course requirements and credit awarded are consistent with Education Code Section 7807.
3. It is a course in which are enrolled only those students who have met the prerequisites for the course.
4. It is subject to the published standards of matriculation, attendance, and achievement of the college, and the enrollees are awarded marks or grades on the basis of methods of evaluation set forth by the college and are subject to the standards of retention set forth in the California Administrative Code, Title 5, Section 131, or to such additional standards as may be established by the governing board of the district.
5. It is a course in which enrollment shall not be repeated except in unusual circumstances and with the prior written permission from the district superintendent or his authorized representative or representatives.

APPENDIX I

INDIVIDUAL JUNIOR COLLEGE PROJECTIONS

TABLE A

Actual Enrollments for Individual Junior College Districts in 1965–66, and Projected Enrollments for 1969–70 [1]

(In terms of Weekly Student Class Hours based on 8 a.m. to 5 p.m. classes)

Districts Maintaining Junior Colleges	Average Annual WSCH 1965–66	Total Day-Graded Students 1965	(Factor) Average Annual WSCH Per Day-Graded Students (Column 2÷ Column 3)	Projected Total Day-Graded Students Fall 1969[2]	Average Annual WSCH 1969–70[3]
	(2)	(3)	(4)	(5)	(6)
Antelope Valley	22,739	1,465	15.5	2,278	35,309
Barstow	4,466	364	12.3	552	6,790
Cabrillo	28,728	1,985	14.5	2,989	43,340
Cerritos	83,468	6,218	13.4	9,223	123,588
Chaffey	46,952	3,115	15.1	4,711	71,136
Citrus	38,898	2,508	15.5	3,656	56,668
Coachella	15,672	1,007	15.6	1,672	26,083
Coalinga	10,687	675	15.8	936	14,789
Compton	35,178	2,596	13.6	3,362	45,723
Contra Costa	120,366	8,319	14.5	12,038	174,551
El Camino	116,414	8,714	13.4	10,956	146,810
Foothill	95,611	6,395	15.0	9,542	143,130
Fremont-Newark*	N/A	N/A	N/A	1,391	N/A
Gavilan	9,669	524	18.4	1,074	19,762
Glendale	46,392	3,349	13.8	4,064	56,083
Grossmont	37,651	3,168	11.9	4,840	57,596
Hancock	24,454	1,716	14.2	2,529	35,912
Hartnell	25,892	1,870	13.8	2,704	37,315
Imperial	14,123	910	15.5	1,267	19,638
Kern	72,321	4,625	15.6	6,187	96,517
Lassen	7,368	451	16.3	542	8,835
Long Beach	101,162	8,43	12.0	11,146	133,752
Los Angeles	538,204	37,710	14.3	53,787	769,154
Los Rios	158,792	10,505	15.1	15,170	229,067
Marin	41,779	3,143	13.3	4,754	63,228
Merced	18,272	1,209	15.1	2,061	31,121
Monterey	31,340	2,002	15.6	2,783	43,415
Mt. San Antonio	84,369	6,051	13.9	8,350	116,065
Mt. San Jacinto	2,692	326	8.2	844	6,921
Napa	24,847	1,771	14.0	2,368	33,152
North Orange	130,858	9,222	14.2	16,069	228,180
Oceanside-Carlsbad	13,060	827	15.8	1,198	18,928
Orange Coast	104,452	7,413	14.1	12,703	179,112
Palomar	29,459	1,961	15.0	3,046	45,690
Palo Verde	4,010	214	18.7	384	7,181
Pasadena	119,914	8,040	14.9	9,040	134,696
Pera .a	113,394	8,033	14.1	10,202	143,848
Porterville	10,031	574	17.5	679	11,882
Redwoods	N/A	N/A	N/A	1,539	N/A
Rio Hondo	18,704	1,195	15.6	4,107	64,069
Riverside	50,370	3,384	14.9	4,955	73,830
San Bernardino	77,729	4,564	17.0	6,657	113,169
San Diego	109,485	7,732	14.2	11,392	161,766
San Francisco	137,278	8,399	16.3	10,732	174,932
San Joaquin	66,152	3,968	16.7	5,542	92,551
San Jose	60,523	4,034	15.0	5,513	82,695
San Luis Obispo	11,153	901	12.4	1,895	23,498
San Mateo	112,170	7,500	15.0	10,626	159,390
Santa Ana	42,579	3,042	14.0	4,618	64,652
Santa Barbara	32,094	2,218	14.5	3,390	49,155
Santa Monica	80,769	6,673	12.1	8,030	97,163
Sequoias	39,971	2,421	16.5	3,249	53,608
Shasta	35,435	2,110	16.8	2,919	49,039
Sierra	29,680	1,667	17.8	2,464	43,859
Siskiyou	9,699	581	16.7	901	15,047
Solano	22,034	1,691	13.0	2,337	30,381
Sonoma	44,676	3,001	14.9	4,139	61,671
South County	50,310	4,189	12.0	6,383	76,596
State Center	88,873	5,868	15.1	8,485	128,124

TABLE A—Continued

Actual Enrollments for Individual Junior College Districts in 1965–66, and Projected Enrollments for 1969–70 [3]

(In terms of Weekly Student Class Hours based on 8 a.m. to 5 p.m. classes)

Districts Maintaining Junior Colleges	Average Annual WSCH 1965–66	Total Day-Graded Students 1965	(Factor) Average Annual WSCH Per Day-Graded Students (Column 2÷ Column 3)	Projected Total Day-Graded Students Fall 1969[2]	Average Annual WSCH 1969–70[3]
	(2)	(3)	(4)	(5)	(6)
Sweetwater	28,986	2,323	12.5	3,570	44,625
Ventura	57,617	3,765	15.3	6,565	100,444
Victor Valley	7,460	639	11.7	963	11,267
West Kern	9,177	516	17.8	635	11,303
West Valley	38,023	2,764	13.8	5,691	78,836
Yosemite	61,131	3,689	16.6	4,811	79,863
Yuba	35,283	2,266	15.6	3,311	61,652

SOURCE: Department of Finance, September 1966.

[1] Enrollments are in terms of Weekly Student Class Hours (WSCH) averaged for the Fall and Spring terms and based on 8 a.m. to 5 p.m. classes. All students included.

[2] Projected by Department of Finance.

[3] The ratio in column 4 is assumed to remain constant for each Junior College district from year-to-year. Average annual WSCH for each Junior College district in 1969–70 is derived by multiplying the projected total day-graded students (Department of Finance) for 1969 by the factor for that district in column 4.

APPENDIX J

COST DATA FROM THE SCHOOL PLANNING DIVISION OF THE LOS ANGELES CITY SCHOOL DISTRICTS

APPENDIX J

SUMMARY "D"

Master Plan Space Allocation Analysis

Ph.	Square Feet	Teach. Sta.	STUDENT STATIONS Type Analysis*				TEACHING STATIONS Capacity analysis					
			1 Trans. Prog.	2 Part. Trans.	3 Tech. Prog.	Total	20 to 29	30 to 44	45 to 59	60 to 89	90 to 120	300
I	231,334	58	1,788	679	378	2,845	12	16	24	2	2	2
II	61,787	26	570	--	332	902	10	8	6	1	1	--
	293,121	84	2,358	679	710	3,747	22	24	30	3	3	2
III	76,322	12	615	--	--	615	--	--	11	--	1	--
	369,443	96	2,973	679	710	4,362	22	24	41	3	4	2
IV	95,354	20	240	390	165	795	7	6	4	1	2	--
	464,797	116	3,213	1,069	875	5,157	29	30	45	4	6	2
Total	464,797	116	3,213	1,069	875	5,157	29	30	45	4	6	2

*1. Transfer Program refers to student stations primarily designed for courses that will be used for transfer programs; i.e., students going on to state colleges and universities.
*2. Partial Transfer refers to student stations designed for courses, some of which will offer transfer credits.
*3. Technical program refers to student stations designed for technical programs which are terminal courses.

APPENDIX J

SUMMARY "E"

Square Footage Allocation Analysis

Department	*Ph*	*Teac'. Sta's*	*% Of Total*	*Student Sta's*	*% Of Total*	*Areas Required*			
						Square Footage	*% for Serv.*	*Total Sq. Ft.*	*% Of Total Sq. Ft.*
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*
Air & Space Technology	2	6	5.17	165	3.20	19,500	40	27,300	5.87
Art	4	4	3.45	120	2.33	7,720	40	10,808	2.33
Automotive Technology	1	10	8.61	282	5.46	38,250	40	53,550	11.52
Business	1	15	12.93	675	13.09	19,712	40	27,597	5.94
Chemistry	1	2	1.72	64	1.24	4,850	40	6,790	1.46
Cosmetology	2	4	3.45	96	1.86	5,600	40	7,840	1.69
Drama	4	3	2.59	80	1.55	13,830	40	19,362	4.17
Earth Science	1	3	2.59	127	2.46	4,800	40	6,720	1.45
Engineering & Electronics	2	8	6.90	270	5.24	13,250	40	18,550	3.99
English	1	8	6.90	360	6.98	7,374	40	10,324	2.22
Foreign Language	1	3	2.59	150	2.91	4,678	40	6,549	1.41
Home Economics	2	7	6.03	234	4.54	9,500	40	13,300	2.86
Journalism	1	2	1.72	75	1.45	2,798	40	3,917	.84
Life Science	1	4	3.45	216	4.19	8,815	40	12,341	2.66
Mathematics	2	3	2.59	135	2.62	3,184	40	4,458	.96
Music	4	3	2.59	190	3.68	9,180	40	12,852	2.77
Nursing	1	4	3.45	96	1.86	5,800	40	8,120	1.75
Physics	2	1	.86	32	.62	2,450	40	3,430	.74
Physical Ed.—Men	1	3	2.59	120	2.33	14,770	25	18,463	3.97
Physical Ed.—Men & Women	4	2	1.72	150	2.91	19,600	10	21,560	4.64
Physical Ed.—Women	2	3	2.59	135	2.62	11,367	25	14,209	3.05
Psychology & Philosophy	3	3	2.59	135	2.62	3,984	40	5,578	1.20
Social Sciences	3	9	7.75	480	9.30	9,874	40	13,824	2.97
Speech	4	2	1.72	90	1.75	2,480	40	3,472	.74
Sub-totals		112	96.55	4,477	86.81	243,366		330,914	71.20
Administration	3					19,400	40	27,160	5.84
Library & Learning Ctr.	1	4	3.45	680	13.19	42,100	25	52,625	11.32
Shipping & Receiving	3					2,650	10	2,915	.63
Boiler Building	1					5,400	10	6,000	1.29
Gardner's & Equip. Stor.	3					2,700	10	2,970	.64
Cafeteria	3					19,100	25	23,875	5.14
Student Center & Store	1					14,670	25	18,338	3.94
Sub-totals		4	3.45	680	13.19	100,620		127,883	28.80
TOTAL		116	100.00	5,157	100.00	349,386		464,797	

APPENDIX J

SUMMARY "F"

Estimated Construction Cost, Analysis

Department	*Ph*	*Constr. Year*	**1 Square Feet*	*1968 Cost Per Sq. Ft.*	*Estimated Constr. Cost*	*Dept. % of Total*	*Plus 8% Each Yr. After 1968*	*Final Cost Of Construction*
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*
Air & Space Tech	4	1979	27,300	$22.00	$600,600	4.9	$198,200	$798,800
Art	4	1979	10,808	23.00	248,600	2.0	82,000	330,600
Automotive Tech	1	1968	53,550	24.00	1,285,200	10.6		1,285,200
Business	1	1968	27,597	24.00	662,300	5.5		662,300
Chemistry	1	1968	6,790	26.50	179,900	1.5		179,900
Cosmetology	2	1971	7,840	22.00	172,500	1.4	15,500	188,000
Drama	4	1979	19,362	37.00	716,400	5.9	236,400	952,800
Earth Science	1	1968	6,720	23.00	154,600	1.3		154,600
Engineering & Electronics	2	1971	18,550	24.00	445,200	3.7	40,100	485,300
English	1	1968	10,324	23.00	237,500	1.9		237,500
Foreign Lang.	1	1968	6,549	25.00	163,700	1.3		163,700
Home Economics	2	1971	13,300	25.00	332,500	2.7	29,900	362,400
Journalism	1	1968	3,917	25.00	97,900	.8		97,900
Life Science	1	1968	12,341	26.50	327,000	2.7		327,000
Mathematics	2	1971	4,458	23.00	102,500	.8	9,200	111,700
Music	4	1979	12,852	29.00	372,700	3.1	123,000	495,700
Nursing	1	1968	8,120	24.00	194,900	1.6		194,900
Physics	2	1971	3,430	26.50	90,900	.7	8,200	99,100
Physical Ed.—Men	1	1968	18,463	28.00	517,000	4.3		517,000
Physical Ed.—Men & Women	4	1979	21,560	28.00	603,700	5.0	199,200	802,900
Physical Ed.—Women	2	1971	14,209	28.00	397,900	3.3	35,800	433,700
Psychology & Philosophy	3	1975	5,578	23.00	128,300	1.1	26,900	155,200
Social Sciences	3	1975	13,824	23.00	318,000	2.6	66,800	384,800
Speech	4	1979	3,472	25.00	86,800	.7	28,600	115,400
Administration	3	1975	27,160	25.00	679,000	5.6	142,600	821,600
Library & Learn. Ctr.	1	1968	52,625	30.00	1,578,800	13.0		1,578,800
Shipping & Receiving	3	1975	2,915	21.00	51,200	.5	12,900	74,100
Boiler Bldg.	1	1968	6,000	24.00	144,000	1.2		144,000
Gardeners' Bldg.	3	1975	2,970	21.00	62,400	.5	13,100	75,500
Cafeteria	3	1975	23,875	29.00	692,400	5.7	145,400	837,800
Student Ctr. & Store	1	1968	18,338	27.00	495,100	4.1		495,100
Totals			464,797		$12,149,500	100.0	$1,413,800	$13,563,300

*1 See Summary "E", Column I.

APPENDIX J

SUMMARY "G"

Total Cost Analysis Based on Estimated 1968 Construction Cost

Department	*Ph*	*Construction Cost 1968**	*Fees, Arch. Inspection C.O.'s, Etc. (18%)*	*Estimated Equip. Cost % of Constr.*	*Estimated Equip-ment Cost*	*Total Cost (C + D + F)*	*Dept. % Cost of Total*
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*
Air & Space Tech	4	$600,600	$78,100	30.0	$180,200	$858,900	5.4
Art	4	248,600	32,300	20.0	49,700	330,600	2.1
Automotive Tech	1	1,285,200	167,100	25.0	321,300	1,773,600	11.1
Business	1	662,300	86,100	35.0	231,800	980,200	6.1
Chemistry	1	179,900	23,400	25.0	45,000	248,300	1.6
Cosmetology	2	172,500	22,400	20.0	34,500	229,400	1.4
Drama	4	716,400	93,100	6.0	43,000	852,500	5.4
Earth Science	1	154,600	20,100	24.0	37,100	211,800	1.3
Engineering & Electronics	2	445,200	57,900	24.0	106,800	609,900	3.8
English	1	237,500	30,900	8.0	19,000	287,400	1.8
Foreign Lang.	1	163,700	21,300	23.0	37,700	222,700	1.4
Home Economics	2	332,500	43,200	20.0	66,500	442,200	2.8
Journalism	1	97,900	12,700	11.0	10,800	121,400	.8
Life Science	1	327,000	42,500	26.0	85,000	454,500	2.9
Mathematics	2	102,500	13,300	11.0	11,300	127,100	.8
Music	4	372,700	48,500	20.0	74,500	495,700	3.1
Nursing	1	194,900	25,300	15.0	29,200	249,400	1.6
Physics	2	90,900	11,800	30.0	27,300	130,000	.8
Physical Ed.—Men	1	517,000	67,200	12.0	62,000	646,200	4.0
Physical Ed.—Men & Women	4	603,700	78,500	2.0	12,100	694,300	4.4
Physical Ed.—Women	2	397,900	51,700	12.0	47,700	497,300	3.1
Psychology & Philosophy	3	128,300	16,700	12.0	15,400	160,400	1.0
Social Sciences	3	318,000	41,300	9.0	28,600	387,900	2.4
Speech	4	86,800	11,300	13.0	11,300	109,400	.7
Administration	3	679,000	88,300	12.0	81,500	848,800	5.3
Library & Learn. Ctr.	1	1,578,800	205,200	20.0	315,800	2,099,800	13.2
Shipping & Receiving	3	61,200	8,000	10.0	6,100	75,300	.5
Boiler Bldg.	1	144,000	18,700	50.0	72,000	234,700	1.5
Gardeners' Bldg.	3	62,400	8,100	30.0	18,700	89,200	.6
Cafeteria	3	692,400	90,000	10.0	69,200	851,600	5.3
Student Ctr. & Store	1	495,100	64,400	10.0	49,500	609,000	3.8
Totals		$12,149,500	$1,579,400		$2,200,600	$15,929,500	100.0

* Summary "F", Column F.

APPENDIX J

SUMMARY "H"

Total Cost Analysis Estimated for Four-Phase Construction

Department	*Ph*	*Year*	*Final Cost of Constr. *1*	*Fees, Arch. Inspection C.O.'s, Etc. (18%)*	*Equipment Cost Estimate *2*	*Final Total Cost Per Department (D + E + F)*
A	*B*	*C*	*D*	*E*	*F*	*G*
Air and Space Tech	4	1979	$798,800	$103,800	$219,800	$1,122,400
Art	4	1979	330,600	43,000	60,600	434,200
Automotive Tech	1	1968	1,285,200	167,100	321,300	1,773,600
Business	1	1968	662,300	86,100	231,800	980,200
Chemistry	1	1968	179,900	23,400	45,000	248,300
Cosmetology	2	1971	188,000	24,400	36,600	249,000
Drama	4	1979	952,800	123,900	52,500	1,129,200
Earth Science	1	1968	154,600	20,100	37,100	211,800
Engineering & Electronics	2	1971	485,300	63,100	113,200	661,600
English	1	1968	237,500	30,900	19,000	287,400
Foreign Language	1	1968	163,700	21,300	37,700	222,700
Home Economics	2	1971	362,400	47,100	70,500	480,000
Journalism	1	1968	97,900	12,700	10,800	121,400
Life Science	1	1968	327,000	42,500	85,000	454,500
Mathematics	2	1971	111,700	14,500	12,000	138,200
Music	4	1979	495,700	64,400	90,900	651,000
Nursing	1	1968	194,900	25,300	29,200	249,400
Physics	2	1971	99,100	12,900	28,900	140,900
Physical Ed.—Men	1	1968	517,000	67,200	62,000	646,200
Physical Ed.—Men & Women	4	1979	802,900	104,400	14,800	922,100
Physical Ed.—Women	2	1971	433,700	56,400	50,600	540,700
Psychology & Philosophy	3	1975	155,200	20,200	17,600	193,000
Social Sciences	3	1975	384,800	50,000	32,600	467,400
Speech	4	1979	115,400	15,000	13,800	144,200
Administration	3	1975	821,600	106,800	92,900	1,021,300
Library & Learn. Ctr.	1	1968	1,578,800	205,200	315,800	2,099,800
Shipping & Receiving	3	1975	74,100	9,600	7,000	90,700
Boiler Bldg.	1	1968	144,000	18,700	72,000	234,700
Gardners' Building	3	1975	75,500	9,800	21,300	106,600
Cafeteria	3	1975	837,800	108,900	78,900	1,025,600
Student Ctr. & Store	1	1968	495,100	64,400	49,500	609,000
Totals			$13,563,300	$1,763,100	$2,330,700	$17,657,100
Ground Improvements (Utilities, parking courts, roads, etc.)						3,000,000
Grand Total						$20,657,100

*1 See Summary "F", Column I.
*2 See Summary "G", Column F (plus 2% per year after 1968).

APPENDIX J

SUMMARY "I"

Phase Construction and Cost Analysis

Department	*Ph*	*Teach Stations*	*Phase I 1968*1*	*Phase II 1971*	*Phase III 1975*	*Phase IV 1979*
A		*B*	*C*	*D*	*E*	*F*
Air & Space Tech	4	6				
Art	4	4				$1,122,400
Automotive Tech	1	10	*2$1,773,600			434,200
Business	1	15	980,200			
Chemistry	1	2	248,300			
Cosmetology	2	4		$249,000		
Drama	4	3				
Earth Science	1	3	211,800			1,129,200
Engineering & Electronics	2	8		661,600		
English	1	8	287,400			
Foreign Language	1	3	222,700			
Home Economics	2	7		480,000		
Journalism	1	2	121,400			
Life Science	1	4	454,500			
Mathematics	2	3		138,200		
Music	4	3				
Nursing	1	4	249,400			651,000
Physics	2	1		140,900		
Physical Ed.—Men	1	3	646,200			
Physical Ed.—Men & Women	4	2				
Physical Ed.—Women	2	3		540,700		922,100
Psychology & Philosophy	3	3			$193,000	
Social Sciences	3	9			467,400	
Speech	4	2				
Administration	3	3				144,200
Library & Learn. Ctr.	1	1	2,099,800		1,021,300	
Shipping & Receiving	3	3				
Boiler Building	1	1	234,700		90,700	
Gardeners' Building	3	3				
Cafeteria	3	3			106,600	
Student Ctr. & Store	1	1	609,000		1,025,600	
Ground Improvements			2,000,000	300,000	300,000	400,000
Totals			$10,139,000	$2,510,400	$3,204,600	$4,803,100
Grand Total						$20,657,100

*1 Dates indicate expected time when contract will be awarded.
*2 Indicated cost taken from Summary "H", Column G.

APPENDIX J

Method Used to Obtain Costs in Table 49 of the Report From Cost Data Supplied by Los Angeles Districts

The Council staff selected the English Department as that Department listed in "Summary F" which best represented classroom instruction (as opposed to laboratory instruction). The construction cost for English, $23/sq. ft. for 1968, was converted to 1966 dollars by multiplying the 1968 cost by 97.08% to obtain the 1967 cost and again by 97.08% to obtain the 1966 cost of $21.68. A "Fee" charge of 13% (See Col. D of Summary G), $2.82 was added to the construction cost. Ten percent was selected from Column E of Summary G as the percent which best represented the cost of equipment for classrooms. The 1968 unit cost for equipment, using this percentage against the $23/sq. ft. cost for English, was $2.30/sq. ft. This cost was converted to 1966 dollars by the same procedure as for construction cost except that a factor of 98.04% was used.

The 1966 total cost per sq. ft. was, therefore, $26.70 ($21.68 + $2.82 + $2.21).

A unit cost for laboratories in 1966 dollars was obtained in the same manner, except that the $26.50 cost/sq. ft. for chemistry in column "E" of Summary "F" was selected with a 30% cost for equipment from Column "E" of Summary G.

The 1966 unit cost for Libraries and for offices was obtained in the same manner, using the data for "administration" and for "Library and Learning Center" in Column A of Summaries "F" and "G".

A 1966 weighted average unit cost for support facilities was obtained by combining the square footage for Physical Education, Shipping and Receiving, Boiler Building, Cafeteria, and Student Center from Summary "F"; combining the estimated construction costs from column "F" of Summary "F" and dividing, to obtain a 1968 weighted construction cost/sq. ft. This unit cost for 1968 was then converted to a 1966 cost in the same manner as for the other facilities, except that 11% was used for equipment.

Unit costs for 1965–66 through 1969–70, 1970–71 through 1975–76 and 1976–77 through 1980, in current dollars, were obtained by advancing the 1966 unit costs for construction 3% each year and the equipment costs 2% each year and multiply the unit cost calculated for each year by the average annual increase in assignable square feet (converted to the equivalent gross square footage) for each time period. Assignable square feet shown in Table II-11 were converted to gross square feet using the following factors:

Classroom —assignable sq. ft. = 65% of gross sq. ft.
Laboratories, assignable sq. ft. = 60% of gross sq. ft.
Library —assignable sq. ft. = 70% of gross sq. ft.
Office —assignable sq. ft. = 65% of gross sq. ft.
Support —assignable sq. ft. = 80% of gross sq. ft.

These annual expenditure figures were consolidated for each period to give the total estimated facility expenditure that would be necessary during each time period to meet the needs of the projected enrollment growth for that period.

	1966	*1968*[1]	*1969*	*1975*	*1980*
Classrooms					
Unit cost	$21.68	$23.00	$23.69	$28.60	$33.16
Fees (13%)	2.82	2.99	3.08	3.72	4.31
Equipment cost (10%)	2.21	2.30	2.34	2.64	2.90
Total cost/sq. ft.*	$26.70	$28.30	$29.10	$35.00	$40.40
Laboratories					
Unit cost	$24.98	$26.50	$27.30	$32.59	$37.79
Fees (13%)	3.25	3.44	3.55	4.24	4.91
Equipment cost (30%)	7.64	7.95	8.19	9.81	11.41
Total cost/sq. ft.*	$35.90	$37.90	$39.00	$46.60	$54.10
Libraries					
Unit cost	$28.27	$30.00	$30.90	$36.88	$42.76
Fees (13%)	3.68	3.90	4.02	4.79	5.56
Equipment cost (20%)	5.76	6.00	6.12	6.88	7.60
Total cost/sq. ft.*	$37.70	$39.90	$41.00	$48.60	$55.90
Office					
Unit cost	$23.56	$25.00	$25.75	$30.74	$35.64
Fees (13%)	3.06	3.25	3.35	3.88	4.50
Equipment cost (12%)	2.88	3.00	3.06	3.44	3.79
Total cost/sq. ft.*	$29.50	$31.20	$32.20	$38.20	$43.90
Support					
Unit cost	$25.44	$27.00	$27.81	$33.20	$38.50
Fees (13%)	3.31	3.51	3.62	4.32	5.00
Equipment cost (11%)	2.85	2.97	3.03	3.41	3.76
Total cost/sq. ft.*	$31.60	$33.50	$34.50	$40.90	$47.30

* Total cost/sq. ft. is rounded off to the nearest ten cents for convenience in calculating.

[1] These 1968 unit cost figures are supplied by Los Angeles Districts and are used here as basis for converting to 1966, 1969, 1975 and 1980 unit costs.

APPENDIX K

ESTIMATING COST GUIDE FOR THE 5-YEAR BUILDING PROGRAM

THE CALIFORNIA STATE COLLEGES

APPENDIX K

THE CALIFORNIA STATE COLLEGES

ENR 1100 **Estimating Cost Guide for the 5-Year Building Program**

Type of Project	*Building Unit Cost*	*Total Project Unit Cost*	*Group II & III Equip. Cost % of Column 2*	*% Efficiency Assignable—Gross Area*
(1)	(2)	(3)	(4)	(5)
Administration	$25.72	$33.44	10%	65%
Art	26.02	33.83	10	65
Biological Science	27.76	26.09	30	60
Bookstore	20.21	26.27	10	70
Business administration	24.56	31.92	15	65
Cafeteria	26.19	34.05	10	70
Classroom General	23.38	30.40	10	65
College Union	27.24	35.41	5	65
Corporation Yard	14.60	18.98	7	80
Corporation Yard Paving	.52	.68	--	--
Education Psychology	24.56	31.92	10	60
Engineering	27.76	36.09	50	65
Faculty Office	23.38	30.40	10	60
Health Clinic	32.74	42.56	20	55
Home Economics	25.72	33.44	10	65
Humanities	23.38	30.40	10	65
Industrial Arts	24.56	31.92	30	65
Language Arts	25.67	33.37	20	65
Library	23.89	31.05	20	70
Little Theatre	30.38	39.49	20	70
Support[1]	23.50	31.00	10	
			33.75	
Music	28.08	36.50	20	55
Parking Structure	5.76	7.49	1	90
Parking Surface/Car	278.00	3.60	1	90
Physical Education	23.68	30.78	10	75
Physical Science	27.76	36.09	30	60
Social Science	23.33	30.40	10	65
Warehouse	11.00	14.30	2	95

NOTE: Use 3½% of project cost for estimating W/D costs. Unit costs are based on outside gross square feet.

[1] Inserted by Council Staff.

TABLE A

Estimated Expenditures for Non-Residential Junior College Facilities Needed in the Periods 1966–67 Through 1969–70, 1970–71 Through 1975–76 and 1976–77 Through 1980–81. Based on Unit Cost Data from the California State Colleges

(Expressed In 1966 Dollars — Thousands)

Type of Facility	*1966–67 through 1969–70*	*1970–71 through 1975–76*	*1976–77 through 1980–81*	*Total Period 1966–67 through 1980–81*
Classroom	$13,244	$12,265	$29,758	$55,267
Laboratories	35,019	32,281	78,679	145,979
Office	37,944	36,678	29,387	104,009
Library	40,532	28,054	19,030	87,616
Support	20,955	19,405	47,081	87,441
Total	$147,694	$128,683	$203,935	$480,312

NOTE: The expenditure for each type of faculty is expressed in 1966 dollars. They are based on the assignable square feet in Table II-11 of the report (converted to gross square feet on the basis of an efficiency factor of 65% for classrooms and offices, 60% for laboratories, 70% for library, and 80% for support) and the following unit costs from the California State College Cost Guide:

Classrooms	$32.74/sq. ft.
Laboratories	44.42/sq. ft.
Office	36.01/sq. ft.
Library	35.83/sq. ft.
Support	33.35/sq. ft. (Estimated by Council Staff)

APPENDIX L

LISTING OF JUNIOR COLLEGE DISTRICTS
(as of October 1966)

APPENDIX L

LISTING OF JUNIOR COLLEGE DISTRICTS (as of October 1966)

Antelope Valley
Barstow
Cabrillo
Cerritos
Chaffey
Citrus
Coachella (Desert)
Coalinga
Compton
Contra Costa
    Contra Costa
    Diablo Valley
El Camino
Foothill
    De Anza *
    Foothill
(Fremont-Newark *)
Gavilan
Glendale
Grossmont
Hancock
Hartnell
Imperial
Kern (Bakersfield)
Lassen
Long Beach
Los Angeles
    East Los Angeles
    Los Angeles City
    Los Angeles Harbor
    Los Angeles Pierce
    Los Angeles Trade-Tech
    Los Angeles Valley
    (Northwest Valley *)
    (Southwest Valley *)
    (West Los Angeles *)
Los Rios
    American River
    Sacramento
Marin
Merced
Monterey
Mt. San Antonio
Mt. San Jacinto
Napa
North Orange
    Cypress
    Fullerton
Oceanside-Carlsbad (Mira Costa)
Orange Coast
    Golden West
    Orange Coast
Palomar
Palo Verde
Pasadena
Peralta
    (Alameda *)
    Laney
    Merritt
Porterville
Redwoods
Rio Hondo
Riverside
San Bernardino
San Diego
    San Diego City
    San Diego Mesa
San Francisco
San Joaquin
San Jose
San Luis Obispo (Cuesta)
San Mateo
    San Mateo
    Canada *
    Skyline *
Santa Ana
Santa Barbara
Santa Monica
Sequoias
Shasta
Sierra
Siskiyou
Solano
Sonoma (Santa Rosa)
South County (Chabot)
State Center
    Fresno
    Reedley
Sweetwater
Ventura
    Ventura
    Moorpark *
Victor Valley
West Kern (Taft)
West Valley
Yosemite
    Modesto
    (Columbia *)
Yuba

* Not completed as of October, 1966—under organization.
66 Districts.
87 College campuses (including *)

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