CAPITAL OUTLAY

Summary

1969 Program

The Governor in signing the Budget Act of 1969 vetoed, among others, several capital outlay appropriations. In its final form, after signature, the act included a total, in round figures, of \$138,675.000 in specific new capital outlay appropriations from all fund sources. This was the lowest total in many years. Included were \$72,140,000 from the General Fund, \$9,321,000 from the conventional special funds, \$10,900,000 from the Capital Outlay Fund for Public Higher Education and \$47,212,836 from bond funds.

The major share (\$56,174,000) of the General Fund went to higher education (state colleges and the University of California) which together with the Capital Outlay Fund for Public Higher Education provided \$66,174,900 for college and university working drawings, construction and equipment. However, circumstances beyond the control of either the Legislature or the administration effectively reduced the funds available in the Budget Act for major construction and equipment in the state colleges and the University by over \$46 million. This reduction or "deferment" was brought about by the state's inability to sell bonds to finance projects for which bond fund appropriations had been made both in 1966 and 1967. Since the earlier projects were of a higher prority, it was determined, by the administration, to defer 1969 and 1968 General Fund projects and to use these funds to finance the bond fund projects. The effect was to stop practically the entire higher education program contemplated by the 1969 Budget Act.

Included among the major University deferrals were such projects as the working drawings for the medical sciences unit No. I at Irvine (\$717,000), the construction of administration unit No. I at the same campus (\$2,585,000), the construction of Webber Hall addition at Riverside (\$5,588,000), the addition of Step 2, central utilities at San Diego (\$1,355,000), the construction of engineering unit No. II at Santa Barbara (\$3.557,000), and the construction of social sciences

unit No. I at Santa Cruz (\$2,514,000).

In the state's college system there were deferred such projects as the conversion of the old library at Cal-Poly, Kellogg-Voorhis (\$1,318,000), construction of classroom faculty office building at Long Beach (\$2,-555,000), construction of a new library at Sacramento (\$6,680,000), and construction of a new library building at San Jose (\$11,290,000).

In the two systems these deferrals meant a time lag to construction of at least one year and very possibly two years or more. It will be noted that in the state college system the significant deferrals were library facilties which are crucial not only to a good quality curriculum, but as utilization of classroom space is intensified, the physical space in libraries, particularly the reading spaces, becomes a real necessity for commuter students trapped on campus in a longer day who have no other space in which to study or spend time between scheduled classes. Student unions rarely provide adequate spaces for such purposes.

Capital Outlay

Summary-Continued

Presumably, this problem will continue in the budget year if the proposition to remove the bond interest limitation in the constitution does not pass in June 1970. If so it will cause serious difficulties because a substantial part of the 1970 proposals is for equipping buildings already under construction.

Bond Funds

Bond fund appropriations in the 1969 act were in two major areas only, the community colleges and the state's recreational and park facilities. In the former the lack of bond cash led to substitution by General Fund cash provided by Chapter 784 of the Statutes of 1969, (AB 606). In the recreational program, almost \$13 million was provided for acquisition and development including the wildlife conservation program and grants to local agencies for recreational capital outlay. In addition to these, there was provision, to the extent of \$5 million from the State Construction Program Fund, for augmentation of earlier higher education bond fund projects which exceeded available appropriations because of construction cost escalation.

Cost Inflation

In our Analysis of the 1969 Budget Bill, we discussed the effects of construction cost escalation on the state's construction program. Since that time, despite a general slowdown in all types of construction, the cost escalation has not only continued but the rate of rise appears to have become steeper. This further erodes the state's ability to provide needed facilities in all categories. While this analysis does not deal with highway construction, it should be pointed out that generally the same erosion is felt in that program since revenues have not increased at the same rate as construction cost escalation.

It would appear, therefore, that extreme efforts need to be made to achieve maximum facility development by those scarce dollars which can be allocated to construction programs of whatever type.

1970 Program

The 1970 Budget Bill now before the Legislature, includes a total of \$90,868,978 from all fund sources for capital outlay proposals. This represents only a fraction of the total expenditures proposed in the Governor's Budget document which includes such major continuously funded programs as highway construction and water resources development.

The items in the Budget Bill reflect collectively the lowest level of investment since World War II. The true level is even lower than face value when one takes into account the inflation which has occurred during the years since the war. To illustrate, the Engineering News Record Construction Cost Index in mid-1949 stood at 477, while as of January 22, 1970 it is quoted at 1311, an increase of 275 percent in a span of 20 years.

The erosive influence of inflation plus the current lack of capital investment funds results in a program which may be perilously inadequate to keep pace with the state's growth and particularly the increasing needs of education, especially the four-year higher education

Summary-Continued

institutions as well as the needs of education beyond the bachelor's de-

The major element in the total of proposed appropriations is for the state colleges and the University of California aggregating \$50,912,000 from the Capital Outlay Fund for Public Higher Education. However, \$34,227,000 of that amount is a transfer from the General Fund while the balance of \$16,685,000 is actually from the oil revenues which normally accrue to that fund. The total distributed is \$16,120,000 for the University and \$34,792,000 for the state college system. In the University this represents almost no additional academic capacity, while in the state colleges about 4,675 FTE student capacity would be generated. The earliest that this additional capacity could become available is probably in the fall of 1972. On page 92 of the Capital Outlay Budget, it is indicated that in the fall of 1972 the total enrollment is projected to 195,140 against a capacity of 159,905, which would include the amount mentioned above. The latter is based on the existing C.C.H.E. standard utilization in the 8 a.m. to 5 p.m. time span. The difference between enrollment and capacity of over 35,000 FTE students would indicate that even with increased utilization, the additional 4,675 FTE student capacity will fall far short of the requirement at that time.

In our analysis of the 1969 Budget Bill, we discussed and recommended techniques for increasing the utilization of existing or funded space, especially lecture classroom facilities. In the University, this type of space represents less than five percent of the total of all available space while in the state college system it is about 12½ percent. We also touched on the problem of increasing utilization of laboratory space but recognized that this area was a much more complex one than that of the simple lecture space. The drastic reduction of building construction resulting from reduced appropriations complicated by lack of cash will force one of three significant results or a combination of them: increased space utilization, curtailment of enrollment or reduction in the

Earlier in this analysis on page in connection with the University's support budget, we suggested a policy option which could generate as much as \$1,600,000 of "surplus" which could be applied towards the University's capital outlay program. If this option is adopted, there should be a careful exploration of the unfunded projects which if financed would provide the greatest benefits to the University and its

potential students.

quality of the educational process.

Community Colleges

The second most significant portion of the capital outlay program provides over \$19,064,000 for state construction cost assistance to community colleges. Nominally, this is from bond funds (the State Construction Program Fund) but actually it is from the General Fund by virtue of the transfer made by Chapter 784, Statutes of 1969 (AB 606). The appropriation contains language which requires the return of the funds from proceeds upon sale of authorized bonds. The proposed appropriation is about \$10 million less than provided in the 1969 Budget

Capital Outlay

Summary—Continued

Act and represents not so much need as availability of funds since the amount is simply the balance remaining from the transfer made by Chapter 784, Statutes of 1969. Subsequent years are pegged at a level of \$25 million of state funds annually against a total cost of \$54 million annually. However, there is no commitment on the part of the administration to support this or any other level.

Construction Costs

In our analysis of the 1969 Budget Bill, we also discussed the possibilities for construction cost reduction. This consideration becomes even more urgent as costs continue to escalate with as such as 12 percent projected for 1970. In the Budget Act of 1967, there was an appropriation of \$200,000 made by Item 311.5 for the so-called "academic building systems study" to be conducted jointly by the University of California, the University of Indiana and the Education Facilities Laboratories. Financing, besides the state's contribution, was anticipated from Indiana, the Education Facilities Laboratory and the federal government. The study was aimed precisely at the problem of cost construction reduction, plus design flexibility and future ease of alteration and changed utilization. Unfortunately, delays held up the start for more than 18 months but it is now underway. Preliminary assessments indicate new development possibilities which should ultimately be significantly helpful to the cost dilemma. However, solid assistance from this approach cannot be expected for another year.

Other Agencies

The balance of the total capital outlay program is proposed to be funded at approximately \$12,560,000 from the General Fund and \$8,100,000 from special funds other than higher education. The General Fund segment also represents the lowest ebb in many years for such agencies as the Departments of Conservation (Division of Forestry), Parks and Recreation, Corrections (including Youth Authority) and Mental Hygiene. In the latter agency, populations have been dropping significantly and the low ebb is probably justified. However, in the Department of Corrections, populations are rising, leading to aggregated overcrowding and inadequate program areas. In the Division of Forestry, the reductions signify posible plant neglect and deterioration and continued use of substandard facilities. In the Department of Parks and Recreation, the public use of and demand for space continues to grow and facilities are not keeping pace.

Supporting Data

Generally, the projects proposed in this bill have adequate supporting material and justification such as schematic or preliminary plans, preliminary estimates, well developed programs and detailed equipment lists. However, some inadequacies were encountered particularly in connection with projects in the Departments of Mental Hygiene, Corrections and Conservation. Apparently, these resulted from the failure to move ahead early enough so that the supporting data could be made available in time for this analysis. In view of the relatively light pro-

Summary—Continued

gram, there seems to be little excuse for this. As a consequence, it will be noted that in the agencies mentioned, there are instances in which we have suggested that the projects receive special review on the premise that by the time the legislative committees are reviewing the capital outlay budget, the information will have been supplied and we will have had adequate time to evaluate it and make definitive recommendations to the committees.

With respect to minor projects adequate data have been available, we have reviewed many of them with the agencies and often directly on site at the institution making the request. In connection with the state colleges, we have accepted and are recommending a proposal in which no prior detail of the project is supplied, but a postaudit will be conducted after the appropriation is allocated by the trustees to the individual campuses and for individual projects. Subsequently, in the next Governor's Budget the detail of the prior allocations will be printed. We believe this will be a more flexible approach and should help to eliminate a significant amount of marginal effort.

With respect to equipment proposals, we have had in each case a detailed list in which the Department of Finance deletions have been noted. Generally, we have found the detail to be quite adequate and the justifications acceptable. In almost every instance the equipment requests represent the minimum amounts necessary to make the build-

ings and programs operable.

DEPARTMENT OF GENERAL SERVICES

item 298 from the General Fund Capit		Capital Outlay Bud	tal Outlay Budget page 2		
Requested 1970-71 Recommended for app Recommended reduct	proval		\$250,000 100,000 \$150,000		
SUMMARY OF RECOM	IMENDED REDUCTI	ONS Amous	Analysis nt page		
Delete (b) Alterations, st	ate building and annex-	—San Francisco \$150,00	00 1042		

ANALYSIS AND RECOMMENDATIONS

This item contains two alteration and improvement projects at three state office buildings located in Sacramento and San Francisco. The projects are as follows:

(a)			corrections-		*
•	Bu	ilding	 ·,	 -	 \$100,000

We recommend approval.

The Office of Architecture and Construction estimates that \$448,500 would be required to perform all of the fire and life safety corrections in the Sacramento Library and Courts Building recommended in a survey by the State Fire Marshal. Recommended modifications include construction of a new steel exit stairway, the installation of a smoke detection system and automatic fire sprinklers, the installation of fire

Department of General Services-Continued

dampers in mechanical duct work and the installation of proper exit lighting, an emergency generator and appropriate electrical switch-gear. The Department of General Services proposes to allocate \$100,000 towards correcting these deficiencies. The Office of Architecture and Construction has indicated that the amount will be sufficient to provide for construction of the additional exit stairs which will be located behind the existing elevators, connecting all six floor levels. This includes removal of a skylight at the first floor and closure of window openings on other floors. An appropriate fireproof enclosure will be provided for the stairway along with installation of a fire door and frame at each floor. Because of the nature of the fire and life safety corrections recommended for the building, it is feasible to split the project into various phases although this approach could increase the total project cost because of inflation.

(b) Alterations, state building and annex—San Francisco \$150,000 We recommend deletion of the amount requested.

It is our understanding that the amount requested is intended to finance the alterations required to recover office space in the San Francisco State Building on McAllister Street and the annex on Golden Gate. This includes partition rearrangement and modifications to mechanical and electrical systems. The department anticipates that 19,000 square feet will be recovered and plans to relocate the Department of Industrial Relations into 7,500 square feet and cancel the lease for the vacated space at 309 Golden Gate. The remaining space will provide a built-in expansion capability and the department estimates that the state will save approximately \$63,750 in leasing funds annually beginning in May of 1971 when the 309 Golden Gate lease could be canceled.

The Budget Act of 1966 appropriated \$444,600 for similar alterations to the San Francisco office buildings and at the time, we commented on the lack of detailed development regarding the partition modifications and other work proposed. It took three years to develop a project and in June 1969, \$119,900 was allocated from that 1966 appropriation for alterations. The department is now requesting additional funds for alterations to the San Francisco buildings and again we do not have sufficient information to recommend the adequacy of the amount requested or to evaluate the modifications proposed. We do not believe there is sufficient urgency to justify appropriating scarce general funds at this time.

DEPARTMENT OF GENERAL SERVICES

Capital Outlay Budget page 2

Item 299 from the General Fund

20011 200 11011 0110 001101 01101 01101 0110101 0110101 0110101	
Requested 1970–71	\$300,000
Recommended for approval	150,000
Recommended reduction	\$150,000

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Department of General Services—Continued ANALYSIS AND RECOMMENDATIONS

We recommend this item be reduced by \$150,000.

This item represents the continuation of a standard practice of providing a lump sum appropriation for unforeseen alterations to various state office buildings during the budget year. This enables the department to finance the cost of minor alterations needed to accommodate personnel and program changes within various agencies. We have heretofore supported this approach and we would continue to do so. However, we have received no documentation to indicate that the \$150,000 level which was provided in the current fiscal year is not ample for the purpose. We cannot recommend approval of the \$300,000 requested without justification. We therefore recommend a continuation of the funding level established for the current year.

DEPARTMENT OF GENERAL SERVICES

tiem 500 from the General Fund	Capital Outlay Buo	rger page o
Requested 1970–71		\$201,700
Recommended for approval		91,700
Recommended reduction		\$110,000

ANALYSIS AND RECOMMENDATIONS

Itom 200 from the Conoral Fund

We recommend this item be reduced by \$110,000.

The amount proposed would finance five minor construction projects at various locations throughout the state. Three of the projects are part of the department's space recovery program and consist of partitioning and associated alterations at three state office buildings with a total estimated cost of \$110,000. It is proposed to alter space in the Veterans Affairs Building in Sacramento, the Junipero Serra Building in Los Angeles and the Oakland State Office Building by implementing the department's new space standards. We have received no information outlining the specific modifications proposed and the agencies to be relocated into the recovered space. Consequently, we cannot recommend the adequacy of the amount proposed nor are we in a position to assess the necessity of appropriating scarce general funds for these projects. We recommend the three projects be deferred.

The remaining \$91,700 requested finances two projects, one of which is for \$36,700 to construct a loading dock canopy and trash receptacle enclosure at Office Buildings 8 and 9. The canopy is for protection during inclement weather and the trash receptable enclosure is to replace space that was provided for this purpose in the building but which now serves as an office for the dock manager. The dock manager was assigned to this area when the services for these two buildings

were centralized.

It is estimated that \$55,000 will be required to modernize the plumbing in the old state building in Los Angeles. The condition of the plumbing in this building has reached the point where it is beyond the

Department of General Services—Continued

scope of normal maintenance. The practical, and in the long run most economical, solution to correcting the numerous deficiencies is replacement.

Department of General Services

STATE EXPOSITION AND FAIR EXECUTIVE COMMITTEE

Item 301 from the State Fair Fund Capital Outlay Budget page 5

Requested 1970–71	\$12,500
Recommended for approval	12,500
Total recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

When the grandstand was constructed at Cal-Expo, a three-year contract was signed to pay for the installation of the wiring that connects the ticket selling machines with the totalizator storage unit which records the sale of parimutuel tickets. The cost of the installation was \$55,000 and \$42,500 has been paid to date. The \$12,500 requested in this item represents the final payment under that contract.

Department of Commerce MUSEUM OF SCIENCE AND INDUSTRY

Item 302 from the General Fund	Capital Outlay Budg	get page 7
Requested 1970–71		\$46,355
Recommended for approval		40,555
Recommended reduction		\$5,800

ANALYSIS AND RECOMMENDATIONS

We recommend that the amount be reduced by \$5,800.

The total amount requested will finance four minor construction projects to correct functional and safety deficiencies. The museum, which is located in Exposition Park near the Los Angeles Coliseum, houses a variety of educational exhibits and from time to time it requests minor construction projects to correct deficiencies that cannot be corrected within the normal maintenance program. The following is a description of the projects proposed.

The existing floor in Progress Hall, which is adjacent to the main lobby of the museum, consists of 18-inch-square concrete tiles installed on a bed of sand. The floor was designed with the removable feature to provide maximum flexibility in scheduling and erecting exhibits. This particular feature permits use of the area for extremely heavy exhibits on special supports which could not be accommodated if the floor was one integral unit and not designed to support heavy loads.

Museum of Science and Industry-Continued

This type of floor adequately supports pedestrian traffic as well as the typical lightweight display structures but it cannot support forklift trucks which must be used from time to time to handle heavier display items. The department is requesting \$15,255 to remove the tile and pour a concrete apron around the perimeter of the exhibit space, leaving a T-shaped area in the center which will be repaved with some of the existing tile. Approximately 3,600 square feet of tile will be replaced with concrete slab, leaving 1 200 square feet of tile forming the T-shaped center element. A more thorough review of the project by the agency and the Office of Architecture and Construction resulted in a proposal to reduce the cost of the project without affecting the end result. This change involves construction procedures and permits a \$5,800 reduction in the estimated cost of the project.

The existing freight elevator cab serving the museum's three stories of exhibit space has a limited clearance height of 7 feet 3 inches. It was installed in 1910 and is driven by an electric drum and cable system. Initially, it served the purpose it was designed for but it is now inadequate to transport many of the exhibits because of its low ceiling height. In addition, the elevator hoisting equipment has aged to the point where the Division of Industrial Safety is urging conversion to a hydraulic lift system. It is estimated that \$15,000 will be required to increase the clearance height of the elevator cage to 10

feet 6 inches and to convert to a hydraulic lift.

The basement of the armory building, which is adjacent to the museum and now called the "space" museum, is used for student workshops, lecture series and other assembly purposes. At the present time, the space has only one means of access which can be reached only from inside the building. This imposes a severe limitation upon the use of the space and is unacceptable to the State Fire Marshal. A \$13,000 project is proposed to provide another access from this area to the exterior of the building. The amount requested will provide for excavation of an areaway to the basement level, penetration of the concrete foundation wall to provide for an opening, construction of a concrete retaining wall, the installation of a sump pump, appropriate lighting and the construction of a concrete stairway. The installation of such an exit is mandatory if basement space is to be used effectively and safely for educational programs sponsored by the museum.

The remaining project is a request for \$3,000 to install four mercury vapor lamps at the west and northwest ends of the museum. These fixtures will be affixed to the building and will illuminate an area which is considered a potential danger spot for people using the Exposition

Park at night.

DEPARTMENT OF CORRECTIONS

Item 303 from the General	Fund	Capital Outlay	Budget page 9
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Requested 1970–71	\$1,050,400
Recommended for approval	750,400
Recommended for special review	300,000
Recommended reduction	

ANALYSIS AND RECOMMENDATIONS

The department's capital outlay budget projections show a continued increase in the prison population without a corresponding increase in space. The department's general budget statement on the other hand alludes to a planned construction program which "contemplates the housing of inmates in accordance with the standards of one bed and one inmate in each cell or room." This approach is deemed necessary to discourage homosexual activity, protect the individual inmate and strengthen internal control of the institution. In spite of this statement and justification, the department anticipates ending the 1970–71 fiscal year with 4,595 inmates in San Quentin, which has a single-cell capacity of 2,743. This means that 3,704 inmates or approximately 81 percent of the prison's population will be double bunked. Thus, when faced with the decision to economize by double bunking versus financially supporting increased single occupancy of cells, the first alternative is and has repeatedly been chosen.

The department's major capital outlay program financed by this item consists of \$1,050,400 for a schedule of three noncapacity projects at the department's two oldest institutions. Two of the projects proposed involve correcting utility system deficiencies while the remaining project represents the expansion of an ongoing work program.

(a) San Quentin State Prison, convert portion of textile mill to laundry _____ \$500,000

We recommend approval.

Operation of the textile mill at San Quentin was discontinued on November 1, 1969. Technological changes in methods, materials and equipment had outmoded the existing plant. In addition, Correctional Industries was no longer able to operate the mill economically and it was felt that the high cost per inmate programmed was unjustifiable.

The amount requested in this item is to convert a portion of the vacated textile mill building into a central laundry with a capacity of 6,000 pounds per hour. This capacity will enable the laundry to serve San Quentin Prison and Napa, Sonoma, and Mendocino State Hospitals. In the event the laundry load from the hospitals drops due to a declining patient population, the department has also considered the feasibility of providing laundry service to Agnews and Stockton State Hospitals, as well as the Veterans' Home at Yountville. The department's estimates indicate that the proposed consolidation could save approximately \$465,000 during the first three years of operation with a continuous savings thereafter of approximately \$300,000 per year.

Department of Corrections-Continued

The department estimates that the proposed conversion will cost a total of \$990,000. This includes \$100,000 to modernize the sewage disposal system to accommodate the increased load as well as \$415,000 for laundry and drycleaning equipment and the development of transportation and distribution systems. The department plans to use Correctional Industries Revolving Fund moneys and income obtained from selling the textile mill equipment and raw materials to raise \$490,000 of the total amount required. The \$500.000 requested from the General Fund will provide for building remodeling utilities and site development and modifications to the sewage plant. Approximately 48,000 square feet will be remodeled at an estimated cost of \$6.20 per gross square foot at building level. This includes excavation and paving. partitioning, installation of rollup doors, the construction of a canopy along the side of the building as well as mechanical and electrical alterations. We have examined the proposal and believe the costs are reasonable. Furthermore, we believe the concept is justifiable both from the standpoint of economics and from the potential benefit to the inmate program.

(b) San Quentin State Prison, sewage plant modifications \$250,400 We recommend approval.

This project is the second phase of a program to modify the sewage plant at San Quentin to improve the effluent quality to meet revised waste discharge requirements set by the San Francisco Bay Regional Water Quality Control Board. The Budget Act of 1967 appropriated \$200,000 to upgrade the treatment plant to meet requirements set by the board in 1964. However the revised requirements adopted by the board in 1968 required further improved treatment. Consequently, the Office of Architecture and Construction revised the project to satisfy the 1968 effluent quality standard. The 1967 appropriation was insufficient to provide all of the improvements required by the revised standards and the Office of Architecture and Construction programmed the necessary modifications into two phases. The State Public Works Board in August 1969 allocated the funds provided in the Budget Act of 1967 for Phase I. Sewage plant improvements in this phase will include replacement of existing raw sewage pumps to meet new capacity-head conditions, the addition of pre-aeration ponds with mechanical aerators, revisions and additions to plant piping and related electrical work.

The department is now requesting \$250,400 to complete the sewage plant modification program. These funds will provide for the addition of a digester and secondary clarifier as well as modifications to the primary clarifier and chlorine contact tank. In addition, the location and depth of the waste discharge line will be modified in order to provide greater dilution of the effluent discharge. We anticipate that the amount requested will successfully complete the sewage plant modification project and permit satisfactory compliance with the Regional Water Quality Control Board discharge standards.

Department of Corrections-Continued

(c) Folsom State Prison, replace boiler plant, phase I \$300,000 We recommend that this item be placed in the category of special review.

The present steam plant at this institution contains three boilers having an aggregate rated capacity of 43,100 pounds per hour. This includes two boilers installed in 1932 and 1935 with rated capacities of 10,400 and 11,000 pounds per hour respectively. The third boiler was installed in 1951 and has a rated capacity of 21,700 pounds per hour. An engineering survey of this facility in 1968 estimated that the three boilers had adequate steaming capacity to serve all present steam loads including the industrial demand, with the maximum recorded demand for steam being 45,000 pounds per hour. That same survey cited the need for standby capacity in the event of a boiler outage. We have supported the need for standby boiler capacity at other state facilities and concur with the need for such a provision at Folsom State Prison where forced curtailment of steam consumption because of a boiler outage could have serious consequences.

The department anticipates that the \$300,000 requested will provide for the installation of a 25,000-pound-per-hour standby boiler adjacent to the Correctional Industries cannery. The building housing this boiler will be designed for future expansion in anticipation of the eventual replacement of the institution's existing steam plant. The decision was made to locate the new boiler adjacent to the cannery because there is no room available in the existing boilerhouse or surrounding area and because the heaviest user of process steam is the cannery operation. We have recommended this project be placed in the category of special review because we have not received preliminary plans or a formal estimate to substantiate the adequacy of the amount requested. We anticipate that this information will be available prior to budget hearings and in sufficient time to permit adequate review.

DEPARTMENT OF CORRECTIONS

Capital Outlay Budget page 9

	.Soc base o
Requested 1970–71	\$220,555
Recommended for approval	$220,\!555$
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

Item 304 from the General Fund

We recommend approval.

The Department of Corrections is able to maintain and thereby extend the life of its facilities well beyond what normally could be expected because of the availability of inmate labor for maintenance and improvement projects at little or no cost. The 47 projects represented by this request are primarily for the correction of deficiencies that do not fall in the scope of normal maintenance activities. Although some of the projects proposed will be accomplished by outside contracts, a

Department of Corrections-Continued

significant portion will be accomplished using inmate labor, thereby maximizing the total benefit within the funds requested. A summary of projects, by institution and purpose, is shown in Table 1.

Table 1
Proposed Correctional Projects, 1970–71

Institution	Number of projects	Health and safety	Improve security	Improve program	Improve plant operations	Amount
California Conservation Center	. 2	0	. 0	1	1.1	\$7,409
Sierra Conservation Center	. 6	1 `.	3	1	1	35,630
California Correctional Institutio	n 1	O	0	· 0	1	5,175
Correctional Training Facility	7	1	5	0	1	25,396
Deuel Vocational Institute	3	1	1	0	1	16,120
Folsom State Prison	7	· 1	3	3 -	0	32,284
California Institution for Men	4	1	0	1	2	27,500
California Medical Facility	4	2	0	1	1	4,545
California Mens Colony	8	2	0	2	4	34,130
San Quentin State Prison	1	0	0	0	1	1,500
California Institution for Wome	n 1	1	0	0	0	4,790
California Rehabilitation Center_	3	1	0.	0	2	26,076
rn	45		· 	_		4000 555
Total	47	11	12	9	15	\$220,555

As indicated in Table 1, the projects requested are primarily of a mandatory nature essential to maintaining the status quo with only a few projects to improve inmate programming. Included in the proposals are such items as a \$12,950 request to provide additional washrooms, toilet and shower facilities in one of the dining rooms at Folsom State Prison to meet minimum health standards for the 80 inmates working in this area. Another example is an \$1,800 request to installa heat-actuated fire alarm system in 10 buildings at the California Institution for Men to comply with the recommendation of the State Fire Marshal. The security projects range from a \$2,120 request for modifications in a segregation unit at Folsom to a \$15,731 request to install electric locks and an operator for the pedestrian gate leading to and from the vocational and maintenance area at Sierra Conservation Center. A number of projects involving improvements to utilities and other types of institution service as well as deferred maintenance are requested in order to improve plant operations.

Generally, the foregoing maintains the 13 major institutions of the Department of Corrections at a level near the minimum that could be tolerated without progressive deterioration of the physical plants and increased risk to personnel.

DEPARTMENT OF THE YOUTH AUTHORITY

Item 305 from the General Fund Capital Outlay Budget page 29

Requested 1970-71	\$1,040,845
Recommended for approval	1,040,845
Total recommended reduction	None

Department of the Youth Authority—Continued ANALYSIS AND RECOMMENDATIONS

This item would finance a schedule of five noncapacity construction projects at two institutions. These projects involve critical utility replacements or expansions as well as the development of additional program space. Four of the projects are at one of the oldest youth authority facilities, the Preston School of Industry, and account for \$900,345 out of the total amount requested.

Paso Robles School

(a) Remodel auto instruction shop and construct industrial arts shop _____ \$136,000

We recommend approval.

The area presently utilized at this institution for instruction in automotive repair and maintenance is inadequate for teaching as well as controlling and supervising students in an institutional environment. One of the deficiencies hampering this program is the location of the existing hydraulic hoist grease rack. It is located outside and adjacent to the automotive shop. It is completely unprotected and lacks the ability to handle large vehicles such as trucks or buses. In addition to inadequacies in the automotive shop, the institution has cited the need for an additional shop to provide a more appropriate training experience for wards who now receive work assignments in the institution maintenance program. A two-fold project is proposed to correct these deficiencies.

This proposal will provide for a 2,608-square-foot addition to the existing 2,423-square-foot automotive shop. The area will then be divided lengthwise to accommodate both the auto shop and an industrial art shop. It is planned so that the existing hydraulic hoist rack will be enclosed in the remodeled auto shop. The department has indicated that 16 wards currently assigned to general maintenance will be programmed into the industrial art shop. The reassignment will not affect the overall level of maintenance at the institution because of overassignment in the maintenance program in order to keep wards active.

(b) Equip industrial arts shop \$4,500 We recommend approval.

The amount requested will provide the complement of equipment required for the industrial arts shop funded in the previous item. The proposed equipment list includes such things as workbenches, vices, a combination lathe, a table saw, and similar items required to carry on an instructional program in the industrial arts.

Preston School

(c) Replace sound security and telephone distribution system _____ \$196,715

We recommend approval.

Most of the 800 wards confined at this institution are described as management problems and/or emotionally disturbed with an average age of 19½ years. The department indicates that many of these wards are parole violators with long histories of aggressive acts. Housing at

this institution consists of 16 living units accommodating approximately 50 wards each. Twelve of these units are designed around an open dormitory arrangement rather than individual bedrooms. The latter design is considered by the department to be advisable for the type of wards housed at Preston. A properly functioning sound security system is considered essential for the safety of institution staff working in the open dormitory situation. This is particularly important during the 10 p.m. to 6 a.m. night shift when a single group supervisor is assigned to each living unit.

The sound security and telephone distribution system installed at this institution in 1953 consists of a single cable in underground raceways. The cable is poorly insulated and crosstalk between lines causes the sound security system to malfunction intermittently. In addition, the vacuum tube type of electronic equipment serving as the sensing device has aged to the point where replacement parts and repairs are extremely costly and difficult.

It is proposed to renovate the distribution system by installing new separate plastic insulated cables for the sound security and the telephone distribution system in the existing underground raceways. The success of similar installations at other institutions has led to the recommendation that the 21-channel system be replaced with a solid state channel identification amplifier system. Existing radio programs will be separated from the sound security system and new transistorized amplifiers and loudspeakers will be installed in the living areas while the necessary central control equipment will be installed in the administration building. One pair of the new security sound cables will be used for distributing radio programs.

This project was requested by the Department of the Youth Authority for the 1969-70 fiscal year, but it was deferred by an action of the Legislature. Subsequently, the department's 1970-71 fiscal year requests included this project as its top priority. We concur with the need to proceed with this project.

(d) Steam distribution system improvements, phase III _ \$247,030 We recommend approval.

The Budget Acts of 1968 and 1969 appropriated a total of \$455,100 as part of a planned program to rehabilitate the steam distribution system serving this facility. Rehabilitation has thus far consisted of the replacement of the main underground steam line servicing the various facilities on the institution grounds. These lines were originally installed by direct burial, consequently groundwater has penetrated the prefabricated metal jacket in numerous places causing considerable heat loss and major failures.

The third and final phase of this project consists primarily of three main elements. First, a portion of the funds requested will provide for the replacement of those underground lines remaining which were not included under phases I and II. The second element consists of replacing one of three existing boilers which was field erected 40 years ago. It will be replaced with a prefabricated 50,000-pound-per-hour

combination oil-gas-fired boiler. The third element consists of the conversion of the remaining boilers from heavy oil to a combination oilgas firing. The department has indicated that the \$247,030 requested will successfully complete this rehabilitation project and anticipates efficient and trouble-free operation of the steam distribution system for a long period of time.

(e) Rehabilitate electrical distribution and emergency electrical power systems \$216,000

We recommend approval.

The Budget Act of 1969 appropriated \$12,100 to develop working drawings for this project in order to more accurately define the scope of work to be accomplished and to pinpoint the costs involved. The basic requirements of this project were established by a utility survey and facility study conducted in 1968 by the Office of Architecture and Construction. The \$216,000 project proposed implements items identified as Phase I in that study and involves deficiencies which the institution is not capable of correcting through its normal maintenance program. The scope of work proposed has four distinguishable elements, one involving the emergency power system and the three remaining concerned with the electrical distribution system for the institution.

The emergency electrical power system at this institution currently consists of DC current supplied by a pelton wheel-driven generator that is as old as the institution. This system is severely limited in its application and there are several locations where emergency power is required but not currently supplied because the equipment is incompatible with the DC system. The department proposes to abandon this system and install two surplus 100-KW diesel engine AC generators, which the department currently has on hand. To make this system operational, it will be necessary to replace the existing emergency power distribution cables as well as provide extensions to the unprotected locations.

The existing power distribution system at this institution consists of a 4.160/2,400-volt, three-phase four-wire star-grounded system. The existing transformers have a 2,400-volt primary and in order to achieve the added capacity of a 4,160-volt star system a primary neutral is necessary. The existing neutral conductor is insulated for only 600 volts. It is proposed to replace these transformers, which have long exceeded their life expectancy, with new transformers having a 4,160volt primary. The Office of Architecture and Construction has listed 29 transformers requiring replacement.

The remaining two elements of this project include the installation of new isolating switches as well as drainage improvements in eight manholes and pull holes in order to reduce the amount of sectionalizing box failures. An inspection of the existing pole lines serving certain facilities at this institution is also proposed and those poles that do not meet the code will be replaced.

It is anticipated that the foregoing improvements will bring the electrical distribution and emergency power systems at this institution

to acceptable standards and minimize the possibility of power outages as well as protect the institution in the event of power failure.

(f) Water distribution system, rehabilitation_____\$240,600 We recommend approval.

The Office of Architecture and Construction conducted a survey of the two water systems at this institution in April of 1968 and outlined a corrective program to be accomplished in six phases at an estimated cost of \$631,000. The Budget Act of 1969 appropriated \$17,500 for additional field testing to determine the scope of work involved and for the preparation of working drawings to more accurately determine the costs of corrective measures. The institution's drinking water is purchased from the Pacific Gas and Electric Company and piped five miles, whereas nonpotable water is transported nine miles to the institution in an open ditch and pipeline system. The latter system is highly inefficient since significant quantities of water are lost due to seepage and evaporation. In addition, because of the system's design and age it is a continuous maintenance problem.

The \$240,600 requested funds the first phase of the program to improve the institution's water system with a current total estimated cost of \$635,300. This phase consists solely of work on the nonpotable water system. The proposal consists of the replacement of approximately two miles of open ditch with an 18-inch diameter cement asbestos pipeline following the route and approximate grade of the existing ditch. Additional work includes riprap and drainage swales at five locations as well as the installation of five cattle watering troughs required by the owner of the property through which the state has an easement. The cost for this project is higher than normally would be expected due to poor accessibility and difficult terrain which will hamper the use of heavy equipment.

DEPARTMENT OF THE YOUTH AUTHORITY

Item 306 from the General Fund	Capital Outlay Budge	et page 28
Requested 1970–71		\$339,790
Recommended for approval		339,790
Recommended reduction		None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

The department maintains and operates 11 institutions and four conservation camps where it shares responsibilities with the Division of Forestry. The amount proposed in this item will finance 11 minor construction and improvement projects at seven institutions. The department's request is \$30,430 less than allocated in the current year. However, it is necessary to look at the total level of funding for both minor capital outlay and special repairs and maintenance, which appears in the department's support budget, to assess the actual level of

support for the program. On that basis, the total level of funding reflects a \$14,980 increase over the current year or approximately three percent. Following is a description of the projects proposed, by institution.

Northern California Reception Center and Clinic \$27,000

In response to a request by the department, the Office of Architecture and Construction conducted a survey of the lighting needs at this institution and subsequently identified numerous areas where the lighting levels are inadequate. This information was evaluated and critical areas selected for improvement. The project will improve the lighting level in the academic classrooms and admissions building, which includes the hospital.

Southern California Reception Center and Clinic_____ \$35,850

In 1967 the department initiated a program, phased over a number of budget years, to repair all the roofs at this institution. This third phase is proposed repair of roofs of four buildings, the kitchen-commissary, the maintenance shop, education building and the recreation building additions. Approximately 38,320 square feet of roof area will be repaired with the funds requested.

Fred C. Nelles School for Boys \$100,220

The Budget Act of 1966 appropriated \$100,000 to install a complete security sound system at this institution. When bids were received for the project in March 1969, the cost exceeded the appropriation and the scope of the project was subsequently reduced by the department by deleting certain areas. To install the system in these deleted areas, \$36,000 is requested. These are the food service building, school clerical office, gymnasium, auditorium, barber shop, vocational classroom building and the field shower and dressing facility.

The location of the special treatment and classification building within the institution prevents adequate natural ventilation. This building contains offices for 21 employees as well as the Youth Authority Board rooms and during the summer months it is extremely uncomfortable. The department is requesting \$46,220 to air condition this facility including a new electrical service which must be installed

to support the requirements of the new mechanical equipment.

The oldest two housing units at this institution, Lincoln and Roosevelt cottages, were completed in 1923. These two-story masonry structures have aged to a point where they are a continuous maintenance problem. In addition, the interior layout of these facilities makes adequate supervision impossible. The Department of the Youth Authority has discontinued use of these facilities and is now requesting \$18,000 to demolish them in order to eliminate an unattractive, hazardous nuisance and security problem.

Los Guilucos School for Girls______\$15,000

The complex containing academic classrooms and office space at this institution was originally constructed with only a single restroom.

It is entered from the lobby of the academic office area and is without a vestibule. In addition, the academic complex has a single janitor's room which is inadequate. It is proposed to remodel 264 square feet of space, formerly used as a lending library, to provide adequate toilet facilities for the 12 women and 10 men working in the unit along with an adequate janitor's closet.

Paso Robles School for Boys \$71,520

This facility has suffered from a severe drainage problem since it was constructed. In 1965 the Office of Architecture and Construction outlined a program to correct the drainage problem in six phases. The improvement program was initiated in 1966 and \$134,300 has been expended to date. The department is requesting \$58,000 to continue that program. Additional phases will be required to complete the program.

The serving line in the food service building at this institution is contiguous to an entrance door located on the south side of the dining room. The entrance is not shielded from prevailing winds and there are times when it is difficult to keep the food hot or dust-free. It is anticipated that the construction of a 48-foot-long enclosure of metal sash and wire glass at an estimated cost of \$13,520 will eliminate this problem.

Preston School of Industry _____ \$85,000

The department has made arrangements with the Department of General Services for two surplus metal buildings containing 24,000 square feet and located on the old state fairgrounds site. It is proposed to use these buildings to develop a corporation yard complex to permit consolidation of the institution's maintenance shops. The department originally planned to construct a new facility at an estimated cost of \$143,900 to be developed in three phases. The current approach, using surplus buildings, is estimated to cost \$65,000.

The department is also requesting \$20,000 to install a surplus airconditioning unit along with necessary duct work to cool certain heavily used areas of the hospital. This proposal is part of a continuing program to modernize the institution's hospital and bring it to an acceptable standard.

Northern California Youth Center_____ \$5,200

O. H. Close was the first institution constructed at the Northern California Youth Center near Stockton, and it has been in use almost three years. Certain areas in the living units have not withstood the normal abuse anticipated when the institution was designed. Future problems can be averted if additional safeguards are installed. The department is requesting \$5,200 to install a rubber cove base around the perimeter of all day rooms, dormitories and offices; to provide stainless steel corner guards on the outside corners of all plastered walls; and to install a hardwood chair rail in all the dayrooms and dormitories.

Department of Education

DIAGNOSTIC SCHOOL FOR NEUROLOGICALLY HANDICAPPED CHILDREN—NORTHERN CALIFORNIA

item 507 from the General Fund	Capital Outlay Budget page 39
Requested 1970–71	\$10,800
Recommended for approval	None
Recommended reduction	\$10,800

ANALYSIS AND RECOMMENDATIONS

We recommend that this item be deleted.

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This residential school is located on a 2.8-acre site in San Francisco. A steeply sloped embankment runs along the north side of the property adjacent to the large two-story building that houses the school's entire program. This embankment is composed of sandy soil which has never been adequately stabilized. The department proposes that interlocking cement planter blocks be used to stabilize the embankment. It is estimated that 1,800 blocks would be required to cover this slope which is 375 feet long and rises from 11 feet to 18 feet in that length.

We cannot recommend the adequacy of this solution because an engineering survey has not been conducted by the Office of Architecture and Construction. Consequently, the proposed solution has not been certified as being structurally effective for the embankment in question. We therefore recommend deferral of this request pending specific recommendations from the Office of Architecture and Construction as to the most appropriate means of embankment stabilization in this area.

Department of Education

DIAGNOSTIC SCHOOL FOR NEUROLOGICALLY HANDICAPPED CHILDREN—SOUTHERN CALIFORNIA

Item 308 from the General Fund	Capital Outlay	Budget pag	e 40
Requested 1970–71		\$3	,000
Recommended for approval		1	,500
Recommended reduction			,500

ANALYSIS AND RECOMMENDATIONS

We recommend that this item be reduced to \$1.500.

Settlement of the northwest corner of the instruction wing at this school has caused an exterior metal exit door as well as one interior door to bind. To correct this problem the department is requesting \$3.000 to reinforce the footing under the corner where the settlement has occurred. However, the Office of Architecture and Construction has conducted an onsite survey and considers this solution impractical. Instead, it has recommended that both openings be repaired by removing the doors and frames and reinstalling them. It has also recomDiagnostic School for Neurologically Handicapped Children—Southern California—Continued

mended that the interior opening which is in a wood stud wall, be reinforced with steel channels anchored at the floor and the structure above to reduce the excessive amount of movement between the door frame and the wall. It is estimated that this work can be accomplished for approximately \$1,500.

Department of Education SCHOOL FOR THE DEAF, BERKELEY

Item 309 from the General Fund Capital Outlay Budget page 40

Requested 1970–71	\$16,900
Recommended for approval	16,900
Total recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This request provides for the rehabilitation of building areas that have deteriorated due to weathering or extended use. The most significant of the two improvement projects proposed is a \$12,400 request to replace 57 windows on the south side of the Crandall School Building. This building was constructed in 1932 and the windows are of the awning type with wooden sash. The windows on the south side of the building have weathered to the extent that dry rot is prominent and most of the obsolete hardware is badly worn. Consequently, these windows are a continuous maintenance problem. The school anticipates that eventually all of the wooden sash on this building will have to be replaced with double hung aluminum windows. However, at this time it is proposed to replace only those on the south side of the building where the problem is the worst.

The remaining project is a request for \$4,500 to replace flooring in three dormitories. Because of ground water intrusion as well as other problems caused by hydrostatic pressure, the asphalt tile floor covering on the first floor in various dormitories has been a constant maintenance problem. The school has taken steps to solve the water problem and the floors have now worn to the point where replacement is justified.

Department of Education

CALIFORNIA SCHOOL FOR THE DEAF, RIVERSIDE

Item 310 from the General Fund

Capital Outlay Budget page 41

Requested 1970-71	\$85,000
Recommended for approval	None
Recommended reduction	\$85,000

ANALYSIS AND RECOMMENDATIONS

We recommend that this item be deleted.

This item provides for the preparation of working drawings for a new facility for the multihandicapped deaf, to be located contiguous to the existing California School for the Deaf and utilizing common facilities such as the kitchen, boiler plant, warehouse and maintenance shops. The Budget Act of 1969 appropriated \$119,516 to establish a program for 30 multihandicapped deaf children in temporary facilities. Funds were provided to lease and equip three relocatable classrooms, to prepare the site where they would be located and to staff the new program. This was to enable the school to continue and expand what was a twoyear federally financed program for 16 multihandicapped deaf children. Concurrent with the provisions for the expanded program, the Budget Act of 1969 appropriated \$50,000 for preliminary planning for a permanent facility. We expected the expanded program to provide operational experience that would have a bearing on the ultimate design of a permanent facility and the nature of the program offered. Under the pilot program, the school gained valuable insight into the problems of teaching emotionally disturbed deaf children. We anticipated the expanded program would include deaf children with other handicaps. It is our understanding that the expanded program has yet to be implemented because the three relocatable classrooms have not arrived.

We believe that the school needs experience with a cross section of the multihandicapped deaf children which the new unit will ultimately serve. The department stated in its program for the new facility that "since deaf multihandicapped is an omnibus term, it is not really known to what degree deaf mentally retarded children can be taught in the same manner as deaf emotionally disturbed children. Nor is it known what commonalities there are in teaching deaf orthopedically handicapped children and deaf visually handicapped children with the other types of multihandicaps." Consequently, we believe the request to proceed with working drawings for a \$6.7 million facility accommodating 210 multihandicapped deaf children is premature. In addition, a decision needs to be made regarding an appropriate method of financing the construction of the proposed facility. The budget projects only \$2,675,000 for construction in the 1971-72 fiscal year and we have no information that reconciles this figure with the current total estimated project cost.

We recommend that this request for working drawings be deferred until the school has had experience with its expanded program for the multihandicapped deaf and a method of financing has been determined.

Department of Education

CALIFORNIA SCHOOL FOR THE DEAF, RIVERSIDE

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Capital Outlay Budget page 41

Requested 1970–71	\$29,700
Recommended for approval	29,700
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

In May 1969, the Department of Education requested that the Office of Architecture and Construction conduct a roof survey at the Riverside school. It was proposed that the results of that study include a priority listing and a project level estimate for each building requiring repairs and reroofing. The survey recommended reroofing nine buildings and some covered walkways at a total estimated project cost of \$81,500. This request will provide for reroofing three of those buildings with a total roof area of approximately 38,388 square feet.

HIGHER EDUCATION

Item 312 from the General Fund	Capital Outlay Budget page 42
Requested 1970–71	\$34,227,036
Recommended for approval	None
Recommended for special review	34 227 036

Recommended for special review 34,221,036 Recommended reduction None

ANALYSIS AND RECOMMENDATIONS

We recommend special review.

The higher education capital outlay proposals contained in the Budget Bill total \$50,912 100 for the University of California and the state college system. These proposals are to be made payable from the Capital Outlay Fund for Public Higher Education.

This special fund receives its regular income in royalties from state tidelands and Long Beach tidelands. The estimated prior unexpended balance as of July 1, 1970 plus accruals during the budget year will total approximately \$25,685,000. Obviously, this is inadequate to cover the proposed appropriation program.

Consequently, this item proposes to transfer, from the General Fund to the special fund, the amount indicated in order to make the fund solvent and adequate to cover all of the proposed appropriations. This would leave a balance in the Capital Outlay Fund for Public Higher Education on June 30, 1971 of \$9,000,000. To a considerable degree, this remaining balance represents the uncertainties of actual receipts into the fund from oil royalties. Further, this balance is needed for cost augmentations.

Higher Education-Continued

A similar transfer was made by the Budget Act of 1969 totaling almost \$56,175,000 and the Budget Act of 1968 authorized the transfer of \$53 million. The latter is the first time that such a transfer had been authorized and the first time that the Capital Outlay Fund for Public Higher Education had actually been used for appropriation purposes with the exception that the Budget Act of 1967 appropriated from that fund minor construction items and some special planning items for the University of California and the state college system totaling slightly more than \$4 million. In connection with the appropriations for the specific construction items following this item, we have made certain recommendations concerning special reviews and reductions. Consequently, we recommend this item receive special review and adjustment in accordance with any changes made by the Legislature in connection with the actual capital outlay items.

UNIVERSITY OF CALIFORNIA

Item 313 from the Capital Outlay Fund for Public
Higher Education Capital Outlay Budget page 43

Requested 1970–71 Recommended for approval Recommended for special review Recommended reduction		3,448,000 5,998,000 None 450,000
SUMMARY OF RECOMMENDED REDUCTIONS	Amount	Analysis page
Reduce project (f) central steam plant, Los Angeles	200,000	1063
Disapprove project (p) heating and cooling engineering building, Santa Barbara	250,000	1068

ANALYSIS AND RECOMMENDATIONS

The total program contemplated in this budget for working drawings and/or major construction projects is the smallest for any year in the period following World War II. The amount proposed is exclusive of minor construction projects, equipment for projects already under construction, preliminary planning and general studies which are covered by separate proposals.

This item covers a schedule of 16 construction projects and three working drawings projects for future construction on eight campuses, with no projects scheduled for the Berkeley campus. It will be noted that the preponderance of the construction projects is for utilities and site development with the balance for the conversion of or additions to existing facilities. The working drawings represent future additional capacity although in a quite limited amount. The effect of the schedule as a whole is that it provides no academic capacity of any significance, despite the fact that the total enrollment in the University as a whole, exclusive of medical areas, is projected to increase from the fall of 1969 to the fall of 1970 by about 3,150 students and from there to the

fall of 1972 by another 6,300. In the health sciences the projection is an increase of less than 150 students from the fall of 1969 to the fall of 1970 and about 1,350 from 1970 to 1972.

(a) Construct—campus storm drainage discharge _____ \$668,000

We recommend approval.

As this campus has expanded its central core with new facilities and high-rise buildings, the volume of storm water runoff has increased. The present system of storm water disposal channels water by means of underground pipes into the north fork of Putah Creek which is not the normal watershed pattern since the campus normally slopes away from the north fork. As a consequence, the campus discharge into the north fork constitutes extraneous water which can cause damage downstream particularly since there is considerable private development now occurring in that area. Furthermore, the north fork simply does not have the capacity for high discharge rates and the long-range plan of the campus contemplates that this fork would become a holding, pumping basin which could be used both for aesthetic purposes and ecological studies.

This project proposes to convert the disposal system to discharge into the south fork of Putah Creek which has ample capacity for the purpose and in which high flows will probably not endanger downstream developments. The system would utilize that portion of the north fork within the campus as a sort of holding-equalizing reservoir from which it would pump the water into the south fork as flows increase. We have examined the project in detail and we believe that the dangers described on the north fork are real and may even at the present writing be causing trouble because of the higher than normal rainfall the area has been experiencing. The project consists principally of approximately 4,000 feet of 60-inch diameter outfall line from the north fork holding basin to the south fork together with a 100cubic-foot-per-second pumping station. The cost appears to be in line

and we recommend approval.

(b) Construct—utilities and site development, 1970-71.... \$979,000 We recommend approval.

This project proposes a series of utility extensions such as steam supply and returns, relocation of power substations, extension of primary feeder line, extensions of video and audio cables from the control center to various new buildings, road and storm drainage development, and some walks and bicycle access to new buildings. The proposal was originally for almost \$1,500,000 but was scaled down to the current amount by a series of conferences.

All the elements contained in the proposal in its present form are relatively crucial to the operation of recently completed facilities or areas whose characteristics have changed because of recent new facilities. We have reviewed the project in complete detail and we believe the elements now contained in it are justified. The costs are in line with

the scope of each element.

Irvine

(c) Construct—sewage disposal facilities (contract), 1970–71 \$237,000

We recommend approval.

Some years ago the University entered into a contract with the Irvine Ranch Water District, which also operates sewage facilities, requiring the University to enter into the cost of providing expanded facilities for the district, thereby avoiding the necessity for the University to develop is own sewage disposal plant and facilities on the campus. This joint approach was clearly more economical and in the best interests of the state. The Budget Act of 1967 provided a first increment towards that contract by appropriating \$504,000.

The continued growth of the campus requires an additional increment of facilities in which the University's share is the \$237,000 proposed. The work is actually done by the district and the University does not become involved in any way in the contracting or construction of the facilities. This appropriation would merely carry out a long-

standing agreement which is to the state's benefit.

(d) Construct—utilities and site development, 1970-71___ \$319,000

We recommend approval.

This project covers a collection of utility and site development elements such as the extension of the campus roadway by about 2,000 feet including two spurs to connect with existing roads, extension of general campus storm drains to accommodate runoff from newly developed areas, minimum grounds improvements for engineering building No. 1 and working drawings only for the ultimate extension of one of the tunnels to serve biological sciences unit No. 2 together with mechanical and electrical distributions therein. The total proposal was originally over \$1 million.

A series of conferences resulted in downgrading some of the elements and deferring others. We believe that the elements now in the proposal are all crucial and essential to the health and safety of both students and faculty on the campus as well as the visiting public. We reviewed the elements in detail and the cost appears to be in line.

(e) Construct—humanities-social sciences unit 1, conversion \$242,000

We recommend approval.

The humanities social sciences building No. 1 was one of the first permanent buildings constructed on the campus and as such it had a multidisciplinary mission. As additional buildings have been constructed, some of the activities have been phased out and transferred to the newer buildings.

The Budget Act of 1969 appropriated \$10,000 for working drawings for alterations in about 15,000 square feet of assignable area to be vacated by social sciences and into which the school of humanities will expand. The alterations consist of moving some partitions, and changing lightings, air handling equipment, etc. Actually, over 30,000 square

feet of assignable area is being vacated, but the balance of the area will be used by the school of humanities as is. In another item in this budget for equipment, there is a proposal to equip the altered space which can be done within the budget year without too much difficulty. We have examined the proposal in detail and the scope is reasonable and the costs are in line for the purpose.

Los Angeles

(f) Construct—central steam plant expansion

\$524,000

We recommend a reduction of \$200,000.

The present central steam generating plant which supplies both steam for heating and steam for absorption type chillers for air conditioning, contains three 65,000-pound-per-hour boilers and two 70,000-pound-per-hour boilers. Good practice requires that in a plant of this size at least one of the five boilers be kept on a standby basis. Assuming that one of the 70,000-pound boilers will be kept on standby, the remaining four boilers have a capacity of 265,000-pounds of steam per hour or an equivalent of 227,900,000 BTU per hour.

With buildings already in operation, the present connected load is nearly 290,000,000 BTU per hour. The latter figure is an average condition that does not take into account peak demands required by extreme temperatures. It may be seen that the capacity of the four on-line boilers is inadequate to meet the average load. Fortunately, for the last few years the weather in Los Angeles has been relatively moderate and

the plant has managed to meet demands.

However, additional buildings will be coming on the line shortly making additional boiler capacity imperative if a standby posture is to be maintained. It should be recognized that on this campus because of the hospital and medical school and because of the many critical research requirements for reliable steam supply, a standby capacity is absolutely essential. This project proposes to add two boilers with a capacity of 125,000-pounds-per-hour each. Predicated on the premise that one of the new boilers will be kept on a standby basis and the other new one together with the five existing would supply the regular line demand, there would be a total on-line capacity of over 395,000,000 BTU per hour. The demand growth curve indicates that by 1975 the average maximum demand would be about 337,000,000 BTU per hour. However, this is based on the assumption that certain additional buildings now in the long-range planning stage will actually be financed and constructed. We suggest that this premise is unrealistic and that providing two such boilers at this time is an unjustifiable investment.

We recommend instead that only one boiler be financed at this time but that the additional building space required for two boilers be constructed at the same time so that the second boiler can be added in the future as required. The estimate indicates that each boiler with its appropriate auxiliaries and controls costs about \$180,000. In addition, there are percentages for fees, inspection, contingencies, etc., which would bring the cost for a single boiler to something over \$200,000. On this basis, we recommend that the project be reduced by \$200,000

and that only one boiler be installed at this time.

Riverside

(g) Construct—utilities and site development, 1970-71___ \$356,000 We recommend approval.

This project is a collection of utility, road development, walk lighting and storm drainage elements. One of its major elements is the installation of emergency electric power generators in 16 buildings which now either have no emergency lighting capacity or only battery operated types. In a number of science building instances there is no capacity to support critical research environmental facilities in which even a short power outage can destroy months of experimental work. The second major element is for the extension of a road on the east side of the campus which is now only a dirt track in order to provide adequate access for a large university community now living east of the campus. Principally, this would assist in reducing serious traffic hazards that now exist because of the excess usage of the main entrance.

We have examined all of the elements of this project which incidentally originally totaled over \$1,200,000, and we believe that they are essential and that the costs are in line with the scopes proposed.

(h) Working drawings—social sciences unit 2_____ \$210,000

We recommend approval.

This project proposes the design of a building having about 115.000 square feet of gross area with a net assignable area of over 68,000 square feet in which would be housed four departments, anthropology, economics, political science and sociology, plus the School of Administration, dean's offices and general assignment classrooms and seminar rooms. The current cost estimate is over \$5 million for the total project based on about \$35 per gross square foot for the basic building construction. In addition, movable equipment will probably add another \$700,000. It is anticipated that there may be a federal grant towards the building of as much as \$2 million. The social sciences generally and the departments mentioned above in particular are experiencing a rapid expansion especially in upper division, graduate and doctoral work. The present facilities were constructed about 15 years ago and have undergone a series of changes as different departments were temporarily housed in them and ultimately moved out. In any case, we believe that the evidence indicates a very real shortage in facilities for this academic area, even taking into account some degree of intensified utilization of existing space based on recommendations made at the last session. On this basis, we think it is essential that working drawings be started now in order to provide for an orderly expansion of facilities for these departments and to assure that enrollments in these areas can be accommodated.

San Diego

(i) Construct—utilities and site development, 1970-71..... \$239,000 We recommend approval.

This project covers four major elements, two of which are at the Elliott field station consisting of a short piece of road to connect to

the new county road and an expansion of the water system to supply the increasing number of animal facilities being developed. The other two are on the main campus, one being a redevelopment of North Torrey Pines Road, and partial extension, to eliminate serious traffic hazards which now exist and are worsening. Finally, more than half of the total cost is concerned with expansion of the central control system which is part of the central heating and cooling plant that is essential to the operation of the new buildings nearing completion. The basic design of the central plant was predicated upon its ability to control many functions which are remotely located in the various new buildings. Without this control expansion the systems in these buildings would not function properly and additional man power would be required to operate them.

We have reviewed these four elements in detail and we believe that they represent crucial needs. We have also reviewed the costs which

we find to be in line with the scope of each of the elements.

(j) Working drawings—Urey Hall space conversion, step 5 \$34,000

We recommend approval.

Urey Hall was the first permanent building at Revelle College and as such it served all departments of the college in the beginning. As additional permanent buildings were constructed, various activities were phased into the new buildings and the spaces were converted to what had been originally planned as the permanent occupancies. The long-range plan for the building was to house permanently the departments of aerospace and mechanical engineering sciences and chemistry.

The current proposal is the fifth alteration step which will probably be the last for some years. It covers somewhat more than 20,650 square feet of assignable area in which about two-thirds will be converted to laboratories for the aerospace and mechanical engineering sciences and the other one-third to chemistry laboratories. The ultimate construction cost will probably exceed \$300,000 representing largely fixed laboratory equipment such as specialized laboratory benches, fume hoods, etc. The space will be vacated by the activities presently occupying it moving into new buildings now nearing completion and it is essential that the vacated space be converted for proper utilization.

San Diego Medical

(k) Construct—utilities and site development, school of medicine, 1970-71 ______ \$128,000

We recommend approval.

This proposal includes three elements of which the major one is the construction of about 1,100 feet of roadway to provide access to the school of medicine and ultimately to the V.A. Hospital. The long-range plan is for a four-lane road, but initially only two lanes, one each way, will be constructed. The access road is essential since the only present access to the medical school is from within the campus, resulting in a hazardous and circuitous approach. The new road will provide direct access from one of the main arterials serving the campus, La Jolla Village Drive.

Another element is for the extension of a 12-inch water line from the basic science building to the clinical science building. This line will also ultimately become part of a loop system to insure reliability of water service.

The third element is for minimum site development adjacent to the basic science building to provide adequate pedestrian access and circulation and to provide for some erosion control and drainage. The original proposal for this site development was almost \$100,000 which has now been reduced to \$27,000, reflecting only the most crucial needs.

(1) Construct—improvements at University Hospital..... \$1,011,000

We recommend approval.

The University of California at San Diego entered into a contract with the County of San Diego to take over the operation of the County Hospital as an adjunct to the new medical school and to conduct the hospital program generally on the level of high-quality community hospitals rather than the relatively low level found in most if not all county hospitals. The hospital as constructed by the county was seriously deficient in many ways compared with conventional high-quality private community hospitals. Therefore, in order to elevate the quality of the facilities as well as the quality of the program, the University undertook a series of improvement projects and alteration projects which has not yet run its course. To date, there has been expended from state and University funds more than \$4,000,000 in alterations, improvements and equipment. In all probability the amount invested to date is only a fraction of what will ultimately be required both in alterations and improvements and in additional facilities to be built as adjuncts to the hospital.

The present proposal covers a group of ten remodeling and improvement elements. For example, one of the major elements is for the expansion of the radiology facilities, particularly in connection with nuclear medicine. It represents the second step for this purpose at an estimated cost of \$166,000. Another element is the second step of adding air conditioning to patient areas where it had not existed before. This is estimated at \$432,000. There is an empty elevator shaft in which it is proposed to add a patient and service elevator which is badly needed, at a cost of \$130,000. There are also such things as conversion of spaces for classroom use by medical students, remodeling of outpatient clinic spaces to bring them up to current standards, the creation of student laboratories and the remodeling of the existing auditorium into a large lecture hall with auxiliary and preparation room spaces.

We have reviewed all of these elements in detail. They have been discussed at length with the University staff in Berkeley as well as University staff at the hospital and on the San Diego campus. We believe the proposals are all thoroughly justified and the costs are in line

for the various scopes proposed.

San Francisco Medical

(m) Construct—clinical faculty facilities, San Francisco General Hospital ______\$215,000

We recommend approval.

In the project immediately preceding, we pointed out that the San Diego campus had taken over the San Diego County Hospital as a medical school teaching hospital. In San Francisco the University has not taken over the entire county hospital but only a portion which it operates and staffs with faculty and auxiliary personnel in order to provide research and teaching space for the clinical faculty and related graduate students.

The proposal deals with about 5,800 assignable square feet of space in one of the buildings which will be altered to provide laboratories, offices and support facilities. We have reviewed the buildings at this hospital from the inception of the program and have been aware of the long-range program to provide modern faculty and research facilities. A series of prior projects aimed at similar developments has been going on since 1965. The need for the facilities relates largely to the goal of providing for an entering class of 128 students. We have reviewed this project in detail and we believe the cost estimate is in line with its scope. Incidentally, the equipment needed for the spaces to be created will be provided through the use of federal funds.

(n) Construct—alterations, medical sciences building, second floor _____ \$120,000

We recommend approval.

The school of nursing presently occupies nearly 5,000 assignable square feet on the second floor of the medical sciences building. The new school of nursing building which is scheduled for completion early in 1971 will lead to the vacating of the space in question. This proposal covers the remodeling of approximately 4,600 assignable square feet to house the administrative activities of the school of dentistry, the school of human biology and the graduate division. In addition, a single large classroom will be created for general assignment purposes which will be large enough to handle an entire entering class. The remaining space vacated will be lost with the construction of escalators which are part of the circulation system between the new school of nursing building and the existing medical sciences building. We have reviewed the project in detail and we believe the cost estimates are in line for the purpose.

(o) Construct—clinics alterations for additional dental chairs _____ \$155,000

We recommend approval.

This project proposes to alter approximately 1,960 assignable square feet of space on the sixth and seventh floors of the clinics building in order to provide space for 12 additional dental chairs which are badly needed to come closer to the Public Health Service guide for dental school facilities. Based on these criteria, there is a requirement for 227

chairs while the availability including the 12 additional chairs will only be 179, still leaving a deficiency of 48 chairs. Unfortunately, there is no way to provide space for more than the 12 chairs until a new dental school building is constructed. We have reviewed this project in detail and we believe the cost estimate is in line with its scope.

Santa Barbara

(p) Construct—heating and cooling plant engineering unit 2 _____ \$250,000

We recommend disapproval.

The Budget Acts of 1967 and 1969, together with prior allocations for preliminary plans, provided over \$4,775,000 for the working drawings and construction of a second engineering unit on this campus. The basic design contemplated that the building would be supplied with chilled water for air conditioning and steam or high-pressure hot water for heating from a central plant and therefore no refrigeration equipment, heat generating equipment or space was included in the design or in the estimate of construction cost. This proposal is to add the neces-

sary fixed equipment to the building.

The Budget Act of 1969 appropriated \$80,000 for working drawings together with a prior allocation of \$61,000 for preliminary plans for the design of a central heating and cooling plant, the construction of which was estimated to cost over \$2,500,000. Instead of moving forward with the construction funds for the central plant, the position has been taken by the administration that funds should be expended in equipping the individual buildings and delaying the start on the central plant. We have always strongly favored the concept of central heating and cooling plants for large state reservations for three basic reasons which have been well established and generally accepted in engineering circles. First, the total cost of a central plant is less than the sum of the costs of individual building plants including the space occupied in the building as well as the equipment and controls. Second, the operating costs of a central plant to provide a given volume of heat and/or cooling is significantly less than the same volume provided by individual building plants. This reduction results both from reduced energy costs whether for electricity or gas or both and from significantly reduced personnel costs and equipment maintenance. Third, the efficiency of a well balanced central plant is markedly greater than that possible with individual building systems. This is reflected in operating costs. In addition, because of the differences in central plant equipment as contrasted with individual building equipment, there is a significantly higher reliability factor and a significantly longer equipment life expectancy. For these reasons, we recommend the construction of a central plant on this campus.

However, we recognize that the fund shortage faced by the state imposes a hard choice of priorities. In this particular instance, there is an option available that has not heretofore been offered but which should be seriously considered. That is the interest expressed by a number of companies including the Southern Counties Gas Company,

in providing a central plant facility without initial investment on the part of the state. Several approaches have been offered, one in which the utility company, for example, would merely provide the funds and the University would build and operate the plant. Another in which the utility company or another type of company would build the plant and operate it and sell steam and/or hot water and chilled water at regular rates in the manner of a public utility selling electricity or gas. This is not a new approach since it is already being done in a number of areas in the United States and abroad. In any case, the resultant annual costs, while greater than would be experienced if the state could take its own money, build the plant and operate it, are significantly less than the costs that would be experienced, on an annual basis, by continuing with the individual building plants. This new approach would result in annual savings to the state plus the development of an equity which in time, say 25 or 30 years, would lead to the central plant becoming the sole property of the University, which it could then operate. We suggest that these are bona fide proposals that can be in the state's best interest and would lie within legal bounds. Consequently, we recommend that serious exploration be undertaken in this direction as soon as possible. Our understanding is that the campus has been working with several organizations and we suggest that they should be encouraged to move in this direction if it can be clearly demonstrated that it is to the state's financial advantage. In line with this view, we also recommend that the proposal to add the equipment to the engineering building be denied.

(q) Construct—Utilities and site development, 1970-71___ \$359,000 We recommend approval.

This project covers two major elements. The first at approximately \$250,000 is for University participation with Santa Barbara County in the widening of three critical streets that feed traffic into this campus. Included in the widening would be walks, some lighting and some bicycle paths. Our on-site review of this project indicated to us very clearly that there were extreme hazards existing on these three streets

in their present condition and we believe that it is essential that the work be accomplished as soon as possible.

The second element at approximately \$62,000 is for the construction of a protective seawall and cribbing to prevent cliff erosion at Goleta Point. We also viewed this project on site and concluded that the further deterioration of the protective rock outcroppings by stormwave action would seriously endanger the entire beach and cliff. We feel that this protection is of the highest priority on this campus. The costs for both elements are in line with the scopes involved.

(r) Working drawings—marine biology unit 2_____ \$79,000 We recommend approval.

This proposal covers an addition to the existing marine biology laboratory which will roughly double the total space. The gross project, including a portion which will be financed by federal funds for a ma-

rine institute, would have an area of slightly over 23,000 square feet. The net assignable area would be about 10,000 square feet financed by state funds and slightly over 5,000 square feet to be financed by federal funds. In addition, the project includes a new sea water collecting and distributing system to replace the existing one which is inadequate for the present needs and would be totally inadequate for the expanded facility.

Marine biology is an important curriculum on this campus and one that is showing substantial enrollment growth. The major deficiency is in laboratories which would be provided by this project. The additional space including the federally financed space will allow for doubling the number of graduate students in the program from approximately 10 to approximately 20. The space would also permit expanded research capabilities for the faculty. We believe this project has high priority and that working drawings are necessary if some schedule of expansion is to be maintained.

Santa Cruz

(s) Construct—utilities and site development, 1970–71...... \$323,000 We recommend approval.

This proposal covers three major elements of utility and site development. The first at approximately \$90,000 is for the installation of a basic central control system from the central heating plant to outlying buildings. It will be recalled that this campus is relatively spread out and dispersed and a system which will permit monitoring of various essential mechanical equipment in the outlying buildings will sharply reduce manpower costs which would otherwise be required to maintain a constant surveillance of the state and functioning of this equipment. We believe that the central control and surveillance systems on any large reservation provide for significant economies, but for this campus the possible economies are even greater because of the spreadout nature of the design. Economies accrue not only from savings made by elimination of unnecessary operation of equipment but also by the avoidance of equipment damage which can, over a period of years, achieve a very significant result.

The second element covers the extension of waterlines, gaslines and electrical supply lines to the College No. 6 site. These utilities are necessary to be put in the roadway before the road surface is constructed. Principally, the utilities will be under the extension of Heller

Drive, the major on-campus access road.

The third element at \$100,000 will cover crucial segments of the general campus drainage system and areas of erosion control. It will be recalled that this campus is quite rolling and hilly and wherever roads are cut or buildings sites are generated, substantial erosion occurs during the rainy season. This particular proposal has been limited only to the most crucial areas.

We have reviewed these three elements in detail, on site, and we believe they are all essential and that the costs are in line for the purpose.

UNIVERSITY OF CALIFORNIA

Item 314 from the Capital Outlay Fund for Public
Higher Education Capital Outlay Budget page 43

	\$1,000,000
Recommended for approval	None
Recommended for special review	1,000,000
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

This item represents a contingency proposal in the event the medical bond issue fails of passage in June of this year. There is no clearly defined program to support the amount other than the intent to keep medical programs going, particularly at Davis, Irvine and San Diego, until such time as some other funding approach is determined.

Tentatively some of the proposals that can be defined for the \$1 million are surge facilities at the main campus in Davis and at the county hospital in Sacramento, surge facilities at the Irvine campus plus equipment for the Orange County Hospital in the areas being operated by the campus and some minimum faculty facilities at the county hospital in San Diego. It is fairly obvious that the amount of money would not buy much in the way of space or equipment when considering the relatively high cost encountered in medical teaching facilities and equipment. While we have no dispute with the basic concept and we recognize the crises that may occur at the several campuses, we feel that the whole proposal needs to be thoroughly reviewed by the Legislature before any action is taken. Consequently, we have taken the position of not recommending approval but suggesting special legislative review.

UNIVERSITY OF CALIFORNIA

Item 315 from the Capital Outlay Fund for Public
Higher Education
Capital Outlay Budget page 43

Requested 1970–71	\$5,675,000
Recommended for approval	5,675,000
Recommended reduction	$\acute{ extbf{N}}$ one

ANALYSIS AND RECOMMENDATIONS

This item covers a schedule of 28 equipment proposals related to construction projects previously funded and in most cases already under construction. Generally, these proposals represent minimum equipment needed to make each facility operable upon completion and we concur with the amounts proposed.

Berkeley

(a) Equip—mathematical sciences building _____ \$700,000 We recommend approval.

The Budget Acts of 1964 and 1965 together with prior allocations of preliminary plans funds provided a total of over \$5,780,000 of state funds for the construction of a multistory mathematical sciences building having approximately 180,000 square feet of gross area and approximately 107,000 square feet of net assignable area. In addition, over \$2,360,000 of federal funds have been made available for both construction and equipment. The current proposal represents only a relatively small part of the total equipment that will be required in the building. In addition to the proposal for the state funds, it is anticipated that there will be federal funds forthcoming for equipment to the extent of \$2,680,000. The long-range program also contemplates an additional \$350,000 in state funds for a final phase of equipping the building.

The federal funds represent additional space in the building totaling approximately 46,000 assignable square feet for graduate instruction in mathematics and related fields and the federal equipment funds are intended for the same specialized area. The main state-funded portion of the structure will provide classrooms and laboratories, a branch library and departmental and faculty offices generally for the departments of mathematics, statistics and computer sciences. While the spaces to be found in this building are not as complex and sophisticated as those generally found in a physical sciences or chemistry laboratory building, they nevertheless require expensive and complex computer and calculating equipment. The amount of state funds proposed for equipment represents roughly about 15 percent of the cost of the building on the basis of state funds provided for construction. However, if the building were to be updated in cost to current construction values as related to current equipment values, the relationship would be more like 10 percent which is quite reasonable for a scientific building of this type.

(b) Equip—undergraduate library _____ \$450,000

We recommend approval.

The Budget Acts of 1965 and 1966 together with funds allocated for preliminary plans provided a total of over \$4,890,000 for the construction of a new undergraduate library located in the heart of the campus and having approximately 130,000 square feet of gross area with over 89,000 square feet of assignable area. Most of the area will be given over to library functions including an open stack collection of about 150,000 volumes and about 2,000 reader stations. A relatively small part of the space will be used for classrooms and seminar rooms. The building is already complete and is partially functional on the basis of some existing equipment and some which was purchased out of special funds. The equipment proposal which represents less than 10 percent of the cost of the building will apparently do the entire job of properly equipping the building, since no future equipment

proposals are included in the long-range program. The amount appears to be reasonable for the purpose.

(c) Equip—life sciences building, alterations_____ \$75,000

We recommend approval.

The Budget Act of 1969 provided \$528,000 and preliminary plan funds provided \$17,000 for the alteration and modernization of nearly 8,200 assignable square feet of space in the life sciences building which was originally completed in 1930. The alterations include modernization of class and research laboratories, offices and vivarium facilities, principally for a program in neurobiology in the department of bacteriology and immunology. The equipment required is relatively sophisticated and expensive. The amount proposed appears quite reasonable for the purpose.

(d) Equip—Cory Hall, alterations \$17,000 We recommend approval.

The Budget Act of 1969 together with prior allocations of preliminary plans provided \$85,000 for alterations and improvements to Cory Hall which among other things houses the department of electrical engineering and computer sciences. Essentially, the alterations provide seven faculty offices plus space for a computer facility.

Davis

(e) Equip—physics unit 1 _____ \$500,000 We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations of preliminary plans funds provided a total of over \$3,480,000 of state funds and the federal government provided \$1,525,000 towards the construction of a laboratory building having over 120,000 square feet of gross area and approximately 73,000 square feet of net assignable area, intended to provide offices, classrooms and teaching and research laboratories for the departments of physics and geology. This is a complex and sophisticated structure representing some of the costliest space on a campus.

The equipment proposal represents a first increment with a second and final increment to come in the following year of a like amount. Since the total cost of the building includes federal funds, the relationship of the equipment must be based on a cost of approximately \$5 million rather than just on that portion financed by the state. On this basis, the two increments would represent about 20 percent of the cost of the structure. Historically, equipping buildings of this type has exceeded 20 percent of the cost of the structure. Consequently,

it would appear that the proposal is reasonable.

(f) Equip—biological sciences unit 4______\$400,000 We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations of preliminary plans provided over \$6 million for the construction of a laboratory building having a gross area in excess of 201,000 square

feet with a net assignable area of almost 125,000 square feet. The structure would provide principally laboratory type spaces but there are also classrooms, offices and minor related facilities to be used by the departments of biochemistry, vegetable crops, entomology and genetics. The project has also been assisted by federal funds to the extent of something over \$3 million for both construction and equipment.

The proposal represents the first of what will probably be a total of two increments with the second probably exceeding \$700,000. As noted in the previous project, this type of structure is highly complex and sophisticated requiring expensive movable equipment for both teaching and research. The equipment proposal, including the second increment, represents roughly about 20 percent of the cost of the structure which we believe is historically conservative for the purpose.

(g) Equip—chemistry addition _____ \$334,000 We recommend approval.

The Budget Acts of 1966 and 1968 together with a prior allocation of preliminary plans funds provided a total of over \$4,400,000 for construction of a chemistry laboratory building having a gross area of over 126,000 square feet and a net usable area of approximately 79,000 square feet which would provide facilities principally for the department of chemistry but the project also provides space for the department of engineering and for a physical sciences branch library. Approximately 60 percent of the assignable space is devoted to the department of chemistry. In addition to the state funds, there were federal grants totaling over \$1,150,000 so that the gross construction cost of the project exceeds \$5,500,000.

The equipment proposal represents a first increment with a second and probably final one of \$625,000. The two together totaling nearly \$960,000 therefore represent something less than 20 percent of the construction cost of the project. Historically, this is relatively low. However, when we take into account the fact that 40 percent of the building will be occupied by functions that have less expensive equipment needs the amount proposed appears to be reasonable and in line.

Davis Medical

(h) Equip—facilities, Sacramento General Hospital, Step 2 \$135,000

We recommend approval.

The Budget Act of 1969 together with a prior allocation of preliminary plans funds provided a total of \$436,000 for working drawings and construction of a so-called "surge" type building to be erected adjacent to the Sacramento General Hospital and on hospital grounds. The building is a one-story type structure with a gross area of about 14,000 square feet and a net usable area of something over 9,600 square feet. The space is intended to provide faculty research laboratories, operating rooms, central support and administrative offices necessary to maintain a proper facility for the clinical program being operated by the University at this hospital.

The equipment proposal covers a single phase with no additional ones contemplated in the future. Since the equipment in a facility of this type is very sophisticated and expensive, it becomes rather difficult to compare the cost of the equipment with the value of the structure on a historical basis because of the fact that the structure represents relocatable space rather than conventional permanent space and is therefore significantly less costly than conventional space. If the cost of the space is recalculated on the basis of current costs for conventional steel and concrete structures, the relationship of the equipment then comes into a historical focus at about 20 percent. Since the list was reviewed in detail, the amount appears reasonable under the circumstances.

(i) Equip—medical surge facilities _____ \$241,000 We recommend approval.

The Budget Acts of 1967 and 1968 provided almost \$1,300,000 for the construction of "surge" laboratory facilities for the medical school on the Davis campus. These facilities were one-story semiprefabricated types of structures which mainly provided multidisciplinary laboratories with the necessary support space plus some classroom and office facilities. The Budget Act of 1968 also provided \$720,000 as a first increment of equipment and the Budget Act of 1969 provided an additional \$304,000 as a second increment making a total of almost \$1,025,000.

The current proposal represents a third increment with probably a fourth to follow which is currently shown in the Governor's Budget at \$169,000. The four increments together would represent nearly \$1,440,000 of highly complex and expensive equipment. It is virtually impossible to make any comparisons on the basis of a historical percentage of movable equipment cost versus project construction cost since the facilities are distinctly unconventional and probably represent a cost that is about two-thirds less than conventional multistory steel and concrete buildings. Consequently, we reviewed the equipment list in considerable detail and have reached the conclusion that the complex multidisciplinary approach used in these laboratories justifies the proposal.

(j) Equip—veterinary medical facilities unit 1, experimental animal housing _____ \$75,000

We recommend approval.

The Budget Act of 1969 appropriated \$2,212,000 for working drawings and construction of a series of buildings of widely differing character in which to house many types of laboratory animals running from the smallest such as guinea pigs and hamsters to the largest such as horses with a wide variety of requirements. The experimental animal facilities are essential to the conduct of a veterinary teaching and research program which is being expanded on this campus.

Included among these buildings are 11 small specialized research laboratories which would be equipped by this proposal. The amount

is relatively modest and appears to be in line for the purpose.

Irvine

(k) Equip—engineering unit 1 _____ \$200,000

We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans and federal grants, provided a total of over \$8,700,000 for planning and construction of an engineering complex having over 160,000 gross square feet of area with approximately 107,000 square feet of assignable space to provide instructional and research facilities for the departments of engineering, information and computer science, a campus computer facility, and classrooms and seminar rooms. The Budget Act of 1968 provided a first increment of equipment at \$584,000.

The present proposal represents a second increment with a third amounting to \$472,000 scheduled for the following year. The three increments together would total over \$1,250,000 and as such would represent less than 15 percent of the cost of the structure. On a historical basis, engineering facilities have usually run well over 20 percent because of the generally simple nature of the structure as contrasted with the complex requirements for movable equipment. The proposal has been reviewed in detail and it appears to be entirely in

line.

(l) Equip—natural sciences unit 1, conversion_____\$200,000

We recommend approval.

The Budget Act of 1968 together with prior allocations for preliminary plans provided a total of \$846,000 for the conversion of spaces in natural sciences unit 1 to biological sciences uses which would be of such magnitude as to occupy the most significant part of the building which would then be named biological sciences unit 1. The Budget Act appropriation was a contingent one based upon the release of state funds from other projects upon receipt of federal grants for such

other projects.

The space affected totaled approximately 37,500 assignable square feet which would house a school of biological sciences and would include such things as seven large undergraduate multidisciplinary wet laboratories, 36 research laboratories and various service rooms including a machine shop, a student workshop and vivarium areas. The present proposal is the first of two increments with the second being estimated currently at \$184,000 for inclusion in the 1971 Budget. The two together at \$384,000 cannot be related to construction costs since the basic building is already there and there is no statistical basis for making comparisons with alteration costs. However, on the basis of prior experience in the kinds and volumes of equipment needed for the purpose, the proposal appears to be entirely in line.

(m) Equip—social sciences unit 1, conversion for humanities _____ \$100,000

We recommend approval.

In another capital outlay item in this budget, there is a separate proposal for the physical conversion of about 15,000 assignable square

feet of space in the social sciences unit 1 building to be used by the school of humanities for general academic and departmental purposes. Working drawings for this purpose were funded at \$10,000 in the

Budget Act of 1969.

The spaces to be altered will provide essentially teaching and laboratory facilities with some offices. Movable equipment now being used in these spaces will be moved with the functions to other buildings requiring a complete new set of equipment for the new purpose. As mentioned in a previous item, it is not possible to make direct comparisons on a statistical basis between equipment and construction cost since only alterations are involved. The present proposal is the first of two increments which will total \$130,000 and on the basis of prior experience with similar curricula the amount proposed appears to be entirely in line.

Irvine Medical

(n) Equip—medical surge facilities _____ \$342,000 We recommend approval.

The Budget Act of 1968 together with prior allocations for preliminary plans provided over \$2,500,000 for working drawings and construction of the second stage of medical surge facilities at the Irvine campus which was intended to absorb the transfer of the entire medical education function from the old California College of Medicine campus in downtown Los Angeles to Irvine. These are one and two-story wood and concrete block buildings intended to serve as staging areas for the medical school with the functions ultimately to be accommodated in permanent multistory conventional construction. In the distant future, these so-called surge buildings will then become auxiliary spaces for research, institutes, etc. Their construction is such that they will serve almost as long as conventional steel and concrete construction.

The current equipment proposal represents the third and last increment of equipping the second stage of surge facilities. The first two steps provided \$800,000 which with this proposal will make a total of \$1,142,000. As mentioned elsewhere in similar situations, it is not possible to make a statistical comparison between the cost of equipment and the cost of construction because of the fact that these buildings are generally much less costly than conventional multistory structures. Nevertheless, on the basis of class size and the nature of the laboratories the total amount appears to be well within prior experience. On this basis, we believe the proposal is justified.

Los Angeles

(o) Equip—Dickson Art Center, alterations for architecture \$60,000

We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans provided a total of over \$567,000 to alter a major part of the old Dickson Art Center so that the building could accommodate the new school of architecture. The building had been vacated by the art department upon completion of its new building

on the north side of the campus. The alterations plus the remainder of the building in which no alterations are necessary were expected to provide for 300 student stations in the school of architecture.

The Budget Act of 1966 also provided \$103,000 for equipment for

the new school on the premise that it could begin to function in parts of the building that would not require alterations. The present proposal is to provide equipment for the first class in the master of architecture program. Principally, this consists of special adjustable individual units or cubicles which provide a reference shelf or desk, a drafting surface and storage with door height walls as part of the movable cubicle so that each student would have a certain amount of privacy. Essentially, each of these cubicles becomes the one and only permanent station for each of the students to whom it is assigned. We have reviewed this proposal on site with the head of the school of architecture and we believe it is justified.

Los Angeles Health Sciences

(p) Equip—hospital and clinics unit 1, alterations, step 2 \$300,000 We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans provided over \$4,600,000 for working drawings and construction of alterations to the hospital and clinics unit 1 which was designated as the second step since the total program could not be undertaken at one time with an on-going hospital and educational program. Much of the alterations occurred in spaces that had been left unfinished in the original construction and had in the interim been put to many temporary uses particularly storage and noncritical medical activities. The basic purpose for the alterations was to provide facilities to permit expansion of enrollment to a 128 entering class size.

The Budget Act of 1969 provided \$500,000 as a first increment for equipping the remodeled facilities and the present proposal will be the second of a total of three increments. The third increment is now estimated at \$873,000 making a total ultimate investment of over \$1,673,000 for equipping these facilities. In addition, there have been substantial grants both for construction and equipment from the federal public health service. As we pointed out in other projects, it is not possible to make a direct comparison between the cost of equipment and the cost of alterations because we have little statistical history to serve as a reference. However, on the basis of class size and the amount of equipment needed per student, the proposal appears to be in line.

Riverside

(q) Equip—library building alterations, step 2 ____ \$32,000 We recommend approval.

The library on this campus was designed to be built in three increments and the third one was recently completed. When the second increment was completed, certain alterations were required in the first increment in order to accommodate the new addition. This altera-

tion was known as step 1. Now that the third increment is complete, the Budget Act of 1969 provided \$162,000 to carry out the second step of alterations to accommodate the two prior increments with the new one.

This proposal is the only equipment that will be required to take care of altered spaces which will now have different uses than those that occurred during the interim. The amount appears to be in line for the purpose.

San Diego

(r) Equip—John Muir College, building 2b...... \$281,000

We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans provided over \$2,880,000 for the construction of a laboratory classroom building having about 72,000 square feet of gross area and about 44,000 square feet of net assignable area consisting principally of laboratories and classrooms and some offices to house the department of biology. In addition, there was almost \$300,000 of federal funds granted under Title I of the Higher Education Facilities Act.

The Budget Act of 1969 provided \$400,000 as a first increment for equipping the building and this proposal will be the second and last making a total of \$681,000. This represents approximately 20 percent of the construction cost of the building which is statistically average for this type of facilities. On this basis the amount appears to be justified.

(s) Equip—central university library building, step 1 ___ \$130,000 We recommend approval.

The major central library for this campus has been master planned to be constructed in what will probably be three increments. The first increment now under construction is referred to as step 1 and will provide over 110,000 square feet of assignable area which will probably

cost over \$5,200.000, including federal funds.

The Budget Act of 1969 appropriated \$200,000 as a first increment for equipment. Ultimately there will be a third and final step of \$479,000 which together with the current proposal would make a total of over \$800,000 to equip the building. This would represent over 15 percent of the cost of the structure which historically is considerably higher than average. In the past we have generally thought in terms of about 10 percent as being average for libraries. However, since this proposal is only the second increment which will produce a total of less than half of the grand total projected, it would appear to be completely justified at this time. When the third increment is proposed, the subject will be reviewed in considerable detail in order to assure ourselves that only the most necessary equipment is being provided.

(t) Equip—John Muir College, buildings 2c and 2c' ____\$220,000 We recommend approval.

This project was funded for construction and working drawings in the Budget Acts of 1966 and 1967 and consists of two separate and distinct wings which are connected by a stairway structure with one wing having been fully financed by federal funds and the other wing having been financed by state funds with some federal assistance. The state funded wing has approximately 45,000 square feet of assignable area and the federally funded wing has about 18,000 square feet of assignable area which will be devoted to graduate and post-doctoral work which will be state supported. This means that about 63,000 square feet of assignable area must be equipped at state expense. Principally, the programs contained in the building are in psychology and linguistics, both of which require fairly significant amounts of expensive equipment.

The Budget Act of 1969 provided a first increment of \$385,000 for equipping the buildings and this proposal is the second and last increment making a total of \$605,000. In terms of the cost of the space for construction, the equipment represents about 20 percent which is statistically average for programs of this type. On this basis we believe the

proposal is reasonable.

(u) Equip—John Muir College, building 2d \$110,000

We recommend approval.

The Budget Acts of 1967 and 1968 together with prior allocations for preliminary plans provided a total of over \$2,300,000 for multistory structure having over 85,000 square feet of gross area with a net assignable area of nearly 52 000 square feet in which to house principally the departments of anthropology, sociology, literature, history and some general assignment space. Essentially the building is mostly lecture-type classrooms with some offices.

This proposal is the first of two with the second being for the same amount so that ultimately the total will be about \$220,000, representing less than 10 percent of the construction cost of the building. Historically, lecture-type buildings have required equipment at the rate of between 6 and 10 percent of the construction value of the project. It

therefore appears that the proposal is justified.

(v) Initial Equipment—third college _____ \$100,000 We recommend approval.

Various buildings at old Camp Matthews are used as a staging area to start each new college complex which ultimately is moved into permanent buildings as they become available. College No. 3 will be started in a like manner and it is scheduled to open in the fall of 1970. Its emphasis will be in the departments of music, anthropology and visual arts for which equipment is not now available. Whatever equipment is purchased through this proposal will ultimately be moved into permanent buildings when they are available.

This proposal represents the first of two with the second being for \$334,000 in the 1971 budget. This total of \$434,000 will function in the temporary facilities at Camp Matthews. Ultimately, as these activities are moved into permanent buildings, additional equipment will be required. The equipment proposed is mostly of a general and conventional nature such as audiovisual units, general instructional classroom materials, office furnishings, etc. There will also be some specialized musical equipment and art equipment. The proposal appears to be reasonable and justified.

San Diego Medical

(w) Equip—improvements at university hospital_____ \$39,000 We recommend approval.

The Budget Act of 1969 together with prior allocations of preliminary plans provided a total of \$971.000 to make various improvements at the San Diego County Hospital which is now being operated by the University as a general high-quality community hospital. These improvements are required to bring the old county hospital to a quality and facilities standard equivalent to that found in good community hospitals throughout the state. The alterations were varied and complex and included such things as providing additional operating rooms, modernizing existing operating rooms, modernizing X-ray facilities, etc.

The Budget Act of 1969 also provided \$15,000 as a first increment of equipment for the remodeled spaces. The current proposal represents the second of three increments with the third of \$10,000 making a grand total of \$64,000 which is relatively modest for the purpose. We have reviewed the equipment list in detail and believe it to be justified.

(x) Equip—improvements, university hospital_____ \$70,000 We recommend approval.

Elsewhere in the budget there is a proposal for \$1,011,000 to continue the program of improving and upgrading the facilities at the hospital in order that it will meet accepted standards for a good-quality community hospital. Principally, the improvements will be in the area of electrical and mechanical services and systems, the addition of a passenger-service elevator and remodeling of various spaces to provide classrooms, student ward laboratories, outpatient clinics and related facilities. The amount proposed for equipment appears to be reasonable for the purpose.

(y) Equip—remodeled nursery—delivery suite, university hospital _____ \$85,000

We recommend approval.

The medical school proposes to provide a special suite in the hospital in which emphasis will be placed on the care of high-risk mothers and infants in the form of an intensive care unit. It is anticipated that this function will occupy approximately 6,500 assignable square feet of space and it is the University's expectation that the actual remodeling work will be done with funds solicited from donors.

The equipment proposal is to provide the highly specialized equipment necessary to make the space operable. We have reviewed the

Capital Outlay

Item 315

University of California—Continued

equipment list in detail and in general we find it to be relatively modest for the purpose. Consequently, we believe it is justifiable.

San Francisco Medical

(z) Equip—school of nursing building_____ \$200,000 We recommend approval.

The Budget Acts of 1967 and 1968 together with prior allocations of preliminary plans funds provided a total of over \$1,700,000 for construction of a multistory building immediately behind the present clinics building in which to house the school of nursing. This would permit relieving other space now being used by the school and also permit the expansion of the class size. The building will have a gross area of over 80,000 square feet with a net assignable area of over 46,000 square feet consisting of classrooms. laboratories, supporting service areas and offices. In addition, there were federal funds granted towards the project.

The present proposal is the first of two increments with the second at \$100,000 making a total of \$300,000 which represents less than 17 percent of the cost of the building construction. Since the project is essentially a science type of building with numerous laboratories, the amount proposed appears to be within prior statistical experience for similar spaces.

Santa Cruz

(aa) Equip—alterations, existing facilities _____ \$79,000 We recommend approval.

The Budget Act of 1965 together with a prior allocation for preliminary plans provided \$273,000 to remodel certain spaces in natural sciences unit 1 when they were vacated by activities which were moved into natural sciences unit 2 upon its completion. The vacated area is about 4,666 assignable square feet and it is being converted principally for the use of biology and organic chemistry. These are relatively sophisticated activities which require some expensive movable equipment.

Since it is not possible to relate equipment costs to alteration costs, on a statistical basis, we reviewed the list in detail and we find that it comes within previous experience for similar activities. On this basis we believe the amount is justified.

(bb) Equip—applied sciences building_____ \$200,000 We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans provided over \$3,500,000 for the construction of an engineering building to be known as engineering unit 1. Subsequently, the University administration reached the conclusion that an engineering curriculum, as such, should not be started on this campus and it was decided to convert the purposes of the project to peripheral engineering activities to be called applied sciences. The building has approximately 170,000 square feet of gross area with a net assignable area in excess of 106,000 square feet. It will provide spaces for the

department of biology, for computer sciences, physical sciences, academic services, administrative services and over 23,000 square feet in the building will remain unfinished to provide for future expansion space. The main reason for this excess space is occasioned by the fact that the working drawings were so far along at the time the decision was made to defer the engineering curriculum that it would have been costly to redesign the building to a smaller size. We were in very close contact with this project and we believe that the decision to move ahead with it in its original size was a proper one.

The proposal is the first of two increments to equip the building in which the second will be \$374,000 thereby making a grand total of \$574,000 when the second increment is funded. This represents something less than 16 percent of the cost of construction. However, it is rather difficult to make any statistical comparisons because of the present conglomerate nature of the activities to take place in the building. Nevertheless, in reviewing the proposal in detail we find that the items of equipment fall well within previous experience for similar spaces. On this basis, we believe the request is justified.

UNIVERSITY OF CALIFORNIA

Item 316 from the Capital Outlay Fund for Public Higher Education Capital Outlay Budget page 43

Requested 1970–71	\$1,000,000
Recommended for approval	200,000
Recommended for special review	800,000
Total recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

This item proposes a schedule of three elements covering separate and distinct types of advance planning. The principles involved in all three have been accepted by the Legislature as evidenced by appropriations for these purposes for a number of years. However, with respect to the first proposal in the schedule, that for preliminary plans for future projects, the Legislature has revised its approach with respect to similar situations in the state college system. Consequently, we believe that the time has now arrived when the same approach should be considered with respect to the University.

(a) Preliminary planning ______\$800,000 We recommend special review.

This proposal is intended to provide for the preparation of preliminary plans to be presented to the Legislature in support of subsequent proposals for the funding of working drawings for future construction projects. The proposal indicates that the amount is to cover preliminary plans for all working drawings to be proposed in the 1971 Budget and for some selected projects in the 1972 Budget.

While the administration has not endorsed the program indicated in the Governor's Budget from the fiscal year 1971-72 through the year 1974-75, the information printed therein indicates the University's own assessment of its needs and future course. The total of working drawings shown for the 1971-72 fiscal year is approximately \$3,150,000. If we assume that these figures represent approximately six percent of the cost of the project and we also assume that one and one-half percent is a reasonable amount to provide for preliminary plans, then approximately \$787,000 would be required for preliminary planning. However, it should be recognized that included in the total of working drawings is \$870,000 for medical facilities which should probably be handled by the proceeds of the bond issue which will be put before the electorate in June of 1970. On that basis, the need would be something under \$700,000. The working drawings proposals for 1972-73 total about \$1,450,000, again including some medical facilities. If advance preliminary planning is allowed for some of these projects then we would agree that \$800,000, as proposed, would represent a reasonable amount for the purpose.

However, if we consider the approach now being used for the state colleges, then preliminary plans funds would be provided only for relatively simple site development and utilities projects and for other types of projects, of less than \$1 million in total cost in which the proposal would be made in one phase including both working drawings and construction. All other projects would have preliminary plans funded at the same time as working drawings are funded. Such an approach would make a significant reduction in the amount of this proposal. We estimate that no more than \$350,000 would be required by this approach. Consequently, we believe that the Legislature should carefully review this proposal and determine whether this budget is the

appropriate time to make this policy change.

(b) General planning studies _____ \$75,000

We recommend approval.

The broad policy concept by which the Legislature provides funds for planning and studies which might not necessarily lead to specific individual projects was first adopted by the Legislature in 1964 when it appropriated \$115,000 for the purpose. Subsequently, the Legislature continued to support this concept at \$100,000 a year with the exception of 1966 when it went to \$250,000.

The need for such studies grows out of the dynamic relationships of growing campuses with their surrounding communities and with the fact that each campus is in itself a large community often with the internal physical problems of a city of substantial size. These problems include traffic, utilities, human amenities for students and faculty and visitors, and the zoning problems of the surrounding private community. We reiterate that this type of planning is imperative if each campus is to avoid serious costly future problems.

(c) Advance planning studies_____\$125,000 We recommend approval.

The concept of long-range master planning studies and studies of peripherally related subjects was first implemented by the Legislature in the Budget Act of 1967 which appropriated \$300,000. The Budget Acts of 1968 and 1969 provided \$200,000 each and the present proposal is somewhat reduced from that level. The funds will be used on each of the nine campuses to update the long-range development plan and for other specialties such as geological studies recreation and open space studies, utilities master plan studies and other related problems. At the statewide level some of the funds will be used for research in architectural and engineering features of building projects to help determine whether new concepts and techniques would be applicable, effective and cost saving.

In the past we have strongly supported the approach as proposed and we continue to do so on the premise that it is a prudent investment which can ultimately result in significant economies as the various campuses continue to expand.

UNIVERSITY OF CALIFORNIA

Item 317 from the Capital Outlay Fund for Public Higher Education Capital Outlay Budget page 52

Requested 1970–71	\$1,997,000
Recommended for approval	1,997,000
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

The amount proposed will provide for 54 minor construction and improvement projects at nine university campuses and three agricultural field stations. The campuses original proposal of \$9.7 million was twice reduced by the University because of anticipated funding constraints to a final request of \$3 million. As indicated by the final budget request, that amount was further reduced. Considerable effort is expended by the campuses to determine their minor capital outlay needs, to develop supporting material and to establish priorities. These requests are carefully reviewed by the University and systemwide priorities are established.

In our analysis of the University's 1969-70 minor capital outlay program, we pointed out that the funding level for this program has not kept pace with rising construction costs. Since the amount currently requested is actually \$11,000 less than appropriated in the current year, it too falls far short of offsetting rising construction costs and meeting University needs. The result of this fixed funding level has been the accumulation of a significant backlog of minor construction and improvement projects.

Table 1 contains a summary of the projects proposed at each campus.

Table 1
Summary of Minor Construction Proposals for 1970–71

•			Justifi	cation		
			,	Improve		
	Number		Improve	utilities or	Correct health and	* # .
Campus	of projects	$space\ deficiency$		rechanico services	l safety deficiencies	A mount
Berkeley	8	0	4	3	1	\$297,800
Davis	4	4	0	0	0	260,000
Irvine	4	1	2	1	0	144,400
Los Angeles	8	0	1	2	5	287,100
Riverside	7	1	1	2	3	148,000
San Diego	3	1	1	1	0	140,200
San Francisco	7	2	1	2	2	127,400
Santa Barbara	4	0	0	. 1	3	185,400
Santa Cruz	6	1	1	1	3	211,700
Ag. Field Stations	3	<u>. 0</u>	3	0	0	195,000
Total	_ 54	10	14	12	18	\$1,997,000

The following is a brief description of the kinds of projects in each category shown in Table 1.

1. Correct space deficiency

The projects included in this category are related to developing existing or new space in order to adequately accommodate an on-going program or a new program. Included is the construction of new facilities as well as the completion of unfinished space.

2. Improve space utilization

The projects included in this category provide for the conversion or remodeling of existing space to accommodate an expanded program or to alleviate overcrowding. This type of project is often necessitated by changing enrollment and curriculum requirements or the advancing state of the art. Frequently, this type of project is the result of the program shifting that takes place following completion of new facilities.

3. Improve utilities or mechanical service

This category includes projects to provide alterations and additions to utilities or mechanical service to accommodate new facilities, additional equipment or a specialized program request. On the older campuses, this often amounts to replacement or major repairs to the existing systems.

4. Correct health and safety deficiencies

The projects identified under this category eliminate health and/or safety hazards by replacing, updating or installing new equipment, making physical modifications or installing specific safety devices.

We believe the foregoing program is below the minimum that can be tolerated without progressive deterioration of the physical plant, the growth of functional deficiencies and inadequate space utilization. In our Capital Outlay summary we suggested a possible source of additional capital outlay funds. This item might be considered for augmentation from that source.

CALIFORNIA STATE COLLEGES

Item 318 from the Capital Outlay Fund for Public Higher Education Capital Outlay Budget page 85

Requested 1970–71	\$244,000
Recommended for approval	244,000
Total recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

A number of projects at each legislative session are proposed to be funded completely at one time for both working drawings and construction. Usually, these are either relatively simple and uncomplicated projects such as site development and utility extensions or relatively small individual projects whose total cost will be well under \$1 million, such as a small specialized lecture hall building whose cost may run between \$300,000 and \$500,000. In such instances it is considered essential that each proposal presented to the Legislature be based on well-developed preliminary plans, a reasonably firm estimate and definitive outline specifications.

No funds are ordinarily available in the general support programs of either the individual colleges or the Chancellor's office to provide documentation on which the Legislature can base its deliberations. Therefore, this item proposes a lump sum appropriation to the trustees which will be parceled out as individual projects are authorized to architects who will then prepare the necessary background material. Whatever is expended on each individual project becomes part of the ultimate total cost of that project and represents, generally speaking, part of the architectural service fees. Over a period of many years, we have repeatedly expressed our opinion in favor of this approach as being essential to meaningful and effective review of project proposals.

By way of emphasis, it should be noted that with respect to large, expensive or complicated projects, the financing proposal is usually on a phased basis with working drawings proposed in one year and construction funds in a subsequent year. Where working drawings only are being proposed, we departed from the approach mentioned above several years ago on the premise that after many years of accumulating statistics as to costs, design features, and general nature of the various types of buildings, it was possible to establish a reasonable basis for estimating the potential cost of a given project and thereby eliminating advance funds for preliminary plans. The working drawings financing then includes sufficient funds to also cover the cost of preliminary plans and outline specifications. Through the medium of the State Public Works Board, control is exercised so that working drawings cannot proceed until satisfactory preliminary plans and outline specifications have been presented to the board. Subsequently, when construction funding is proposed, either in the budget immediately following or in any year thereafter, preliminary plans and outline specifications or partially completed working drawings and fairly firm estimates are available so that it is possible for the Legislature to make a well-founded decision

on the construction financing of each project of this type. Thus far this new approach has worked quite well, due partly perhaps to the fact that the total construction program has been significantly decreased principally because of fund shortages.

In any case, we believe that one of the most significant elements in capital proposals in the next few years will be the expansion of utility systems and site development and the upgrading of existing inadequate and malfunctioning utility systems. The proposal, therefore, appears to be a reasonable amount to accomplish the objectives and we recommend approval.

CALIFORNIA STATE COLLEGES

Item 319 from the Capital Outlay Fund for Public Higher Education Capital Outlay Budget page 85

Requested 1970-71	\$252,500
Recommended for approval	252,500
Recommended reduction	- None

ANALYSIS AND RECOMMENDATIONS

Projections of increasing demand for college education well into the future, combined with an increasing scarcity of funds for capital investment in college facilities, makes it imperative that existing college plants be carefully master planned and that these master plans be readjusted from time to time to maximize the utilization of existing campuses on the most economical basis possible.

This proposal would provide an average of \$12,500 for each of the existing 19 campuses and \$5,000 for each of the three new campus sites which have been purchased but not yet developed at Ventura, San Mateo and Contra Costa. At the latter three sites the money would provide support for activities required to assure that the surrounding community will develop in a way that will complement the campus and not interfere or clash with it. It is our opinion that these master plan proposals represent prudent and necessary investments. We recommend approval.

CALIFORNIA STATE COLLEGES

Item 320 from the Capital Outlay Fund for Public Higher Education Capital Outlay Budget page 86

Requested 1970–71	\$2,000,000
Recommended for approval	2,000,000
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend that the Department of Finance be directed to review and revise if necessary, the State Administrative Manual definitions of

minor capital outlay projects to insure that the Support Budget is relied upon for the purchase of equipment required for new, expand-

ing or developing curriculums.

The amount requested represents a lump sum appropriation to the Trustees of the California State Colleges to be allocated for minor construction and improvement projects at the 19 state college campuses. For the first time, the Governor's Budget does not identify specific projects at each campus by budget page and line. This new approach delegates authority to the trustees to make the final decision with respect to the need for specific projects requested by individual campuses. It is our understanding that subsequent budgets will identify, on a postaudit basis, the minor capital outlay project allocations made by the Trustees during the previous fiscal year. We have in the past identified the need to review administrative practices with respect to this program because of misdirected effort. The proposed approach offers one solution to the problem by giving the Trustees the flexibility to meet the changing needs of the college campuses in a more timely fashion and reduces the administrative effort required in the Department of Finance. We propose to review this program on a postaudit basis to insure that the funds are administered wisely.

The success of this approach also depends upon the adequacy of the State Administrative Manual guidelines for determining appropriate minor capital outlay projects. We believe that State Administrative Manual procedures and definitions should be thoroughly reviewed and reconsidered in light of this new approach to funding the state colleges' minor capital outlay program. Our specific concern is with the use of minor capital outlay funds to purchase equipment for new, expanding or developing curriculum. We understand that the state college campuses submitted minor capital outlay requests for 1970-71 totaling \$239,800 for this purpose. Approximately \$333,500 was allocated for this purpose in the minor capital outlay program for the current year. The significance of diverting these requests to minor capital outlay is to compound the already unlimited demand on the limited funds available as well as preclude adequate legislative review of all appropriate academic program costs. We therefore recommend that the Department of Finance be directed to review and revise, if necessary, the State Administrative Manual definitions of minor capital outlay projects to insure that the Support Budget is relied upon for the purchase of equipment required for new, expanding or developing curriculums.

CALIFORNIA STATE COLLEGES

Item 321 from the Capital Outlay Fund for Public
Higher Education Capital Outlay Budget page 85

Requested 1970–71	\$4,967,100
Recommended for approval	4,967,100
Recommended reduction	None

\$150,000

California State Colleges—Continued ANALYSIS AND RECOMMENDATIONS

This item proposes a schedule of 23 equipment appropriations for projects previously funded for construction at various campuses. Most of these projects are already under construction and some have been completed but require additional equipment as enrollment in the buildings expands. The proposals have been carefully screened and generally represent virtually irreducible minimums needed to operate the buildings and to meet enrollment projections. As in prior years, equipment appropriations continue to be proposed on a one-year availability basis on the premise that since the equipment is needed as soon as possible the funds should be committed within the budget year.

Bakersfield

(a) Equip—initial buildings ______\$463,000 We recommend approval.

The Budget Acts of 1967 and 1968 together with prior allocations for preliminary plans, provided over \$2,055,000 for working drawings and construction of a complex of so-called "initial buildings" which would provide space for the establishment of a general curriculum on this new campus. The buildings while mostly of one and two-story, wood frame construction are designed to have a fairly long life expectancy. They will provide facilities for all elements in the curriculum including administrative space. Ultimately, as the permanent buildings are developed, the initial buildings will be used as staging areas and finally they will become a special school within the college with some specialized emphasis.

The plan calls for about 80,000 gross square feet of area with a net assignable area in excess of 64,000 square feet. The equipment proposal includes many types of equipment for science laboratories, art spaces, offices, lecture rooms, library, etc. As a consequence of the conglomerate nature of the equipment and the complex in which it is to be placed and of the relatively low cost for this type of construction, it becomes virtually impossible to make a direct comparison between cost of equipment and cost of construction. However, based on similar experience at campuses such as San Bernardino, Fullerton and San Fernando, the equipment list details indicate a reasonable and justifiable approach.

Fresno

(b) Equip—art building ______ We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans, provided over \$1,336,000 for working drawings and construction of a new art building having over 38,000 square feet of gross area with about 23,000 square feet of net assignable area. The building was intended to provide six art activity classrooms, a graduate studio, a lecture classroom and a display gallery plus faculty office stations and various auxiliary spaces. On the basis of existing space utilization standards, it was calculated that the building would have a capacity of 216 FTE students. A number of delays occurred which set

the completion of the building back several years. The most significant one being the rejection by the trustees of the first design proposal which was considered unsatisfactory and unsuitable for the campus. The building is now under construction and is expected to be completed late in 1970.

The equipment proposal represents the only increment and on the basis of the cost of the project will be about 10 percent which is average for small fine arts buildings. Therefore the proposal appears to be justified.

Fullerton

(c) Equip—third floor converted library \$124,000

We recommend approval.

The five-story library structure on this campus was initially designed with excess space which was to provide interim classroom facilities with a capacity of over 2,000 FTE students. As other new buildings were developed, classroom activities would gradually be phased out of the building and the space converted to library uses.

The Budget Act of 1969 together with a prior allocation for preliminary plans, provided a total of about \$167,000 for remodeling the third floor of the library which consisted principally of removing temporary partitions, rearranging lights and air-handling systems and generally putting the space into proper condition to be used as stack and reading area. It is anticipated that the work will be completed by September of the current year. The proposal for equipment covers the conventional library devices such as stacks, tables, chairs, etc. The amount is statistically in line with what has been provided for similar floor areas. On this basis the proposal appears justified.

(d) Equip—administration-business administration building _____ \$282,000

We recommend approval.

The Budget Acts of 1967 and 1968 together with prior allocations for preliminary plans, provided a total of over \$4,330,000 for working drawings and construction of a multistory building having approximately 134,500 square feet of gross area with a net usable area of over 82,600 square feet. The building is intended to house the school of business administration and economics and, based on existing utilization standards, it is calculated to have a capacity of 1,328 FTE students. Most of the space will be in lecture type classrooms with some specialty areas and offices.

The equipment proposal represents less than 7 percent of the cost of construction which is historically characteristic of large buildings devoted principally to simple lecture classroom space. On this basis

the proposal appears to be justified.

(e) Equip—art building _____ \$95,200

We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans provided over \$2,370,000 for working drawings

and construction of a new permanent art building for this campus which would have over 74,000 square feet of gross area with a net assignable area of about 47,000 square feet and would provide 240 student stations plus auxiliary facilities. On the basis of current utilization standards, this would calculate to a capacity for 252 FTE students.

The Budget Act of 1969 provided \$210,300 as a first increment of equipment and the present proposal is a second and final increment making a total of \$305,500. This represents a little more than 12 percent of the cost of construction which is a statistical average for fine arts facilities of this size. On this basis the proposal appears justified.

(f) Equip—engineering building _____ \$116,400 We recommend approval.

The Budget Acts of 1967 and 1968 together with prior allocations for preliminary plans, provided approximately \$3,100,000 for working drawings and construction of an engineering building complex consisting of three elements with a gross area of about 72,000 square feet and a net assignable area of 49,000 square feet. The building which is expected to be completed and ready for occupancy in the fall of 1971 is calculated to have an instructional capacity of 229 FTE students based on current space utilization standards. In addition, there will be over 40 faculty office stations.

The engineering program has been underway on this campus for some years and has been accommodated temporarily in the letters and science building. The Budget Acts of 1967, 1968 and 1969 provided a total of over \$651,000 to equip the on-going program. All of the equipment will be moved to the new complex when it is ready for occupancy. The present proposal would constitute the fourth of six increments bringing the interim total to almost \$768,000 or slightly less than 25 percent of the cost of constructing the project. Historically, engineering facilities have experienced equipment costs running between 30 percent and 50 percent of the cost of construction depending on the specific type of engineering element considered. Some engineering elements are rather large, simple and basically inexpensive buildings which house large volumes of very expensive equipment producing a high ratio of equipment cost to construction cost. In this instance the proposal appears to be in line and under statistical averages. On this basis we believe the proposal is justified. Hayward

(g) Equip—science building _____ \$85,000 We recommend approval.

The science building on this campus which was completed and occupied in 1963 was substantially oversized for science purposes upon completion because it was in effect a reproduction of a science building designed for the San Fernando campus. Therefore, initially it served many other purposes as well as science needs. The concept was similar to that used at Fullerton in which a single large building was constructed with an ultimate capacity for science facilities when the campus

reached an enrollment of 10,000, while in the interim it served practically every other purpose on the campus being the single permanent building available for some years. On the Hayward campus, each year some extraneous activity has been removed from this building to a new building as it was completed and the vacated space has then been converted to science uses and equipment was provided in six steps starting with the Budget Act of 1963. To date, over \$1,700,000 has been provided for science equipment including computer facilities.

The present proposal is the seventh increment with a final one now scheduled for 1972. It is impossible to make statistical camparisons in situations of this type wherein equipment has been drawn out over a long series of increments. Consequently, our position is based principally upon a detailed review of the proposal and its relationship to altered facilities and expanding science programs. On this basis the proposal appears to be justified.

Humboldt

(h) Equip—biological science addition _____ \$489,000

We recommend approval.

The Budget Acts of 1965 and 1966 together with preliminary plans allocations and subsequent cost augmentations, provided over \$2.454,000 for working drawings and construction of an addition to the existing biological sciences building which would add a gross area of about 71,000 square feet with a net assignable area of approximately 42,000 square feet.

The Budget Act of 1968 provided \$108,100 for a first phase of equipment requiring long lead time. The building is scheduled to be completed and occupied in the fall of the current year and the major equipment is now required. The present proposal is a second and final increment which would provide a total of nearly \$600,000. Based on statistical experience for biological science buildings we find that the average equipment cost has been close to 30 percent of the cost of construction. This proposal represents a total of approximately 25 percent. On this basis we believe the request is justified.

Long Beach

(i) Equip—library building, II _____ \$210,000

We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans, provided over \$5,400,000 for working drawings and construction of an addition to the existing library building which was referred to as Phase II. The project is a five-story structure having over 201,000 square feet of gross area with a net assignable area of about 141,000 square feet. The building is under construction and is expected to be ready for occupancy in the fall of this year. Together with the existing library, it is anticipated that the complex will provide library facilities for an enrollment of 15 500 FTE students.

The Budget Act of 1969 provided \$400,000 for a first phase of equipping the new addition and the present proposal, which is the

second and final phase, would bring the total to \$610,000 or about 11 percent of the cost of constructing the project. Historically, equipping libraries has run between 9 and 12 percent of the cost of construction depending upon the phase of the project and whether the required equipment had a preponderance of bookstacks as compared with chairs and tables or carrels. The proposal appears to be justified.

(j) Equip—psychology building _____ \$100,000 We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans, provided over \$2,790,000 for working drawings and construction of a specialized psychology building of four stories having a gross area of about 85,000 square feet and a net assignable area of slightly over 53,000 square feet. The building was to have 842 student stations with a capacity based on current utilization standards of about 945 FTE students.

The Budget Act of 1969 provided \$300,000 for a first increment of equipment which together with the second and final one now proposed would make a total of \$400,000 representing about 14 percent of the cost of construction. Historically, psychology buildings have run between 15 percent and 17 percent for equipment since they do represent some aspects of a laboratory type facility requiring specialized and expensive equipment. On this basis it would appear that the proposal is justified.

(k) Equip—engineering building, II _____ \$534,800 We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans, provided over \$3,550,000 for working drawings and construction of a second engineering building on this campus. The building was contemplated as having a gross area of almost 84,000 square feet with a net assignable area of over 55.500 square feet which would provide space for 460 FTE students based on the current space utilization standards, plus offices for 32 faculty members. The Budget Acts of 1968 and 1969 provided two increments of equipment totaling \$424,700. The present proposal would be the third increment with a fourth at \$375,000 projected for the 1971 Budget. These four would make a total of over \$1,330,000 which would represent over 37 percent of the cost of constructing the project. As we have pointed out in previous engineering equipment proposals, the statistical history on such projects runs from 30 percent to 50 percent depending upon the nature of the project element. In some relatively simple open shop-like buildings where the basic structural cost is quite low, there is often contained a large volume of highly sophisticated and expensive equipment which produces a very high ratio of equipment cost to construction cost. In this instance we have reviewed the equipment in detail and we believe it is all essential to the functioning of the engineering program on this campus.

Los Angeles

(1) Equip—classroom building No. 2______\$213,200 We recommend approval.

The Budget Acts of 1961 and 1964 together with prior allocations for preliminary plans, provided over \$6,490,000 for the working drawings and construction of a multistory complex known as classroom building No. 2. The project has had a long and tortuous history based upon the fact that after the appropriation was made originally, it was determined that in order to conserve the very tight land base on this campus the complex should be superimposed over a two-story parking structure. The project consists of two buildings perched on the parking structure and having a gross area of 173,000 square feet with a net assignable area of about 105,000 square feet consisting principally of lecture type classrooms which are calculated, on the basis of current space utilization standards, to have a capacity of almost 3,000 FTE

students. The project was completed in December of 1969.

The Budget Act of 1969 provided \$420,300 for a first increment of equipment. The present proposal, which will be the second and final increment, will bring the total to \$633,500, representing slightly under 10 percent of the cost of construction. Historically, buildings of this type have run between 7 percent and 11 percent for equipment. On this basis the present appears to be instifted.

this basis the proposal appears to be justified.

(m) Equip—administration building, addition _____ \$28,300

We recommend approval.

The Budget Act of 1962, 1963 and 1964 together with prior allocations for preliminary plans, provided over \$2,750,000 for working drawings and construction of an addition to the existing administration building. The project was long delayed because of design problems and the question of the ultimate size of the building. Because of the very tight land base on this campus, the decision was finally made to build a nine-story building which in effect straddles the existing building while partly covering an existing courtyard and partly integrated with the second story of the existing building. The new building has about 77,400 gross square feet of area with about 48,000 square feet of net usable area.

The Budget Act of 1969 provided \$168,000 for a first increment of equipment which together with the second and final increment in the current proposal would make a total of \$196,300 or about 7 percent of the cost of constructing the project. This is fairly characteristic, on a statistical basis, for buildings of this type. The proposal, therefore, appears to be justified.

Sacramento

(n) Equip—teacher education building _____ \$196,800

We recommend approval.

The Budget Acts of 1966 and 1967 together with preliminary funds previously allocated, provided a total of over \$1,930,000 for working drawings and construction of a building which would have about 57,000

square feet of gross area and almost 39,000 square feet of net assignable space. It was calculated on the basis of existing space utilization standards that this would provide for about 1,110 FTE students in the division of teacher education and the department of foreign languages. In addition, there will be approximately 75 faculty stations. It is anticipated that the building will be completed by the fall of this year.

The present proposal, which is for completely equipping the building, represents slightly less than 10 percent of the cost of constructing the project. Statistically, the cost of equipping buildings which are essentially lecture classroom space has run between 7 percent and 11 percent of the cost of construction. This proposal falls within that range and therefore appears to be justified.

San Bernardino

(o) Equip—library classroom building _____ \$246,900

We recommend approval.

The Budget Acts of 1966 and 1967 together with previously allocated preliminary plan money, provided a total of over \$4,912,000 for working drawings and construction of a combination library and classroom building having a gross area of more than 165,000 square feet with a net assignable area of about 110,000 square feet of which a substantial portion will be devoted to interim classroom use. The basic building, when fully utilized as a library, is expected to provide capacity for a campus enrollment of at least 3,800 FTE students. The interim classroom use will accommodate about 1,300 FTE students plus faculty offices.

The Budget Acts of 1968 and 1969 provided a total of \$368,900 for two increments of equipment which together with the current proposal would make a total of over \$615,000. Normally, we relate the cost of equipment to the cost of constructing each type of building. However, in this case there is no good statistical basis for making a comparison because of the fact that the building has conglomerate uses as both library and classroom in which the classroom space will gradually be phased out and the equipment will move with it so that the vacated space will then need to be reequipped for library purposes. Consequently, our only approach is to review the proposed equipment in detail, compare it with the spaces to be supplied and with the inventory of previous equipment. On this basis the proposal appears to be justified.

San Diego

(p) Equip—library classroom building _____ \$427,500 We recommend approval.

The Budget Acts of 1964 and 1966 together with prior allocations for preliminary plan money, provided a total of over \$8,200,000 for working drawings and construction of a new library-classroom building having over 315,000 square feet of gross area with a net assignable area of about 243,000 square feet which is intended to provide ultimate library capacity for a campus enrollment of about 16,000 FTE students. Initially, part of the library will be used for classrooms with a total

capacity of about 2,200 FTE students based on current space utilization standards. The building is scheduled for occupancy late in the current year.

The Budget Acts of 1968 and 1969 provided \$400,000 for two increments of equipment which together with the current proposal would make a total of \$827,500. As mentioned in the project above concerning the library at San Bernardino, it is not practical to make any statistical comparisons in this case because of the conglomerate nature of the activities in the building. Consequently we have reviewed the proposal in detail, and compared it with proposed space uses and with inventory of available equipment. On this basis, the proposal appears to be justified. It should be recognized that this equipment will not be the final increment for the library since it includes classroom equipment which will be moved out of the building as the classrooms are phased into other buildings. The vacated space will then be equipped with conventional library equipment such as bookstacks, tables, carrels, etc.

San Francisco

(q) Equip—library addition \$400,000

The Budget Acts of 1965 and 1966 together with prior allocations of preliminary plans money, provided a total of over \$3,600,000 for working drawings and construction of an addition to the existing campus which would add approximately 126,500 square feet of gross area and about 93,000 square feet of net assignable area. It was anticipated that this would result in a library facility large enough to serve the needs of a total enrollment of 16 000 FTE students. The building is scheduled for completion by the late fall of this year.

The equipment proposal represents the first of two increments with the second to come in 1971 at \$225,000 making a total of \$625,000. This represents over 17 percent of the cost of construction which statistically would be excessive for the purpose. However, since it is an addition to an existing library in which an exceptionally high proportion of the space will be used for bookstacks and audio-visual purposes, the equipment total becomes distorted as a result. We have examined the proposal in detail and at least for the increment proposed there appears to be ample justification.

San Jose

(r) Equip—business classroom building _____ \$150,000 We recommend approval.

The Budget Acts of 1963 and 1965 together with prior allocations for preliminary plans, provided a total of over \$4,420,000 for working drawings and construction of a building having a gross area of about 128,000 square feet with a net assignable area of nearly 77,000 square feet. The project was intended to house principally the department of business administration education. The project's history has been one of many differences of opinion concerning its ultimate capacity and its relationship with certain existing spaces which were proposed to be altered. These problems were not finally resolved until last year when the project was allowed to go to bid. Its present target date is approximately the

middle of 1971. The current proposal is significantly less than has historically been provided for buildings of this type and it is assumed that there will be additional amounts for equipment proposed in the future. In any case, the amount requested appears fully justified.

(s) Equip—corporation yard _____ \$65,000 We recommend approval.

The Budget Act of 1967 provided \$500,000 for the purchase of the American Can Company plant lying approximately half way between the main campus and the north campus. The budget also provided \$200.000 to make alterations and modifications so that the property would be made suitable for use as a general corporation yard, shop and storage facility.

The Budget Act of 1968 provided a first increment of equipment at \$65,000. The present proposal for the same amount would make a total of \$130,000 which is quite reasonable in view of the size of the property and the kinds of shop storage and materials handling equipment that are required.

Sonoma

(t) Equip—science building No. 1_____ \$134,000

We recommend approval.

The Budget Acts of 1962 and 1963 together with prior allocations for preliminary plans, provided well over \$3,100,000 for working drawings and construction of a three-story science building with a gross area of about 100,000 square feet. The building was intended to have part of its space used on an interim basis for nonscience purposes.

The Budget Acts of 1966 and 1967 provided over \$751,000 for equipping the building. The current proposal represents the final phase resulting from the removal of nonscience activities from the building to other spaces. Because of this series of steps, it is virtually impossible to draw statistical comparisons with other science buildings. However, we have examined the equipment list in detail and have related it to the spaces to be served and the proposal appears to be fully justified.

Stanislaus

(u) Equip—performing arts complex \$264,000

We recommend approval.

The Budget Acts of 1966 and 1967 together with prior allocations for preliminary plans, provided over \$2,250,000 for working drawings and construction of a performing arts complex having a gross area in excess of 63,000 square feet with a net assignable area of over 39,500 square feet. This project represents the first phase of permanent facilities for art, music and drama, including a little theater, recital hall, rehearsal rooms, art gallery, practice rooms and offices as well as numerous auxiliary spaces. The project is calculated to have a capacity of about 374 FTE students and is scheduled to be completed in the fall of this year.

This proposal is the only equipment anticipated for the building. It represents less than 12 percent of the cost of construction which is well

within the statistical average for arts complexes of this type. On this basis, the proposal appears to be justified.

Cal-Poly Kellogg-Voorhees

(v) Equip—agriculture classroom addition _____ \$102,000

We recommend approval.

The Budget Acts of 1967 and 1968 together with prior allocations for preliminary plans, provided over \$1,725,000 for working drawings and construction of a building referred to as "agriculture classroom addition" which is in fact a totally separate and distinct building to be occupied mainly by agricultural teaching activities. The building has a gross area of over 50,500 square feet with a net assignable area of over 32,000 square feet which will provide for 206 FTE students generally in laboratory type spaces in landscape architecture, soil sciences and food and nutritional sciences. The capacity is based on the current standard for space utilization.

The Budget Act of 1969 provided \$112,300 for a first increment to equip the building and the present proposal is the second and final increment which would bring the total to \$214,300. This would represent something less than 13 percent of the cost of the building which is average for this purpose since the characteristics of the building fall between a typical lecture-classroom structure and a science structure. The amount proposed, therefore, appears justified.

Cal-Poly San Luis Obispo

(w) Equip—remodeled science building No. 1_____ \$90,000 We recommend approval.

The Budget Act of 1969 together with a prior allocation for preliminary plans, provided over \$163,000 for remodeling three laboratories in the old science building to convert them from botany to upper division chemistry. The space in the three laboratories is about 4,000 square feet of assignable area with each laboratory having 24 stations for botany. The new fixed equipment will provide 16 stations in each room for the relatively sophisticated upper division chemistry program.

The current proposal for equipment represents a first phase with the second to follow next year for a like amount as the program expands. The proposal appears to be in line for the purpose.

CALIFORNIA STATE COLLEGES

Item 322 from the Capital Outlay Fund for Public
Higher Education Capital Outlay Budget page 85

Requested 1970–71	\$27,329,000
Recommended for approval	24,130,000
Recommended for special review	3,199,000
Recommended reduction	None

California State Colleges-Continued ANALYSIS AND RECOMMENDATIONS

The total program contemplated in this budget for working drawings and/or major construction projects for the state college system is approximately at the same level as that provided by the 1969 Budget Act in direct state appropriations exclusive of those which were contingent upon the receipt of federal funds. For the budget year it is not anticipated that any federal funds will be available and no con-

tingent appropriation is being proposed.

The item covers 15 of the 19 campuses in a schedule including 10 working drawings projects for future construction and 16 construction projects, some of which had prior working drawing funds and the rest include working drawings in the construction proposal. Of the construction projects, half are for utilities or site development although the other half of the construction projects account for most of the construction dollars with a significant emphasis on additional academic capacity space. Collectively, the construction proposals will provide capacity for approximately 4,675 FTE students at six campuses, based on current, formal standards of space utilization.

Bakersfield

(a) Working drawings—central plant, II.....

We recommend approval.

The Budget Act of 1968 provided funds for the construction of socalled initial buildings on this campus which included, as part of the corporation yard area, a central plant which will supply heat and chilled water to the buildings in the complex. The plans for the central plant contemplated that ultimately it would be expanded to accommodate additional equipment required by the development of additional buildings. For example, this item under (c) proposes construction of

a permanent science building.

Essentially, the proposed project is for working drawings which will provide an expansion of the central plant to support the science building when it is ready for occupancy. The expansion will consist principally of an additional 7,500-pound-per-hour steam generator with distribution piping and a 700-ton water chiller. The new equipment will be housed in about 2,500 square feet of additional space to be added to the existing central plant. Ultimately, the cost of the expansion and the additional basic equipment will probably be on the order of \$450,-000. Obviously, the need for the expansion is tied to the construction of the science building. The two must go hand in hand and appropriate timing is to provide the working drawings for the central plant expansion at this time.

(b) Working drawings—classroom-office building I_____ \$100,000

We recommend approval.

This proposal covers the development of preliminary plans and the production of working drawings for a building having a gross area of nearly 52,000 square feet which will in effect become a multipurpose facility providing general purpose lecture rooms, some specialized facil-

ities such as language labs and an art studio, psychology labs, an accounting lab and administrative areas including 96 faculty offices, conference rooms, auxiliary spaces, etc. Based on existing space utilization standards, the building would have a substantial capacity at 1,050 FTE students. The current schedule is to have the building ready by the fall of 1973. Current projections would indicate that by that target date enrollments will probably exceed 1,500 FTE students in undergraduates and probably over 100 graduates. On this basis it would appear that the facilities ought to be available at the time of the projected enrollment. It is essential to keep the plan on schedule by providing working drawings at this time.

It should be pointed out that since this building will serve a number of curricula, as other new buildings are completed space in this building will be vacated and remodeling will be required as has been the case on a number of other campuses where the same approach has been

nsed.

(c) Construct—science building I ______ \$1,878,000 We recommend approval.

The Budget Act of 1969 appropriated \$110,000 for the preparation of working drawings for a permanent science building having a gross area of almost 39,000 square feet with a net assignable area of almost 24,500 square feet. Based on current space utilization standards, the building is calculated to have an FTE student capacity of 355 plus 36 faculty office stations. The structure is anticipated to be four stories in height, of reinforced concrete and structural steel frame with concrete block filler walls.

The most recent cost estimate is based on a projection of the anticipated construction cost index to December, 1970 or about the midpoint of the budget year. The estimate is \$37.45 a gross square foot for the basic building and \$51 a gross square foot at total project level which includes fixed group I equipment such as laboratory benches, fume hoods, etc., and all architectural fees and contingencies. Bakersfield is a relatively isolated area for construction purposes, and for a sophisticated building of this type it must be anticipated that costs will be higher than might be experienced in the Los Angeles basin, for example. We have examined the detailed preliminary plans and specifications and believe that generally the plan is a reasonable one.

It should be pointed out that the need for a science building on this new campus is crucial since the initial buildings alone can offer only a very limited curriculum as they contain very little in the way of science facilities. Consequently, if this campus is to move forward as a rounded four-year institution to serve the region and its needs beyond those that can be provided by the community colleges, a science

building is a necessity.

Chico

(d) Construct—central chiller plant.......\$1,110,000 We recommend approval.

The Budget Act of 1968 together with prior allocations for preliminary plans provided a total of almost \$80,000 for the preparation of preliminary plans and working drawings for a central chiller plant which is to be part of the new central steam generating plant. A number of buildings now under construction have been designed without integral sources of heating or cooling. These are intended to be supplied from a central plant. In addition, several buildings which have been remodeled for air conditioning will also rely on the central plant for their supply. The chiller plant will also have some excess capacity for future buildings. Initially, it will supply the life science building, physical science building, applied arts building, classroom-office building, library, science-music-speech building and the physical education building.

Since Chico has a long hot weather season, air conditioning is an essential element in making academic buildings function properly during high-temperature weather. As we have pointed out many times in the past, a central plant for both steam and chilled water is by far the most economical and efficient way to provide these necessary amenities. As compared with providing steam and chilled water generating equipment in each individual building, it is safe to say that the cost savings of a central plant will actually pay for that plant in less than 10 years, as a general rule. In any case, since a number of buildings have been designed without any other source of either steam or chilled water, it is essential that this project move ahead now.

Fresno

(e) Construct—industrial arts building _____ \$2,350,000

We recommend approval.

The Budget Act of 1968 together with prior allocations for preliminary plans, provided a total of almost \$90,000 for the preparation of preliminary plans and working drawings for a specialized building have a gross area of approximately 45,600 square feet with a net assignable area of nearly 29,000 square feet. The building will provide nine laboratories or shops having a capacity of 153 FTE students plus 20 faculty office stations and numerous auxiliary spaces. In addition, the project includes the remodeling of approximately 12,500 square feet in the existing industrial art building. The remodeling, unfortunately, will offset some of the new capacity space since it will be taking existing laboratories and remodeling them for noncapacity purposes.

The current cost estimate which is based on the anticipated construction cost index as of December 1970, is \$34 per gross square foot for the basic building and \$51.30 per gross square foot at total project level for the new space only. These figures do not include the alterations. The total project cost does include a substantial amount of fixed group I equipment plus all architectural fees, contingencies, etc. The project has been reviewed in detail and we do not believe that it contains any elements that are significantly excessive in cost or design. The cost estimate reflects the complex nature of the building which has many of the aspects of a regular scientific laboratory building with

special utilities, heavy electrical services, etc.

The industrial arts curriculum at Fresno is a very important one for which the campus has been noted for many years. Enrollment demand in this field has been increasing and is continuing to increase. Consequently, we believe that the project is justified and the cost is in line.

Fullerton

(f) Construct—utilities. 1969 _____ \$502,000

We recommend approval.

The Budget Act of 1969 together with a prior allocation for preliminary plans, provided a total of \$242,273 for the first phase of extending the utility tunnel together with the utilities contained therein to the administration-business administration building and the engineering buildings. The project was divided into two phases because it was recognized that there would be delays in starting the engineering buildings due to changes in the program. Originally, it was anticipated that the engineering buildings might be completed early in 1971. However, it subsequently developed that the engineering building probably would not be ready until the fall of 1971. Consequently, it was possible to delay the second phase to the 1970 budget.

The engineering building represents a new development in the eastcentral quadrant of the campus which is not now served by the heavy utility lines required for such a building. The project includes approximately 600 feet of concrete tunnel which will be part of the ultimate loop tunnel serving the campus, and then laterally from the tunnel to the engineering building there will be a series of extensions of concrete conduit in which will be housed the high-temperature hot water supply and return lines. Chilled water lines from the tunnel will be by means of direct burial using insulated transit pipes. Gas and domestic water will be by direct burial and sewer lines will also be extended. Sewer lines are never run in utility tunnels. In addition, there will be supervisory and control cables from the system at the boiler plant. All the utilities in the tunnel will be sized to take care of other buildings in accordance with the master plan. The runs from the end of the extended tunnel to the building will be sized to take care of the present engineering building plus the one planned for a future addition. The utilities are necessary to supply the building when it is ready for occupancy in the fall of 1971. We have examined the project in detail and we believe all of it to be essential and the cost is in line.

(g) Construct—conversion of space, science building, phase IV ______ \$790,000

We recommend approval.

The Budget Act of 1969 appropriated \$533,703 for working drawings and construction of the fourth phase of converting the science building. However, this was in item 387(h), which was a zero appropriation dependent upon the receipt of federal funds for other projects which would have released the state funds. Unfortunately, not enough federal funds were realized so that only \$39,500 was available which was used for working drawings.

The proposal covers approximately 28,000 square feet of net assignable area which will be converted from temporary administrative office use to 10 lecture rooms, one seminar room and 12 laboratories for biology, chemistry and general science. This will produce an additional capacity of 634 FTE students based on existing space utilization standards. The sharp difference in amount between the contingent appropriation of 1969 and the present proposal is due to an unfortunate error in calculating the cost of fixed group I equipment which is mostly concerned with the 12 laboratories. The earlier estimate had allowed only \$36,000 which was grossly inadequate. The current estimate includes \$330,000 for group I equipment which is reasonable for 12 laboratories requiring sophisticated laboratory benches, fume hoods, sinks and other costly fixed equipment and cabinetry. The space will be vacated upon completion of the administration building and its conversion to science purposes is part of the long-range plan for this building. The costs appear to be in line with the scope of the project. Occupancy is scheduled for the fall of 1971.

(h) Construct—education-classroom building _____ \$3,636,000 We recommend approval.

The Budget Act of 1968 together with prior allocations for preliminary plans, provided a total of \$173,000 for preliminary plans and working drawings for a six-story general classroom building having a gross area of approximately 93,000 square feet with a net assignable space of over 57,000 square feet. It will contain 36 lecture rooms and 16 so-called laboratories which collectively will provide almost 1,300 student stations having a capacity of 1,632 FTE students based on existing space utilization standards. Enrollment growth at this campus is expanding quite rapidly and by the time this building could be completed, which would be by the fall of 1972 at the earliest, its capacity will by any standards, be badly needed.

The current cost estimate is \$29.73 a gross square foot for the basic building and nearly \$39.75 a square foot for the total project which includes group I equipment, architectural fees and commissions, contingencies, etc. The estimate is based on the anticipated construction cost index as of December 1970 which at this time has been projected at 1350. The original estimate which was made in October of 1967 was based on an index of 1165. We believe the current cost estimate is realistic and at present market values is reasonable for this type of a building

building.

Hayward

(i) Construct—utilities, 1970 _____ \$200,000

We recommend approval.

The East Creek storm sewer was installed as part of the early utilities development on this campus. It consists of a 48-inch diameter reinforced concrete pipe over 3,000 feet long and in some places covered by fills as deep as 90 feet. Inspection several years ago indicated that the pipe was failing by being distorted into an oval shape due to inadequate reinforcement within the pipe. The original manu-

facturer of the pipe is no longer in business and the project is years past the guarantee period. In order to prevent total collapse of the pipe, it is necessary to take certain steps to force the pipe back into circular shape and reinforce it by grouting and other methods. Upon completion of the repair work, the Alameda County Flood Control District has indicated that it will accept the line for future maintenance. It is essential that the repair work be done as soon as possible because if the distorted sections fail completely, the cost of replacement will be very much higher than the repair work proposed now.

(j) Working drawings—conversion of space in science building _____ \$15,000

We recommend approval.

One of the two original permanent buildings on this campus was the science building which was a reproduction of the building designed for the San Fernando Valley campus. From the beginning it served many purposes other than those for which it was designed and as additional buildings were added to the campus these extraneous activi-

ties were gradually phased out.

The library administration complex which is now under construction is expected to be ready for occupancy late in 1971 at which time a substantial amount of space in the science building will be vacated and will need to be remodeled for the purposes for which it was designed. Actually, the bulk of the work will occur on the floor which now houses the main library among other nonscience activities. In any case, the remodeling will result in significant increases in FTE student capacity which have not been fully calculated at this time. It is essential that working drawings be funded now in order that the space can be converted on an orderly schedule.

Humboldt

(k) Construct—utilities, 1970 _____ \$114,000

We recommend approval.

This project proposal is a collection of utilities, repairs and extensions principally to serve new buildings but also to correct deficiencies in some existing systems. For example, there will be 800 feet of 10-inch water line, 2,000 feet of 6-, 8-, and 10-inch sewer line, over 500 feet of 36-inch storm drain and some high voltage feeder cable. The natural resources building and the biological sciences addition which are under construction are the ones principally in need of these utilities. The scope appears to be justified and the cost is in line with that scope.

Long Beach

(1) Construct—utilities, 1970 ______ \$350,000

We recommend approval.

The three science buildings on this campus are among the oldest of the permanent buildings. The growth in sophistication and techniques of the various programs offered in these buildings has made increasing demands on electrical power supplies resulting from the addition of many kinds of scientific equipment requiring electrical power. All of

the buildings are now running actually above rated capacity with the danger that failures or blackouts can occur at any time. All three of the buildings have inadequate distribution capacity within the buildings and two of them have inadequate main feeder capacity coming to the buildings. A study undertaken by a qualified engineering firm indicated the magnitude of the deficiency and this project proposes to correct the deficiencies by new main feeders, new distribution lines, switching gear, circuit breakers, etc. We have examined the project in detail and we believe it is justified. The cost is in line with the scope.

Sacramento

(m) Working drawings—utilities, 1970 _____ \$45,000

We recommend approval.

This project is principally to cover the extension of basic utilities to the site of the new library building. At present this building is scheduled for occupancy in September of 1972. Consequently, construction funds would not be needed until the 1971–72 fiscal year but working drawings should be prepared at this time. The program calls for an extension of the utility tunnel together with extension of heating supply and return lines, chilled water supply and return lines, electrical feeder power, storm drains, road and walk lighting and similar related elements needed to make the building site and the building usable.

We have no difference of opinion with respect to the need for these utility extensions and the cost, which at the present time is estimated at over \$880,000 at total project level. However, it should be pointed out that the projected target date for the availability of the building is most uncertain. The Budget Act of 1969 provided nearly \$6 million from the General Fund for the construction of the library building. However, due to the critical cash flow problems the project has been deferred and at this writing we have no idea when it will be rescheduled. For this reason we believe the projected target date is unrealistic and unattainable. Nevertheless, since only working drawings are proposed for the utilities and since a project of this type is not likely to change in its design or requirements because of a delay in the use of the working drawings, we believe that the working drawings appropriation should be made.

(n) Working drawings—business classroom building____ \$210,000 We recommend approval.

This project proposes the design of a multistory classroom building having almost 103,000 square feet of gross area with over 63,000 square feet of net assignable area which would provide 29 lecture rooms and three laboratories plus 222 faculty office stations, all to serve the school of business administration. Based on existing space utilization standards, the instructional capacity of the building is calculated at 2,186 FTE students.

The target date for this building, which would later require over \$4 million for construction, is the fall of 1973. General lecture room space is one of the prime needs on this campus even taking into account some

measure of increased utilization of existing space based on recommendations made to the Legislature in 1969. On this basis, we believe that it is prudent to move ahead with working drawings at this time.

San Diego

(o) Construct--central chilling plant and utilities, 1969 \$2,659,000

We recommend special review.

The Budget Act of 1969 together with prior allocations for preliminary plans provided over \$122,000 for the preparation of design and working drawings for a central chiller plant which would be adjacent to and part of the existing central steam plant. It would add approximately 6,000 gross square feet of area in which would be housed the chillers, pumps, controls and other auxiliary equipment. In addition, the project included the extension of chilled water supply and return lines principally to the site of the new library and to the site of the

new art building.

The library which is under construction and expected to be ready for occupancy by the fall of this year, is the largest single building on the campus and probably the largest single library in the system. It is a massive block type design with a great deal of interior space, requiring air conditioning. The building was designed without the equipment to provide a local source of chilled water or the space to house such equipment. It was intended that it would receive its supply from a central plant. Consequently, if the library is to be put to use this fall a source of chilled water for air conditioning is imperative. However, since the art building, which is also a relatively large structure, has been delayed and may not be available for occupancy until 1972, we question the need for the scope of chilling equipment included in the central plant. Consequently, we recommend that the project be held for special review in order to determine how much reduction can be made by deferring some equipment.

San Fernando

(p) Construct—library building _____ \$6,882,000

We recommend approval.

The Budget Act of 1967, together with prior allocations for preliminary plans, provided over \$352,000 for the preparation of preliminary plans and working drawings for a new central library building which would be a first phase of an ultimate building approximately twice the size. The first phase is designed at almost 190,000 square feet of gross area with over 133,000 square feet of net usable area. Construction funding was proposed in 1969 but was rejected by the Legislature.

The size of this first phase is intended to provide library facilities for an enrollment in excess of 10,000 FTE students which is expected to be reached in 1973. The building would have almost 2,600 reader stations and stack capacity for nearly 500,000 volumes. The target date

for occupancy is the fall of 1972.

The existing library which was the first permanent building on the campus serving many purposes initially, will become a multipurpose building providing college administration space, instructional space

and faculty offices. The exact changes to take place in the building have not yet been made final and probably decisions on this will wait until the new library is nearing completion. On the basis of the formula for providing reader and stack space, the existing library will fall considerably short of being able to handle an enrollment in excess of 10,000 FTE students. Consequently, adding this building to the campus is of prime importance.

The current cost estimate, based on a year-end construction cost index of 1350 is almost \$27.90 per gross square foot for the basic building and almost \$37.70 per gross square foot for the total project which includes fixed group I equipment, architectural fees, contract management, inspection, contingencies, etc. At current and anticipated market levels, this is a reasonable cost.

We should point out, as we have earlier in this analysis, that several libraries which were funded in the 1969 Budget Act have been stalled for lack of eash with no clear indication as to when this crisis will pass. Nevertheless, we believe we should recognize the need for the project by providing the necessary authorization at this time.

(q) Construct—education building _____ \$4,460,000

We recommend approval.

The Budget Act of 1968 together with prior allocations for preliminary plans, provided a total of \$202,000 for the preparation of design and working drawings for a general lecture classroom type of building which at that time was contemplated as having approximately 110,000 gross square feet of area. Since the initial appropriation for working drawings, the scope has been increased to almost 127,000 gross square feet with a net assignable of over 79,000 square feet. The capacity has been increased from 1,300 FTE students originally calculated to a present figure of 1,780 FTE students. The building will have 36 lecture rooms and 14 so-called laboratories, plus 219 faculty office stations. The projected target date for occupancy of the building is the fall of 1972. The principal occupant will be the school of education but until it expands its needs to the capacity of the building there will be interim use of some space for home economics and speech.

The current cost estimate based on a year-end construction index of 1350 is \$28.70 per gross square foot for the basic building and \$36.51 per gross square foot at total project level which includes fixed group I equipment, fees and commissions, contingencies. etc. The building is of relatively simple design and current market indications are that the estimate is reasonable for the purpose.

The enrollment growth on this campus by the time this building could be ready for occupancy is anticipated to be such that even with a more intensive utilization of existing classroom space, additional

space will be required to meet enrollment demands. On this basis, we believe the building should move forward.

(r) Working drawings—business and economics building \$196,000 We recommend special review.

California State Colleges—Continued

This project proposes the design of a relatively large structure having an instructional capacity of 3,000 FTE students presumably based on existing space utilization standards. It is anticipated that the building would have 47 lecture rooms and three laboratories plus 183 stations for faculty. Principally, the building would serve the school of business and economics. The preliminary proposal contemplates over 102,000 gross square feet of area with a net assignable of nearly 64,000 square feet. Based on a construction cost index of 1350, the current estimate is \$28.75 a gross square foot for the basic building and \$37.75 a gross square foot at total project level. However, it should be pointed out that by the time this building could be funded for construction the index will have substantially passed the figure mentioned and the cost will accordingly be higher.

In the previous project, we have noted that there would be a significant increase in capacity by 1780 FTE students based on presently accepted standards of space utilization. We do not believe at this time that an additional building, particularly one having almost exclusively lecture classroom space, should be considered until it has been possible to effectuate the maximum reasonable utilization of existing space that could be expected. On this basis, we suggest that the proposal needs to be carefully reviewed.

San Francisco

(s) Construct—life science building, phase II \$780,000 We recommend approval.

This project has had a long and tortuous history. Working drawings funds were first appropriated in 1964 at which time we raised questions based on the total lack of a program and project package. Subsequently, in 1965, construction funds were proposed even though at that time there were still many unresolved elements in the project. However, the appropriation for construction was made in the Budget Act of 1965. There were questions concerning the size of the building, its location and its relationship with another building to follow, the physical sciences building. The solution of all these delayed the project so that it did not go to bid for the first time until April of 1968 at which time the low bid was so high that all bids were rejected and additional work was done on the design. The project went to bid again in February of 1969 at which time it came in with a deficit of over \$1 million despite the fact that about \$700,000 worth of fixed equipment had been left out of the proposal to be funded at a future time. The total funds made available by appropriation and from preliminary plans allocations was \$6,409,470. To this was added over \$1 million in augmentation funds by action of the Public Works Board.

The project which consists almost entirely of laboratories is a ninestory building having over 180,000 gross square feet of area with nearly 109,000 square feet of net assignable area. It is now under construction and is anticipated to be completed and ready for occupancy by February of 1971. At that time it will be essential that the balance of the group I equipment should have been installed in order to make the California State Colleges-Continued

building fully operable. The present proposal is to finance the balance of the equipment so that it can be purchased and installed in time to meet the completion date of the building. We have reviewed this fixed equipment and we agree that all of the elements are necessary to a high quality life sciences program. Essentially, the fixed equipment will be similar to that provided in life science buildings on other campuses.

San Jose

(t) Construct—utilities, 1970 _____ \$80,000

We recommend approval.

There is an existing water well at the center of the campus immediately adjacent to the old central steam supply plant which will shortly be abandoned so that the site can be used for the construction of a new central library. In the meantime, a new central plant is under construction at another location and it is necssary therefore to provide a new well to supply it and the campus generally.

The project proposes the drilling of a 1,000-gallon-per-minute well with a 30-inch casing to a depth of 600 feet. In addition, complete new pump equipment including motor will be provided although the existing 15,000-gallon-hydropneumatic tank will be reused. An important element in the project is new distribution piping which is necessary both because of the new location and to improve the hydraulic characteristies of the system. We believe the cost is in line with the scope and the project is justified.

(u) Working drawings-remodel administration building for home economics _____ \$44,000

We recommend special review.

This proposal would result in remodeling the entire existing administration building having a gross area of 38,800 square feet which would produce a remodeled net assignable area of 19,400 square feet to be used for home economics instruction. Remodeling would provide 10 laboratories and 4 lecture rooms plus 24 faculty stations which collectively would result in a capacity of 275 FTE students based on the current standards of space utilization. The only part of the building which will not be remodeled for home economics is the area occupied by the central telephone exchange.

This project is one in a series of steps which is dependent upon prior steps moving ahead as planned. The administrative functions are proposed to be removed into the old library which would have to be remodeled for this and other purposes. However, the old library cannot be remodeled until the new library is complete and ready for occupancy. The new central library was funded for construction in the Budget Act of 1969 but because of critical cash shortages no action has been taken with respect to moving ahead on the construction. Since the new library is a very large building requiring a two-year construction period and thereafter the old library will require about one year to be remodeled for other uses, it would appear that even working drawings for the remodeling of the administration building are premature at this California State Colleges-Continued

time. On this basis, we believe the project should be carefully reviewed by the legislative committees.

Sonoma

(v) Construct—utilities, 1970 _____ \$210,000

We recommend approval.

This proposal covers only storm drainage facilities, actually main trunk lines on the east and west sides of the campus needed to pick up increased runoff resulting from development on the campus and to prevent erosion. The project requires 2 200 feet of 72-inch poured-in-place conduit including catchment structures and 2.600 feet of 48-inch precast conduit with catchment structures. Current rainstorms are clearly indicating the critical need for these facilities. The costs appear to be in line.

(w) Working drawings—classroom-office building No. 2 _ \$120,000

We recommend approval.

This project proposes the design and working drawings for a classroom building having a gross area of 50,000 square feet with a net assignable area of 31,000 square feet and including 17 lecture rooms and 4 laboratories plus 100 stations for faculty. Based on current space utilization standards, in the time span from 8:00 a.m. to 5:00 p.m., the building is calculated to have a capacity of 750 FTE students. The current cost estimate at a construction cost index of 1350 is \$23 a gross square foot for the basic building and \$29 a square foot at total project level. This indicates that the building will in all probability be a type V design rather than the conventional permanent type I which is usual for college and university campuses.

In accordance with current projections, the enrollment expected at. this campus in the fall of 1971 in the period from 8:00 a.m. to 5:00 p.m. is 3,750. If the span is stretched to 10:00 p.m., the enrollment will rise to 4,150. The current capacity of the existing facilities on the campus plus that of some remodeling in classroom building No. 1 is calculated at 2,500 FTE students in the 8:00 to 5:00 period. The earliest that this proposed building could be ready would be the fall of 1971, although this is optimistic. In any case, if this assumption is made the total capacity would then be 3.250 or about 500 short of the anticipated 8:00 to 5:00 enrollment. In a relatively small campus it would be difficult to achieve the increased space utilization goals recommended at the 1969 session of the Legislature. For this reason, we believe that working drawings at this time would be justified for this project.

(x) Working drawings—physical science mathematics building _____ \$300,000

We recommend special review.

This project proposes the design and working drawings for a relatively large science building having a gross area of 95,000 square feet with a net assignable area of 70,000 square feet, in accordance with information furnished us in a preliminary estimate made by the Chancellor's Office and dated October 31, 1969. However, an earlier state-

California State Colleges—Continued

ment made in connection with the program submission and justifications indicated a gross area of almost 195,000 square feet with a net assignable of almost 123,000 square feet. On the other hand, the Governor's Budget speaks of a project having 150,000 gross square feet which would have an instructional capacity of 1,381 FTE students in lecture and laboratory space. Furthermore, the budget indicates that the building, if kept on schedule, would be ready for occupancy in the fall of 1973. Other sources of information which we have lead to the conclusion that in the fall of 1973 the projected enrollment in the sciences would be about 1,182 FTE students, towards which the existing science building would provide a capacity of approximately 600 FTE students, indicating clearly that there are discrepancies concerning the need for the space proposed and particularly its quantity.

We would recommend special review for two reasons. The first is the previously cited question of size. The second reason is that the estimate in our possession covering the gross area of 95,000 square feet indicates a cost of over \$50 per square foot for the building construction alone, which is beyond all justification even at a construction cost index of 1350. If in fact the correct size of the building is 95,000 square feet, then a more equitable cost of about \$37 per gross square foot would indicate a need of not more than \$225,000 for working drawings. We suggest that both of these problems need to be resolved before the Legis-

lature takes any action.

Stanislaus

(y) Construct—conversion of space in classroom building \$127,000

We recommend approval.

The first major permanent building on this campus was known as the classroom building but it initially served many purposes including accommodations for the performing arts and administrative offices. The new performing arts building is nearing completion and the space now occupied by performing arts disciplines in the classroom building will be vacated. This amounts to approximately 12,600 assignable square feet. The vacated space is proposed to be converted for use by the psychology department and the speech correction program. In addition, more administrative space will be provided. It is estimated that the academic space resulting from the conversion will provide a capacity of 225 FTE students. The cost appears to be in line for the purpose and the conversion is essential if the vacated space is to be properly utilized.

Cal-Poly San Luis Obispo

(z) Working drawings—life science building_____ \$150,000

We recommend approval.

This project proposes the design and preparation of working drawings for a building having a gross area of about 52,200 square feet with a net assignable area of over 32,500 square feet, consisting principally of laboratories with some lecture classrooms and 35 faculty office stations plus a variety of auxiliary spaces. The building is calculated to have a capacity of 528 FTE students based on the current standards of space utilization. The cost is currently estimated at over \$35 a gross

California State Colleges-Continued

square foot for the basic building and nearly \$51 a square foot at total project level including group I equipment, fees, etc.

The life sciences are an important curriculum on this campus and one which will be significantly deficient in laboratory space by the time this building would be ready for occupancy which is now scheduled for the fall of 1973. On this basis, we believe that the working drawings should move ahead in order to keep the project on schedule if money becomes available for construction.

CALIFORNIA MARITIME ACADEMY

Item 323 from the General Fund Capital Outlay Budget page 150

Requested 1970–71	\$30,000
Recommended for approval	30,000
Total recommended reduction	$\acute{\mathbf{N}}$ one

ANALYSIS AND RECOMMENDATIONS

This item covers a single project to equip the new library building now under construction.

(a) Equip—library building _____ \$30,000 We recommend approval.

Prior budget acts provided over \$259,000 for working drawings and construction of the first regular library building on this campus. The building is of one-story, wood frame construction with a gross area of approximately 6,441 square feet and a net assignable area of approximately 4,896 square feet which provides an efficiency ratio of 76 percent. Heretofore, the only library facilities available on the campus had been housed in about 1,200 square feet in the residence building. The new building will have a capacity for about 20,000 volumes, of which 10,000 are now available, and 60 reader stations. The equipment consists of a wide variety of fairly standard elements that are found in most libraries with more than half the total proposed appropriation being for freestanding book stacks. It is difficult to make a direct comparison between this library and others that have been built at state institutions because it is so much smaller and simpler than the conventional library found at the state college and University campuses. We have examined the equipment list in detail and the items proposed appear to be necessary and justifiable. The costs for the various items are based on state catalog prices in most cases.

CALIFORNIA MARITIME ACADEMY

Item 324 from the General Fund Capital Outlay Budget page 150

Requested 1970–71	\$47,400
Recommended for approval	47,400
Total recommended reduction	$ m \acute{N}one$

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

The amount requested is for two minor construction projects to improve some of the academy's ancillary facilities. The most significant item is a \$40,000 proposal to rehabilitate the wharf. The wood decking on the 500-foot long by 20-foot wide wharf and catwalks will be replaced and wooden bulkheads will be constructed at specific intervals under the deck to serve as fire stops. The latter modification is pursuant to a recommendation made by the State Fire Marshal.

The remaining project is a \$7,400 proposal to repair damages to an access road which runs from the main entrance road to the area containing faculty residences. Inadequate drainage has caused a severe settlement of the shoulder of the road near the residences. An investigation by the Office of Architecture and Construction resulted in the recommendation that a subdrain be installed along the uphill side of the roadway for the total length of visible damage (approximately 500 feet). This would reduce the future possibility of excessive groundwater permeating the subgrade and causing additional settlement.

DEPARTMENT OF MENTAL HYGIENE

Item 325 from the General Fund Capital Outlay Budget page 162

SUMMARY OF RECOMMENDED REDUCTIONS		Analysis
	Amount	page
Delete (c) Mendocino State Hospital, air condition	ward	
buildings 124(b) and 125(c)	\$292,900	1115

ANALYSIS AND RECOMMENDATIONS

The amount requested finances a schedule of five major construction projects and one equipment proposed at 5 of the 15 hospitals operated by the department. One of the requests is a continuation of the department's program to redistribute mentally retarded patients into hospitals for the mentally ill to relieve overcrowding while four of the remaining five projects are for air conditioning. We understand that the department submitted its proposed major capital outlay program for the 1970–71 fiscal year to the Department of Finance in

Department of Mental Hygiene-Continued

July 1969. However, the Office of Architecture and Construction was not authorized to proceed with the preparation of preliminary plans and estimates until the second week of December, less than two months ago. Consequently, we have received no information to verify that the amounts requested are adequate to accomplish what is proposed by the department. We anticipate that this information will be available prior to committee hearings on the department's capital outlay budget. The following is a brief description of the projects proposed.

(a) Agnews State Hospital, remodel wards for mentally retarded patients _____ \$125,000

We recommend a special review.

The number of mentally ill patients at this hospital is declining and the department proposes to convert four east area wards in the receiving and treatment building for mentally retarded patients. It is anticipated that the amount proposed will provide for the necessary modifications to accommodate 132 acute crippled and infirm mentally retarded patients to be relocated from Porterville State Hospital. This includes specific modifications in the toilets, bathing areas and corridors to facilitate treatment and accommodation of this type of patient. The department also proposes to remove roach-infested acoustical tile ceilings in the main kitchen, serving area and the dishwasher room and provide a more suitable ceiling surface treatment. We cannot recommend the adequacy of the amount requested because of insufficient information.

(b) Agnews State Hospital, complete air conditioning of receiving and treatment building _____ \$250,000

We recommend a special review.

When this building was constructed in 1956, only the surgery suite was air conditioned, although duct work was provided throughout the remainder of the facility for the future installation of air conditioning. The Budget Act of 1965 provided \$38,900 to air condition the medical and surgical wards housing 31 patients each. The department anticipates that the amount requested in this item will provide for air conditioning the remainder of the building. The department estimates that \$250,000 will be required to purchase and install compressors, chillers, fans, pumps and controls along with the necessary adjustments to balance the completed system. We have no information to substantiate the adequacy of the amount requested.

(c) Mendocino State Hospital, air condition ward buildings 124(b) and 125(c) \$292,900 We recommend that this item be deleted.

These wards are located in a single-story reinforced concrete structure that was constructed in 1952 and which currently houses geriatric and bedridden patients. The department does not feel that the natural insulating qualities of the structure itself along with shade from surrounding trees and natural ventilation provide adequate patient comfort during the summer months. We do not believe the situation is

\$8,000

Department of Mental Hygiene-Continued

critical enough to justify the expenditure of scarce general funds at this particular hospital for air conditioning. We believe there is sufficient uncertainty as to the future of Mendocino State Hospital to warrant deferring any major building rehabilitation projects at this facility.

(d) Napa State Hospital, equip wards for mentally retarded patients

We recommend special review.

The Budget Act of 1969 appropriated \$568,520 to augment a \$434,500 allocation to remodel the interiors of six wards at Napa State Hospital which will eventually be occupied by 480 mentally retarded patients. We were not informed at the time of any future need for equipment funds, and at this writing have not received documentation to support this request.

(e) Stockton State Hospital, air condition ward building (Cottage E) _____ \$190,000

We recommend a special review.

This particular ward building is a two-story reinforced concrete structure with a clay tile roof which was constructed in 1949 and which houses 370 patients. The department is currently preparing to award a contract for \$345,575 to remodel this facility. These funds were appropriated by Item 413(a) of the Budget Act of 1966 for environmental improvement and will provide for such things as painting, floor renovation, fixture replacement and toilet and shower area renovation. The building currently houses geriatric and bedridden patients and is located in an area where summer temperatures frequently exceed 100 degrees. We believe the extreme temperature conditions and the greater degree of certainty concerning the future of Stockton State Hospital justify the proposed \$190,000 investment to air condition one of the ward buildings. However, we cannot recommend the adequacy of the amount requested.

(f) Porterville State Hospital, air condition wards, phase II \$142,100

We recommend a special review.

The Budget Act of 1968 appropriated \$1,373,700 to implement the first phase of a three-phase program to replace the evaporative coolers in 34 ward buildings at this hospital with a central air-conditioning system. This hospital is located in an area that experiences consistent high summer temperatures and the expansion of irrigation and impounding of water in the Porterville area has increased the humidity to the point where the existing evaporative coolers are no longer efficient and effective. The original project estimate for Phase II was \$1,118,200. We concur with the necessity to continue the air-conditioning rehabilitation program at this hospital, however, it is difficult to speculate at this time what will be accomplished for the significantly reduced \$142,100 currently proposed.

DEPARTMENT OF MENTAL HYGIENE

Item 326 from the General Fund Capital Outlay Budget page 162

Requested 1970–71	\$1,400,430
Recommended for approval	1,400,430
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

The Department of Mental Hygiene currently maintains 13 facilities to provide care and treatment for the mentally ill and the mentally retarded. These include four hospitals currently housing mentally ill patients, four hospitals housing mentally retarded patients and five hospitals housing both mentally ill and mentally retarded patients. In addition, the department maintains two neuropsychiatric institutes to provide research and training in the fields of mental illness and retardation. To maintain this investment in physical plant and to facilitate good patient care and treatment, the department is requesting \$1,400,430 for 113 minor construction and equipment projects at these 15 facilities. This is nine projects less than are underway in the current year although the amount requested represents an increase of \$4,406. Table 1 contains a summary of the projects proposed at each hospital.

Table 1

Projects by Institution and Justification						
Hospital	Number of projects	Improve patient environment	Health or safety improvement	Facilitate employee efficiency	Utilities or mechanical improvement	Amount
Hospitals for						
Mentally Ill				*		
Agnews	8	3	1	2	2	\$167,000
Atascadero	4	0	2	2	0	64,500
Camarillo	6	5	1	0	0	101,000
DeWitt	1	0	1	0	0	7,000
Mendocino	12	7	1	2	2	82,570
Metropolitan	7	1	3	0	2 3	79,660
Napa	14	6	1	2	5	156,900
Patton	5	1	2.	2	0	84,000
Stockton	14	5	2 \	3	4	103,200
	 .	_		_		
Total	71	28	14	13	16	\$845,830
Hospitals for Men- tally Retarded						
Fairview	11	5	1	5	0	\$62,200
Pacific	5	- 3	0	1	1	98,000
Porterville	3	0	1	2	0	135,800
Sonoma	12	3	4	2	3	131,000
				.		
Total	31	11	6	10	4	\$427,000
Institutes					200	
Langley Porter	8	2	. 1	5.	0	82,600
U.C.L.A	: 3	1	1	• 1	0	45,000
		_				
Total	11	3	2	6	0	\$127,600
Grand Total	113	$\frac{-}{42}$	$\frac{-}{22}$		20 \$	31,400,430

Department of Mental Hygiene-Continued

The department carefully screens the projects requested by the various institutions prior to final inclusion in a budget. The result is an overall minor capital outlay program which reflects similar emphasis from year to year. As indicated in Table 1, a significant number of the projects proposed are directed towards improving the environment for patients. In a sense these requests constitute a piecemeal approach to improving patient areas and updating the treatment program. However, until the future of the hospital system is more predictable this represents the most prudent approach. The projects proposed for this purpose include such items as toilet partitioning and other wet area improvements, the construction of personal care units, improved heating, lighting and ventilation throughout the wards as well as site development projects on the hospital grounds.

A continued upgrading of health and safety standards as well as changing program requirements lead to a continued need to upgrade health and safety provisions for patients and employees. Many of the projects proposed for this purpose are to satisfy Department of Public Health requirements or the State Fire Marshal. These types of improvements vary from fire and life safety corrections such as adequate exits and fire sprinkler systems to the installation of fly fans over kitchen doorways or improved bathing facilities.

The improvement of overall physical plant operations by facilitating employee efficiency often results in improved patient treatment. Projects proposed for this purpose include such items as the installation of grounds irrigation systems, the remodeling of office areas, kitchen modernization, the remodeling of medication rooms and nurses' stations as well as the construction of loading docks for ease of handling laundry and food carts.

The remaining column in Table 1 covers projects requested to modernize or increase the capacity of electrical service, replace water and sewer lines, and correct deficiencies in heating and ventilating systems.

MILITARY DEPARTMENT

Item 327 from the General F	and Capital Outlay Budget page 177
Requested 1970–71 Recommended for approval Total recommended reduction	35,000

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This item finances three separate projects to correct deficiencies at various armories located throughout the state. The department's request is \$158,850 less than the current year, resulting in a significant reduction in the number of projects undertaken. However, we do not believe this change will have any deleterious effect on the department's program.

Military Department-Continued

Two of the projects proposed are for ongoing facilities maintenance and have become an annual request. This includes a \$10,000 roof repair proposal for an unspecified number of armories and a \$15,000 proposal to surface the unpaved vehicle storage compounds and parking facilities at four armories. The latter program was initiated to correct a deficiency resulting from economy considerations made when some of the armories were originally constructed. The Modesto, Sacramento, El Centro and Santa Ana Armories are scheduled to receive new or additional paving at a total estimated cost of \$40.750 towards which the federal government is expected to contribute \$25,750.

The remaining project is a \$10,000 request to correct an erosion problem at the Torrance Armory. The vehicle and equipment storage yard on the southwest side of the armory building is separated from a railroad right-of-way by a steep embankment which slopes away from the yard. The embankment, which is on state property, has eroded to the extent that the fence surrounding the yard is no longer effective. The department proposes to construct approximately 540 feet of retaining wall to correct this problem permanently.

Resources Agency DEPARTMENT OF CONSERVATION

Item 328 from the General Fund Capital Outlay Budget page 181

Requested 1970–71	\$170,893
Recommended for approval	170,893
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

This item is to finance a schedule of five land acquisition proposals and one project to construct and equip a forest fire station. The \$170,-893 represents a significant reduction from the current year appropriation of \$492,185. The reason for such a cutback in the department's major capital outlay program relates to an administrative decision affecting the proposed funding level for the department's support programs which is discussed on page — of this analysis.

(a) Land acquisition—Tyler Creek Forest Fire Station...... \$5,000 We recommend approval.

The department plans to request funds for the construction of a new facility at this location in the 1972–73 fiscal year. The existing facilities are inadequate and a portion of the leased site is under the high water mark of Tyler Creek. It is proposed to purchase approximately two acres adjacent to the present fire station to provide a site for the future construction of permanent facilities.

(b) Land acquisition—Tularcitos Forest Fire Station____ \$10,000 We recommend approval.

Department of Conservation—Continued

This facility is located on the edge of Carmel Valley in Monterey County on a site leased from the California American Water Company. The lessor plans eventually to construct a dam which would inundate the present station site. The existing lease expires in 1975, and a new lease after that time would include a clause to vacate the property when the dam is built. The present facilities consist of two metal war surplus buildings which the department considers substandard and plans to replace. Because of the uncertainty as to the future availability of the present station site, the department proposes to purchase sufficient acreage nearby which will not be affected by the water company's plans and which will be of sufficient size to eventually accommodate a new facility.

(c) Land acquisition—Sandy Point Forest Fire Station____ \$2,000

We recommend approval.

The Budget Act of 1969 appropriated \$4,000 to purchase two acres adjoining this station site. This was to provide for parking and the construction of additional facilities and improvements. The existing site consists of 1.17 acres and is under lease from the County of San Mateo. This lease expires in 1970 and the county has offered to sell the land and improvements to the state for \$2,000. The department plans to construct a new station, built to current standards, on this expanded site. The new station is urgently needed because the combination barracks-messhall burned last year and station personnel are currently operating out of rented portable facilities which were moved onto the site.

(d) Land acquisition—Witch Creek Forest Fire Station \$11,000

We recommend approval.

The department's current lease for this station site expires in 1976. This one-acre site was acquired under a 24-year term lease for \$960. The present lessor acquired the property through probate and has expressed an interest in selling the property. The department indicates that this site is ideally located with respect to the overall county fire control plan. The \$11,000 requested for site acquisition is the department's estimate.

(e) Land acquisition—Hesperia Forest Fire Station _____ \$5,500

We recommend approval.

This station is presently operating on a .80-acre site leased from a property development corporation under a long-term agreement. The corporation has offered to sell the property to the state at an amount equivalent to back taxes owed and street improvement bonds outstanding. The \$5,500 requested by the department also includes the estimated acquisition costs.

(f) Construct—Eagle Lake Forest Fire Station _____ \$133,190 (g) Equip—Eagle Lake Forest Fire Station ____ \$4,203

We recommend approval.

Department of Conservation-Continued

This station in the Lassen-Modoc Ranger Unit consists of war surplus metal buildings which were erected after World War II. The department's lease for the site on which these facilities are currently located expires in January 1973. The department does not believe it is economically or functionally feasible to relocate the metal buildings to the new site. Instead, it proposes to construct a standard 14-man barracks. messhall, three-bay equipment building with office, and a gas and oil house on the new site. These facilities will be designed and constructed according to Division of Forestry standards which include a concrete foundation and floor, wood frame with rough-sawn plywood exterior siding and galvanized metal roofing. In addition, the structures will be designed to accommodate heavy snow loads and minus 40 degree temperatures. The estimated construction cost is \$31.10 per square foot at project level. The cost figure is particularly favorable in this isolated area because the department plans to undertake the necessary site. work and develop the water supply system with its own day labor forces.

Resources Agency

DEPARTMENT OF CONSERVATION

Item 329 from the General Fund Capital Outlay Budget page 182

	,
Requested 1970–71	\$474,107
Recommended for approval	185,107
Recommended for special review	262,000
Recommended reduction	27,000

ANALYSIS AND RECOMMENDATIONS

We recommend that \$27,000 requested for a new messhall at the Carmel Forest Fire Station be deleted. We also recommend that the \$262,000 request for radio system modifications, phase III, be placed in the category of special review.

This item provides for a series of minor construction and equipment projects in all six forestry districts which is \$283,708 less than appropriated for similar purposes in the current year. This decrease is primarily the result of budgetary decisions made by the department.

The minor capital outlay program currently proposed by the department for the 1970-71 fiscal year is outlined in Table 1.

Table 1

Classification of Forestry Projects Proposed, 1970–71	
1. General projects 2. Inmate labor projects	\$170,598 36.109
3. Radio vaults and associated facilities	,
Total	\$474,107

Projects included in the first category require the assistance of construction tradesmen and are undertaken on a day-labor or contract

Department of Conservation-Continued

basis. There are 15 projects proposed, ranging in estimated cost from \$1,400 to \$43,950. The projects include enlarging an existing facility to accommodate an increased number of men and replacing existing facilities that have deteriorated. Also included are utility projects involving modernization of antiquated water systems, paving and erosion control projects as well as the construction of truck trails and firebreaks. Under Public Law 566, which is a cooperative program with the United States Forest Service, the department constructs truck trails and firebreaks in conjunction with small watershed flood control projects. The total cost of fire protection facilities under this program is shared equally with the federal government. Table 2 summarizes the types of projects in the first category as requested for each district.

Table 2 General Projects Proposed, 1970–71

	Number of	Facil-ities	$Facilities \\ re-$	$Utilities \ im$ -	Site	
District	projects	expansion	placement	provement	work	Amount
I (North Coast)	1	0	1 .	0	0	\$15,865
II (Sierra Cascade) _	2	0	2	0	0	63,725
III (Central Sierra)	3	0	0	1	2	12,950
IV (San Joaquin)	2	0	0	1	1	9,400
V (Central Coast)	3	1	0	1	1	39,055
VI (Southern Californ	nia) 4	0	2	1	1	29,603
	- .	.—	_ `	_	_	
Total	15	1	- 5	. 4	5	\$170,598

One of the projects proposed for the central coast district requires further comment. The department is proposing to construct a new messhall at the Carmel Forest Fire Station at an estimated cost of \$27,000 at contract level. The proposed facility would be a standard 24-man unit and is required because the existing facilities are not large enough for the total complement of personnel assigned to this station during the fire season. It is the department's plan that the existing combination barracks-messhall, which is a standard 14-man unit, will eventually be remodeled to provide additional barracks space, although funds are not being requested at this time to perform the necessary modifications. The reason this space enlargement is being proposed is to accommodate county-financed crews and equipment assigned to this station during the fire season. Under present policies, the counties do not contribute towards the capital outlay costs that are incurred to accommodate the additional station personnel and equipment. Consequently, we recommend that this project be deferred until such time as the department establishes procedures for the recovery of capital outlay costs incurred to satisfy local needs.

There are seven projects in the second category which is distinguished by the fact that less costly inmate labor is used and the funds requested are primarily for the purchase of construction materials. Five projects totaling \$18,212 provide for the construction of 18 concrete water storage tanks to be located throughout four of the six forestry districts. In addition, there are two projects totaling \$8,000 for utility improve-

Department of Conservation-Continued

ments at two conservation camps and a \$9,897 project to correct site drainage problems at the Mt. Bullion Youth Conservation Camp.

The third category consists of three projects to improve the Division of Forestry communication network at a total estimated cost of \$267,400. This includes two projects totaling \$5,400 to provide for the construction of a new generator building at Lyons Peak, the replacement of a deteriorating microwave antenna tower along with air conditioning the radio vault at the Joaquin Ridge repeater site and \$262,000 for statewide radio system modifications.

A modernization and expansion program was initiated in the 1968-69 fiscal year to correct critical deficiencies in the division's statewide radio communications system. The program was planned to eliminate severe overloading of the existing system during periods of bad fire conditions and to eliminate the lack of coverage in certain areas throughout the state. To accomplish these objectives, the department outlined a five-year communications plan which was based upon an estimate of the amount of funds required for additional equipment, ongoing equipment replacement, engineering and radio coverage surveys along with the necessary installation costs for each year of the program. The department estimated that a total of \$2,905,700 would be expended during the five years including \$1,500,000 for the ongoing equipment replacement program. The Budget Acts of 1968 and 1969 appropriated approximately \$1,200,000 towards this program.

The department is new requesting \$262,000 to implement phase III of that program. The amount proposed finances the purchase of various pieces of radio equipment to augment and modernize the existing radio system. In reviewing this proposal, we questioned a request for equipment not previously identified in the department's five-year plan. Subsequent discussions with the department identified the equipment in question as sophisticated replacements for existing overloaded remote console systems. However, this communication control center is much more expensive than the remote consoles it replaces. The department is currently in the process of revising its five-year plan to reflect this cost increase and to reflect other revised cost estimates based upon the purchasing experience of phases I and II of the program. We anticipate that this revision will be completed prior to budget hearings in sufficient time to permit adequate review. Consequently, we recommend that this project be placed in the category of special review.

DEPARTMENT OF WATER RESOURCES

Item 330 from the General Fund Capital Outlay Budget Page 186

Requested 1970-71	\$80,000
Recommended for special review	80,000
Recommended reduction	\mathbf{None}

Department of Water Resources—Continued ANALYSIS AND RECOMMENDATIONS

We recommend special review.

The budget requests \$80,000 in this item to start a continuing program of removing debris from a section of the Cherokee Canal. The maintenance of this section of the channel was made a state responsibility by amendments to Section 8361(f) of the Water Code in 1965.

At the present time the Department of Water Resources is making a study of the best way to handle this debris problem. There are some indications that the problem has arisen because of a design deficiency in the original project constructed by the Corps of Engineers which results in an unusual deposit of debris in this section of the channel. If this is true, the costs of correction may be a federal responsibility and, in addition, the best long-range solution and the cheapest solution would be to raise the levees along this section of the channel. The \$80,000 would only provide for a holding action to remove continuing accruals of debris and would not restore the channel to its original capacity. Therefore, with some special review and further attention being given to the problem, it may be possible to work out a better solution to the problem before the Budget Bill is passed.

DEPARTMENT OF WATER RESOURCES

Item 331 from the General Fund	Capital Outlay Budget	page 186
Requested 1970–71 Recommended for approval Total recommended reduction		\$74,150 74,150 None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This proposal includes four separate projects, two of which total \$67,650 and affect the department's maintenance yard operations.

The Sacramento flood control maintenance vard is currently located near the Sacramento weir on leased premises. The facilities out of which the department operates are old and deteriorated and approaching the time when major remodeling and repairs will be required to permit continued occupancy. In addition, vehicular access and egress to and from the area is extremely hazardous and costly modifications would be necessary to correct the deficiency.

A recent survey of activities at this facility and the Bryte Laboratory has prompted a decision to consolidate these activities at the laboratory site. In order to accommodate the relocation of staff and equipment, the department is requesting \$42,650 to rehabilitate some existing buildings and to construct a suitable equipment storage yard. The funds will provide for modifications to an existing storage building to permit its utilization as a daily supply point and for equipment maintenance, repair and fabrication. A Quonset hut will be modified for the storage of equipment and materials and to provide locker facilities

Department of Water Resources-Continued

and a shower room. Storage and workshop space will also be developed for the communications engineer and the snow survey unit. In addition, 1,500 square feet of space will be modified in the main laboratory building to provide administrative offices. Some outside yard area will also be paved, fenced and equipped to serve as a dispatching area for all equipment and for storage.

The second project of significance is a \$25,000 request to improve the Sutter maintenance and repair yard. To reduce maintenance and extend the useful life of equipment, it is proposed to grade and repave portions of the yard and in the process modify and improve the existing drainage system to extend the anticipated life of the new surfacing.

The state utilizes a network of cabins, constructed and maintained under a cooperative agreement with the U.S. Forest Service, to provide winter shelter for snow surveyors gathering water content data relative to summer runoff conditions. Because of their location and type of use, these facilities deteriorate rapidly and from time to time require replacement. The department is requesting \$4,000 to replace a facility located in the San Joaquin River Basin. Under a cooperative agreement, the state supplies construction material and the federal government constructs the facility. The remaining project is a \$2,500 request to construct 2,420 square feet of concrete sidewalk and place 4,656 square feet of rock ground cover to improve a portion of the site occupied by the northern district headquarters in Red Bluff adjacent to State Highway 36.

AIR RESOURCES BOARD

Item 332 from the Motor Vehicle Fund

Capital Outlay Budget page 187

Requested 1970–71	\$1,575,627
Recommended for approval	1,575,627
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

(a) Construct and equip—motor vehicle pollution control laboratory—Los Angeles _____ \$1,575,627

We recommend approval.

The Budget Act of 1969 appropriated \$199,431 for land acquisition and the preparation of working drawings for a new laboratory to support the Air Resources Board's activities and program. The space that the board is currently leasing from Los Angeles County is inadequate to meet the needs of the state's emissions control program. Antiquated equipment and overcrowding have led to numerous operational inefficiences. To proprovide for new and expanded facilities, a 2.215-acre site in an industrial park near El Monte has been purchased. The board is requesting \$1,366,200 to construct and \$209,427 to equip an office and laboratory facility containing approximately 43,760 gross square feet. The building that is proposed will be a one-story structure of precast and tilt up con-

Air Resources Board-Continued

crete construction which is separated into two main areas. The office wing contains approximately 8,640 gross square feet and provides space for the executive officer, manager, supervising engineers and their staff, purchasing, reproduction, mail services and clerical. The laboratory wing is planned to accommodate two separate functions, air pollution and investigation and motor vehicle emission control. The space for the air pollution investigation program includes a spectroscopy room, a gas chromatography room, an environmental laboratory, an electronic instrument laboratory and an analysis and sampling, preparation and storage room. The space included for the motor vehicle emission control program consists primarily of engine dynamometer rooms, chassis dynamometer installations and a machine shop. The entire building will be air conditioned and the entire site will be developed with paved parking and appropriate landscaping.

The construction cost of the laboratory is estimated at \$22.23 per gross square foot at building level and \$31.22 at total project level. The latter unit cost includes \$46,500 for fixed group I equipment. Numerous structural and mechanical provisions for specialized testing equipment have inflated the unit cost of this facility. However, we have reviewed the preliminary plans and specifications and believe the

cost is reasonable and justified.

CALIFORNIA HIGHWAY PATROL

Item 333 fro	m the	Motor
V ehicle	Fund	

Capital Outlay Budget page 187

Requested 1970–71	\$2,	129,914
Recommended for approval		629,392
Recommended for special review	1,	123,522
Recommended reduction		377,000
SUMMARY OF RECOMMENDED REDUCTIONS	l mount	Analysis page
Reduce (b) Working drawings and construction — area office building—West Valley to provide only for working drawings\$	377,000	1127

ANALYSIS AND RECOMMENDATIONS

The amount requested finances a schedule of nine projects which provide for land acquisition, construction, communication equipment purchases and architectural services.

(a) Construct—new academy _____ \$2,768,663

We recommend special review.

The amount requested in this item is the total estimated requirement for the first phase of a proposed three-phase program to construct a new academy for the California Highway Patrol. This amount will be offset by a \$1,645,141 federal reimbursement which is identified sepa-

rately in the item appropriation schedule. Thus the net Motor Vehicle

Fund appropriation for this project is \$1,123,522.

The department requested \$1,110,000 in its 1969-70 fiscal year capital outlay budget to initiate the first phase of a program planned in four phases to reconstruct the academy on the existing south Sacramento site. This request was based upon a total estimated project cost of \$7.6 million, which had not been updated to reflect rising construction costs. The department's decision to reconstruct the academy on the existing site was made after a feasibility study by the Office of Architecture and Construction had determined that relocation and construction of a new academy on a new site was the most acceptable solution. It was emphasized that this approach would allow more orderly growth and provide for a training program at the highest standard possible. We stated in our Analysis of the 1969 Budget Bill that the California Highway Patrol budget proposal to invest capital outlay funds in a site no longer suited to the department's purposes and incapable of expansion should the need arise was, in our opinion, shortsighted.

The Budget Act of 1969 subsequently appropriated \$580,000 for preliminary planning and site acquisition to provide for the ultimate construction of a new academy on a new site. It was estimated that this approach would cost approximately \$8.5 million for construction as opposed to an updated estimate of \$8.2 million to construct a new facility on the existing site. Subsequently, the department received approval of a federal grant application based on its original academy reconstruction proposal. The Department of Transportation grant provides \$4.5 million towards a total estimated project cost of \$7.6 million. This chronology of events placed the California Highway Patrol in the position of having a federal grant based on an outdated estimate

for a proposal that had been modified by legislative action.

The department is now requesting funds to construct a new academy on a new site based upon the original cost estimate of \$7,669,000. The department's budget request states that this total amount will provide for a facility comparable to that originally proposed on the exising academy site. We have not received preliminary plans and a formal estimate to substantiate this statement. We understand that the Office of Architecture and Construction has been attempting to design the new facility within the unrealistic funding limitation of an outdated estimate for a different proposal. The department's reluctance to recognize rising construction costs has seriously delayed this project and, in our opinion, jeopardized its future.

We supported the need to construct a new academy on a new site. However we do not have sufficient information to justify supporting the department's current request. We anticipate that this deficiency

will be corrected in time for the budget hearings.

(b) Working drawings and construction—area office building—West Valley ______ \$403,000 We recommend that this item be reduced to \$26,000 to provide only for the preparation of working drawings.

The amount requested is to provide for a state-constructed California Highway Patrol area office near the intersection of the San Diego and Ventura Freeways. The building will be sized to accommodate 150 traffic officers, including supervisory and support personnel, with space for motor carrier services, passenger vehicle inspection and communications services. The proposed site improvements include carport storage for 10 patrol vehicles, a vehicle inspection area, a communications repair shop, space for automotive repairs as well as sufficient uncovered paved parking and storage space.

The department is currently leasing temporary space in order to provide service to the West Valley area and is in the process of negotiating with the City of Los Angeles Recreation and Parks Department for a site for the permanent facility. Inasmuch as the department has not acquired a site and the Office of Architecture and Construction has not prepared preliminary plans and a formal estimate, we recommend that construction funds be deferred and \$26,000 provided for the preparation of working drawings. This will permit planning to move ahead once the site is acquired and will provide a more accurate estimate upon which to base a future appropriation of construction funds.

(c) Purchase of relocatable buildings—academy—Sacramento _____\$80,000

We recommend approval.

The department is currently leasing 60,000 square feet of relocatable facilities to provide additional classroom and dormitory space at the California Highway Patrol Academy. The lease for these facilities expires in January 1972 with a purchase option in 1971, one year prior to the expiration of the lease. The department is requesting \$80,000 to exercise that option. The department is currently paying \$6,000 per month to lease these facilities and the proposed purchase would save a minimum of \$72,000 in leasing funds and provide a significant amount of usable space at a reasonable cost. We believe this represents a prudent investment in light of increased emphasis on utilizing relocatable facilities to satisfy the pressing space needs of various state agencies, particularly higher education. In addition, we anticipate that the department will continue to use these facilities through 1973 because of the delay in constructing the new academy.

(d) Acquisition of substation facility—Los Banos_____ \$120,000 We recommend approval.

This substation facility services the western part of Merced County including Interstate 5. It was constructed and leased to the state with a purchase option after two years' occupancy. An analysis prepared by the Department of General Services indicates that exercising this option would result in an economic benefit to the state.

This facility was sized to accommodate a maximum field office strength of 50 traffic officers. It has approximately 3,800 gross square feet of building space with 2,500 square feet of carport space. Combining the \$120,000 requested with two years' rental of \$31,800 gives a total project cost of \$151,800. This represents a unit cost of approximately

\$24 per gross square foot at total project level, after deducting the estimated land cost of \$32,000. This is a very favorable unit cost for this type of facility. We believe it is in the best interest of the state to exercise the purchase option.

(e) Acquisition—office/warehouse building—San Diego___ \$110,000

We recommend approval.

The California Highway Patrol is currently leasing this facility from the Department of Public Works—Division of Bay Toll Crossings and is in the process of remodeling it into a field office at an estimated cost of \$59,000. The building contains approximately 8,600 square feet and is a masonry structure with glu-lam roof beams supporting wood decking and composition roofing. The facility is surplus to the needs of the Division of Bay Toll Crossings and the department is requesting \$110,000 for acquisition of the site and improvements. We believe this is a good, economical solution to some of the department's critical office space problems in the San Diego area.

(f) Major communications equipment—statewide_____\$263,192

We recommend approval.

This proposal provides the California Highway Patrol share of fixed equipment required for expansion, maintenance and replacement of the basic radio and microwave systems operated by the state and available to a number of agencies. Equipment attached to the automobiles and motorcycles is included in the support section. The amount requested is required for the following purposes:

1. Replace and purchase additional base station equipment including transmitters, consoles and tape recorders ___ \$131,000

2. Replace and purchase additional repeater and control station equipment

43,132

3. Replace and purchase additional communications vault support equipment, including standby and auxiliary generators, radio microwave towers and air conditioning and heating equipment______

89,060

The replacement equipment is justified by functional obsolescence, high maintenance due to age, and inability to convert economically to modern modes. The new equipment requested will enable the patrol to more effectively carry out its responsibilities by providing adequate radio coverage where little or no coverage is now available.

(g) Land acquisition—communications facility—Jarbo Gap \$2,000

(h) Land acquisition—communications facility—Butcher Hill \$3,200 We recommend approval of the above two items.

The above communications vault sites are located in Butte and Siskiyou Counties, respectively, and are under the jurisdiction of the Division of Highways and surplus to their needs. The amounts requested

are to purchase these sites and permit the Division of Highways to clear their records.

(i) Construction program planning _____ \$25,000

We recommend approval.

This item provides funds for the preparation of preliminary plans, specifications and estimates for those projects to be requested in the 1971–72 capital outlay budget. In light of the department's current projections for 1971–72, we feel the amount requested is justified.

DEPARTMENT OF THE CALIFORNIA HIGHWAY PATROL

Item 334 from the Motor Vehicle Fund

Capital Outlay Budget page 187

Requested 1970-71	\$100,000
Recommended for approval	100,000
Recommended reduction	$ m \acute{N}one$

ANALYSIS AND RECOMMENDATIONS

We recommend approval of the amount requested.

The amount proposed finances five minor construction projects including expansion of two area offices and modernization of mechanical

heating and cooling systems at two headquarters facilities.

One of the expansion projects is an \$18,250 request to expand the department's leased facility in Indio. The area office was designed to accommodate 60 traffic officers but now has 78 traffic officers assigned to it and further expansion is projected over the next several years. The lessor has indicated that he is not interested in expending additional funds for expansion of the facility. The department is therefore requesting funds to construct an additional 800 square feet of office space, 1,500 square feet of carport space and 15,000 square feet. of paved and fenced parking space. The department believes that the favorable location of this facility and anticipated long-term occupancy justifies this expenditure. The other expansion request is a \$15,000 proposal to grade, pave and landscape 35,000 square feet of unimproved space adjacent to the Fresno office. There is no on-street parking available in the nearby area and additional parking is needed for operational enforcement vehicles and out-of-service vehicles awaiting disposition.

The remaining three projects totaling \$66,750 cover modifications to heating and cooling facilities at the old headquarters office building in Sacramento and at the Zone V headquarters building in Los Angeles. These projects entail the replacement of existing inefficient equipment that has deteriorated to the point where continued extensive maintenance is unjustifiable. We have reviewed the proposed modifications and feel the costs are justifiable on the basis of potential savings in operating and maintenance costs and reduced employee discomfort.

1133

1134

DEPARTMENT OF MOTOR VEHICLES

Item 335 from the Motor Vehicle Fund

Capital Outlay Budget page 190

Requested 1970–71	\$3,535,330
Recommended for approval	2,636,900
Recommended for special review	178,230
Recommended reduction	\$720,200
SUMMARY OF RECOMMENDED REDUCTIONS	Analysis
Amoun	
Delete (e) Working drawings and construction—additional parking facilities—Sacramento\$157,000	0 1132
Delete (g) Working drawings and construction—office building	- 1

and parking facilities-Sacramento, northeast _____\$543,200

Reduce (i) Preliminary planning _____ \$20,000

ANALYSIS AND RECOMMENDATIONS

The amount requested finances a schedule of nine items for land acquisition, planning and construction of new field offices. The projects proposed will ultimately provide for six new state-owned facilities. This includes \$580,000 to purchase one new site and \$2,589,600 to construct five new field offices on sites acquired with previously appropriated funds. In addition, this item includes a request to augment a previous appropriation, the development of additional parking in Sacramento and a provision for construction program planning.

(a) Land acquisition—office building and parking facilities—Hawthorne _____\$580,000

We recommend approval.

This proposal will provide a site for a new field office to replace an existing one which has become inadequate to handle the increased workload of its service area. The department has prepared an economic analysis which provides a reasonable substantiation that it is in the best interest of the state to construct a state-owned facility at this location. It is proposed to purchase sufficient property to permit construction of an adequately sized facility with sufficient public parking located where the greatest workload potential exists. The existing Hawthorne field office serves an area with an estimated population of 305,000 and is staffed with 32 employees. The proposed new facility will be designed to serve a projected population of 406,000 with a staff of 54 employees.

(b)	Working drau	rings and	construction - of fice	building	
	and parking	facilities-	-Whittier		\$534,000
(c)	Working drau	ings and	construction-office	building	
, ,			-Anaheim		\$606,500
(d)			construction—office		
	and parking	facilities-	—Salinas		\$377,200
		-		_	

We recommend approval of the scheduled proposals named above.

The Budget Act of 1969 appropriated funds for land acquisition for the three projects to provide sites for new facilities to replace existing

Department of Motor Vehicles-Continued

ones which had become inadequate to handle the increased workload of their service areas. The sizes of the field offices proposed include 9,072 gross square feet at Salinas, 14,500 gross square feet at Whittier and 17,500 gross square feet at Anaheim. The design for each of these facilities is based upon a functional work flow program and includes a public counter area for vehicle registration and driver's licensing, and an office area for driver improvement analysts and investigators as well as circulation space and service facilities. Public parking is provided according to a formula developed by the Department of Motor Vehicles from past experience. All three proposed field offices are estimated to cost approximately \$24 per gross square foot at building level with Whittier and Anaheim planned and designed for future expansion. The unit cost is consistent with that experienced for similar Department of Motor Vehicle facilities.

(e) Working drawings and construction—additional parking facilities—Sacramento _____ \$157,000

We recommend this item be deleted.

The amount requested is to develop parking lots on the two blocks located at the north end of the Transportation Agency complex facing Broadway and situated between 24th Street and 26th Street. We opposed a similar proposal in the department's 1969–70 capital outlay budget because an updated master plan had not been developed for the Transportation Agency complex and because an appropriate method of financing the development of parking facilities had not been established. The revised master plan projects the use of the two blocks in question for surface parking until 1985, when it is projected that a parking structure will be required on the block situated between 25th Street and 26th Street. However, an appropriate method of financing the proposed parking has not been proposed.

The Department of General Services is currently authorized under Section 14678 of the Government Code to develop and maintain motor vehicle parking facilities for state officers, employees or other individuals including parking facilities under the jurisdiction of other state agencies. The code also provides for the collection of parking fees and the use of these funds for construction, operations and maintenance of parking facilities. Revenues received are deposited in the General Fund and appropriated to the Department of General Services without regard to fiscal year. More than 4,500 parking spaces have been provided in lots throughout the state under these provisions. However, the parking facilities within the Transportation Agency complex were

not developed by the Department of General Services.

We are not aware of any compelling reason which would preclude the development and operation of parking facilities for Department of Motor Vehicle employees by the Department of General Services. We believe such a consolidation would insure uniform practices and policies with respect to constructing, operating, maintaining and charging for parking facilities including more effective long-range planning for financing and development. We recommend that this request for Department of Motor Vehicles-Continued

\$157,000 to develop additional surface parking within the Transportation Agency complex be deferred pending an evaluation of the feasibility of transferring this responsibility to the Department of General Services.

(f) Construct—office building and parking facilities— Westminster _____ \$528,700

We recommend approval.

The amount requested provides for the development of a one-story field office with approximately 15,938 gross square feet space for driver's licensing, registration, driver improvement and investigation. The building is designed for horizontal expansion by utilizing a structural steel frame with bearing and nonbearing wood stud walls and wood decking on the roof. The exterior of the building will be finished with cement plaster and the interior finish will consist of a suspended ceiling system with some metal lath and plaster and a gypsum board wall finish. Site development includes paved parking for 145 cars, land-scaping, irrigation and fencing as well as utility development. The building is estimated to cost \$23.87 per gross square foot at building level and \$35.60 at total project level. We have reviewed the preliminary plans and specifications and believe the cost is reasonable for the purpose.

(g) Working drawings and construction—office building and parking facilities—Sacramento, northeast \$543,200

We recommend that this item be deleted.

The Budget Act of 1969 appropriated \$30,000 for the preparation of working drawings for a replacement facility for the department's Cottage Way office. The department just recently located an acceptable site for this new facility but has not commenced acquisition. The site selected includes a landlocked parcel of surplus highways property and six privately owned lots. W have not received preliminary plans and an estimate for the facilities that are to be constructed on this site. Consequently, we believe the request for additional working drawings and construction funds is premature.

(h) Construct—office building—San Mateo \$178,230

We recommend special review.

The Budget Act of 1968 appropriated \$326,900 for construction of an office building and parking facilities in San Mateo. In reviewing the long-range planning for this facility, the Department of General Services proposed that the facility be overbuilt by 4,570 net square feet to house the Department of Industrial Relations. This recommendation was based upon a survey of all state agencies leasing space in the San Mateo area to determine if some consolidation could be achieved. The final recommendation was based upon a determination of the long-range expansion requirements for this particular field office as well as the compatibility of the Department of Motor Vehicles operations with that of other agencies. The Department of General Services estimates a potential lease savings of \$125,856 by overbuilding the San Mateo

Department of Motor Vehicles-Continued

facility. In order to implement this proposal, the Department of Motor Vehicles is requesting an additional \$178,230 to augment the construction funds already appropriated for this project. This will provide a total of \$452,756 to construct an office building with 13,196 gross square feet along with sufficient parking and appropriate site development. We cannot recommend the adequacy of the amount requested as we have not received preliminary plans or a formal estimate from the Office of Architecture and Construction. We anticipate that this information will be available prior to budget hearings.

(i) Preliminary planning _____ \$30,000

We recommend that this item be reduced by \$20,000.

This item represents a continuation of the Legislature's policy of providing advanced funds for the preparation of preliminary plans, specifications and cost estimates for projects that will be proposed in subsequent budget years. This is done in order to give the Legislature sufficient information upon which to make judgments. In light of the fact that the budget only contains one land acquisition proposal, we believe that \$10,000 would be sufficient to provide preliminary planning for the department's 1971–72 fical year major capital outlay program.

Department of Veterans Affairs

VETERANS HOME OF CALIFORNIA

Item 336 from the General Fund	Capital Outlay Budget page 193
D 4. 1 1070 71	\$100.400

nequested 1970-71	\$10U, 4 9U
Recommended for approval	159,300
Recommended reduction	\$31,190

ANALYSIS AND RECOMMENDATIONS

We recommend that this item be reduced by \$31,190 by eliminating those projects requested to rehabilitate areas of the main kitchen.

This request covers a total of 10 minor construction and maintenance projects and is \$127,340 or 240 percent greater than appropriated in the current fiscal year. This increase is primarily attributable to an effort by the department to comply with the request of the State Fire Marshal to correct fire and life safety deficiencies at the Veterans Home. An emergency appropriation was recently approved for the installation of attic sprinklers in response to one of the State Fire Marshal's requests.

The minor capital outlay program proposed for the Veterans Home concentrates on two areas, the hospital and the main kitchen. Five projects are requested for the hospital area with a total estimated cost of \$124,000. This includes \$110,000 for three fire and life safety projects requested by the State Fire Marshal. It is estimated that \$11,500 will be required to install approved automatic fire dampers in the ventilation louvers in all hospital ward bathrooms and \$34,000 will be

Veterans Home of California-Continued

required to install an approved automatic sprinkler system in all portions of the hospital basement used for storage or maintenance workrooms. In addition, \$64,500 is requested to install fire walls and doors in all hospital corridors adjacent to open stairwells and ramps and to replace existing partitions and doors in all areas of the building which do not meet the proper fire rating. The two additional hospital projects requested include a \$4,800 proposal to extend the oxygen distribution system to the hospital annexes and a \$10,000 proposal to replace deteriorating floor covering.

Three rehabilitation projects totaling \$31,190 are requested for specific areas in the main kitchen. These projects represent fragments of a large-scale kitchen remodeling project recommended by the Office of Architecture and Construction in a master plan study developed in 1965. The projects requested include replacing ceramic tile wainscoting in the main kitchen, repairing and modifying the garbage room as well as repairing and modifying the vegetable and fruit preparation room. We believe these three projects should be deferred inasmuch as the department is currently evaluating recent changes in the Veterans Home population forecast as part of the development of a future use plan for the Veterans Home. This evuluation is in response to language contained in the supplementary report of the Committee on Conference relating to the Budget Bill, 1969-70 fiscal year which further directs that the future use plan shall include: "(1) the intended future use of the land and structures of the home, and (2) an implementation schedule for necessary action." We do not believe it would be prudent to invest additional funds in the main culinary building until that plan has been developed and reviewed by the Legislature.

Two additional projects are requested for the Veterans Home which do not directly relate to the hospital and the main kitchen. These are \$18,000 for roof repairs to various buildings and \$11,500 to patch and double armor coat those portions of the home's roadway network which receive abnormally heavy volumes of traffic and are in need of repair.

UNALLOCATED

Capital Outlaw Budget naga 105

Requested 1970–71 Recommended for approval Recommended reduction	\$150,000 100,000 \$50,000

ANALYSIS AND RECOMMENDATIONS

om 337 from the Conoral Fund

We recommend a reduction of \$50,000.

This item proposes to continue the well-established policy by which the Legislature provides advance funds for the preparation of preliminary plans, outline specifications and estimates to be used as supporting data for requests for working drawings and/or construction in a succeeding budget for projects normally supported by the General Fund.

Unallocated—Continued

The proposed appropriation would be allocated by the Department of Finance as justified.

The University of California and the state college system are excepted since they are separately provided for elsewhere in the bill. The major agencies which would make use of these funds are the Departments of Parks and Recreation, the Youth Authority, Corrections, Conservation, Mental Hygiene and General Services.

The Budget Act of 1969 appropriated \$150,000 for this purpose which would have supported approximately \$10 million in project value on the assumption that preliminary plans and specifications would be valued at about $1\frac{1}{2}$ percent of the cost of the project. However, this would be applied only to projects which would require working drawings and not two projects such as equipment which do not require such drawings. Furthermore, many of the simpler types of projects do not require the $1\frac{1}{2}$ percent.

The present Budget Bill contains a total of about \$12,560,000 in General Fund proposals of which a substantial portion would have needed little or no preliminary plans funds. On the premise that the 1971 Budget and fiscal situation may be similar to the current one, we believe that the proposal for \$150,000 is excessive. On this basis, we recommend the reduction to \$100,000, a savings of \$50.000

UNALLOCATED

Item 338 from the Harbors and Watercraft Revolving Fund

Capital Outlay Budget page 197

Requested 1970–71	\$10,000
Recommended for approval	10,000
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This item proposes to provide advance funds for the preparation of preliminary plans, outline specification and estimates to be used as supporting data for a request for working drawings and/or construction in a succeeding budget for projects payable from the Harbors and Watercraft Revolving Fund. Usually, these are basically recreational types of projects in which the Harbors and Watercraft Revolving Fund often represents only a part of the financing.

The amount proposed appears to be reasonable for the relatively low level of capital outlay program and fund availability to be anticipated from the Harbors and Watercraft Revolving Fund. On this basis, we recommend approval.

UNALLOCATED

Item 339 from the General Fund	Capital Outlay Budget page 196
Requested 1970–71	\$50,000
Recommended for approval	50,000
Recommended reduction	

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This item is intended to cover unanticipated miscellaneous repairs improvements and equipment which would be allocated to eligible agencies by the Department of Finance upon approval of the State Public Works Board.

Generally, the projects financed from this item would be of an emergency nature requiring action before the next session of the Legislature. For example, the failure of a primary electrical feeder to a building or an institution would require immediate repair in order to safeguard the health and welfare of the occupants of the facilities affected. The amount appears reasonable for this purpose.

Department of Agriculture DISTRICT FAIR CONSTRUCTION PROGRAM

Item 340 from the Fair	and
Exposition Fund	

Capital Outlay Budget page 202

*North	
Requested 1970–71	\$69,135
Recommended for approval	69,135
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

Approval is recommended.

This item reappropriates the sum of \$69,135 from the Fair and Exposition Fund out of the \$2,250,000 continuing statutory appropriation for district agricultural fairs or citrus fruit fairs for engineering services in the Department of Agriculture. The \$2,250,000 for district agricultural fairs and citrus fruit fairs is appropriated under Business and Professions Code Section 19630 for (1) permanent improvements for fair purposes, (2) the purchase of equipment for fair purposes and (3) the acquisition or purchase of real property, including costs for appraisal and incidental costs. This item is further discussed in the Department of Agriculture support analysis, Item 59, under Financial Supervision of Local Fairs.

DEPARTMENT OF FISH AND GAME

Item 341 from the Fish and Game Preservation Fund

Capital Outlay Budget page 285

D	
Requested 1970–71 \$231,0	000
Recommended for approval 231,0	-
Total recommended reduction No	

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

The Budget Act of 1969 appropriated \$417,600 to finance 12 minor construction and improvement projects throughout the state. At that time, the department projected the need for \$248,000 for similar purposes during fiscal year 1970–71. This request is \$17,000 less than projected and therefore appears consistent with the department's minor capital outlay program planning. The amount requested will provide for a series of seven minor construction and equipment projects with the bulk of the request affecting the department's hatchery program. The following is a brief description of the projects proposed.

The department estimates that from 5,000 to 30,000 juvenile King Salmon are lost annually at the El Solyo diversion, depending upon the total flow of the river for a particular year. This diversion is located on the west bank of the San Joaquin River near Bernales and affects the downstream migration originating in the Merced and Tuolumne Rivers. It is estimated that \$60,000 will be required to construct and install appropriate fish screens across the intake of the diversion.

The Newell Creek fish planting base serves as the distribution point for stocking catchable trout in Santa Cruz County. This facility is currently located on leased premises which the department will be forced to vacate by 1972. A renewal of the lease has been denied and consequently, it is planned to remove and relocate the fish planting base facilities to a new site. In the process of relocating, the department also plans to enlarge the capacity of this facility in order to accommodate an expansion of the stocking program. It is estimated that \$35,000 will be required for relocation and expansion at a new site.

Small water projects, which often eliminate populations of anadromous fish, are generally too small to pay the cost of constructing a separate hatchery for mitigation. Constructing one facility to serve several projects from a central point reduces the cost of mitigation to small water project developers. This approach easily lends itself to expansion as more projects are built, resulting in a further reduction in cost. The department is reimbursed for the capital outlay as well as operations and maintenance cost by the water project developers. Two similar projects have been completed and \$64,000 is requested to expand Crystal Lake Hatchery under this program. These facilities, consisting of a water treatment system and two 100-foot-long, 10-footwide, 42-inch-deep concrete rearing ponds, will be used to rear steel-head trout and silver salmon.

Mojave River Hatchery personnel attribute a great deal of their fish disease problem to poor water quality resulting from the lack of suffi-

Department of Fish and Game—Continued

cient oxygen and ample water flow. It is felt that a \$40,000 recirculation system with an 8,000-gallons-per-minute capacity will correct this deficiency. The department indicates that a long-term monetary savings may accrue due to the possibility of shutting down one well at least part of the year and using recirculated water at a lower pumping cost.

The Budget Act of 1969 appropriated \$30,000 to relocate the intake apparatus for the Black Rock Rearing Ponds near Mt. Whitney in anticipation of the adverse effect completion of the second barrel of the Los Angeles Aqueduct will have on the flow of Black Rock Creek. Completion of this portion of the aqueduct will also affect the process whereby water from the Black Rock Ponds drains into the Los Angeles Aqueduct through the brood stock ditch. After completion of the second barrel of the aqueduct, the water level will be too high to allow the springs to flow. It is estimated that \$20,000 will be required to install an adequate pumping system and controls to carry drainage up to the new level of the aqueduct.

One of the two remaining projects is a \$10,000 request to construct and install a 2-foot by 12-foot electrically operated fish screen at Holcombs pump site on the Shasta River to prevent the downstream migration of salmon and steelhead from entering into the irrigation system. The landowner has requested a screen at this location and it is felt that trouble might occur if a water-powered screen is used. The remaining project is a request for \$2,000 to design construct and install automated equipment at the San Joaquin Trout Hatchery. This equipment will be hydraulically operated and equipped with aluminum baskets to lift the brood stock from the pond to the dope tank and to the sorting tank. A similar type of automated system is in use at the department's salmon hatcheries. It is anticipated that a successful installation at San Joaquin will accelerate the spawning operation with less physical damage to the fish and eliminate one man from the spawning crew.

DEPARTMENT OF NAVIGATION AND OCEAN DEVELOPMENT

Item 342 from the Harbors and Watercraft Revolving Fund

Capital Outlay Budget page 290

Requested 1970–71	\$373,035
Recommended for approval	25,500
Recommended for special review	347,535
Recommended reduction	None

GENERAL DESCRIPTION

Pursuant to the Governor's Reorganization Plan No. 2 of 1969, the responsibility for planning and executing a capital outlay program for boating development has been shifted to the Department of Navigation and Ocean Development from the Department of Parks and Recreation.

The projects in this item are major capital outlay projects and are

Department of Navigation and Ocean Development—Continued

funded by boaters' gas tax revenues which are paid into the Harbors and Watercraft Revolving Fund.

ANALYSIS AND RECOMMENDATIONS

(a) Castaic Reservoir for development of boating and parking facilities ______\$100,000

We recommend special review.

This project consists of 300 parking spaces, trailer parking area, and the surfacing and riprap of slopes of the parking area. Also included in the project are two accommodation docks. This request will provide a car and trailer parking area which will serve a six-lane boat ramp approved in the 1969-70 budget. Although the appropriation is to the Department of Navigation and Ocean Development, the project was originally planned and proposed by the Department of Parks and Recreation. We noted during the budget hearings last year that this project was being proposed for two locations, the downstream borrow area of Castaic and as an alternative, the ridge area near the easterly abutment of the dam itself. Although we did not have a plan for the ridge area, we indicated that it would be possible for the Legislature to approve the project for either area with the Public Works Board providing a check on the department's cost data. Because we have seen no detail plans for Castaic and because the project has not come before the Public Works Board during 1969-70, we recommend this project for special review.

(b) Mokelumne River Berms, for land acquisition \$25,500

We recommend approval.

This project proposes to purchase three low-level islands or berms, a total of 16.7 acres adjacent to Westgate Landing in San Joaquin County. These berms will be developed as "port of call" anchorages for delta boaters. The purchase of the land is the first phase of the project. Ultimate development will be limited to providing safe anchorages and minimum shoreside facilities. San Joaquin County is in the process of acquiring the lands adjacent to Westgate Landing for purposes of developing a marina. The proposed anchorages will be developed in cooperation with and maintained by the County of San Joaquin. The department justifies the project because of the rapidly increasing fleet of delta boaters using such types of anchorages. The department indicates that the purchase of this type of anchorages implements the Delta Master Recreation Plan.

(c) Silverwood Lake, for development of boating facilities \$247,535

We recommend special review.

This project contemplates the construction of a six-lane boat ramp, maneuvering area, parking area and provides payment to the Department of Water Resources for spoil material placement. These funds are necessary to construct the six-lane boat launching ramp before the Department of Water Resources begins to fill the reservoir in September of 1971. Although this project will be operated by the U.S. Forest Service, funds provided here are a part of a three-phase development. Because we do not have a planning report on this project, we are un-

Department of Navigation and Ocean Development—Continued

able to determine at this time the total cost of the project. In order to provide the Legislature with a complete project evaluation, we recommend this project be placed on special review.

DEPARTMENT OF NAVIGATION AND OCEAN DEVELOPMENT

Item 343 from the Harbors and Watercraft

Revolving Fund Capital Outlay Budget page 290

Requested 1970-71	\$145,415
Recommended for approval	145,415
Recommended reduction	\mathbf{None}

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This item funds four minor capital outlay projects at a cost \$145,415.

Park unit	Description	Cost	Recommendation
Oroville Reservoir S.R.A.	Floating station to provide sanitary facilities and emergency call.	\$25,000	Approval
Oroville Reservoir S.R.A.	Shoreline facility for waste removal	\$15,000	Approval
Oroville Reservoir S.R.A.	Repayment of fire construction costs to the Department of Water Resources.	\$44,415	Approval
San Luis Reservoir S.R.A.	Boat launching area parking lot.	\$61,000	Approval

DEPARTMENT OF PARKS AND RECREATION

Item 344 from the General Fund Capital Outlay Budget page 292

Requested 1970-71	\$3,161,000
Recommended for approval	86,000
Recommended for special review	3,075,000
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

In our analysis of the 1969-70 capital outlay program, we emphasized that the program was not based on firm development policies and guidelines nor did it reflect a structured decision making process. In particular we pointed out that the department did not produce a comprehensive written master plan report for each project so as to resolve the problems of the project before it was budgeted and an appropriation secured. In order to facilitate review of the 1970-71 capital outlay program, we recommended in our support budget anal-

Department of Parks and Recreation-Continued

ysis last year, that the Legislature direct the department to provide a master plan report for each major capital outlay project in the 1970-71 budget. The Legislature directed the department to provide

such a plan, and the department readily agreed to do so.

Prior to preparation of this analysis we have received no such reports for any of the projects in the 1970-71 capital outlay program. Because of the inability of the state to sell bonds and because of General Fund shortages, the department's capital outlay program for the 1970-71 year has been substantially reduced. In reality there is only one major project financed in the budget (San Clemente State Beach). We have attempted a partial analysis of the projects. However, lacking the planning report, we have recommended that all of the major projects be placed on special review until the report is received.

Review of 1969 Projects

In order to provide the Legislature with insight into certain planning and construction problems which delay even the funded projects, we review below the status of the small number of projects for which the department received a very modest appropriation in the 1969–70 budget.

(a) Bolsa Chica State Beach, for beach erosion control \$86,625 This money is the department's share of a \$1.5 million beach erosion control project being constructed by the U.S. Corps of Engineers. This project is not within the scope of the department's planning and execution function. However, the project is held up pending the completion of an earlier phase by the Corps of Engineers.

(b) Butano State Park, for development \$386,700 This development project included 86 camp sites, a road system, water system, and related administrative facilities. The project has received Public Works Board approval. Current status reports indicate that the working drawings are 85 percent completed. The estimated construction date is in October 1970.

(c) Carpinteria State Beach, for development \$1,385,200 This project was to provide day use redevelopment which included an entrance access road, parking for 850 cars, 250 picnic sites, 75 concrete fire rings, lifeguard facilities, three comfort stations, underground utilities and four multipurpose turfed areas. This project was reduced \$300,000 by the Legislature to a level of \$1,385,200 to lower the intensity of the development and to eliminate some embellishments.

The department proposed to bring the project before the Public Works Board in November 1969, but the project was to be phased to bring it within the appropriation rather than reduced in cost as decided by the Legislature. The department intended to request more money in later years so that the project when finally completed would be substantially the same as that originally denied by the Legislature in the 1969–70 budget because of costliness. Because of this, before the project could be approved by the Public Works Board, it had to be redesigned. Economies were achieved in lighting, colored walkways, degree of play form development, beach showers, and the interpretative area was integrated into the stage area. Landscaping and landscape

Department of Parks and Recreation-Continued

sprinklers were increased to develop the overflow parking facility as was originally proposed by the department. Working plans and drawings for this project were approved at the January Public Works Board's meeting. However, General Fund cash flow problems may now delay the project start date to June 1970. The department currently estimates a work completion date of July 1971. The end result has been nearly a years delay in the project.

(d) Castaic Reservoir, for development \$2,372,500

This project was originally proposed for the Castaic afterbay. However, the project was shifted during the budget hearings to the ridge area near the dam itself. We have not seen a completed plan for this project although we understand an agreement has been reached with the County of Los Angeles on operation and maintenance. However, the Office of Architecture and Construction indicates that on November 14, 1969 the department requested that the entire project be held in abeyance. The department itself indicates that it is still working on an agreement for the offsite sewer facilities with the County of Los Angeles as directed by the Legislature.

(e) Fort Ross State Historic Park, for construction \$75,000 This project request consisted of a 900 foot entrance road, parking for 165 cars and 10 buses, fencing, stockade restoration, and 1,500 feet of natural rock walkways. This project has been shifted to the

Division of Highways for plans and execution.

(f) Lake Tahoe and Donner Lake Basins, for export of

sewerage _____ The sum of \$2,000,000 was budgeted at the direction of the Resources Agency Secretary in the 1969-70 budget for the state's portion of a sewerage system in the Tahoe and Donner Lake drainage basins to serve park units near these lakes. The Lahonton Regional Water Quality Control Board had adopted a resolution to require export of all sewage from these lake basins by January of 1970. This project was received by the Office of Architecture and Construction on December 23, 1968 for preliminary plans and specifications. However, as of January 15, 1970, the Office of Architecture and Construction indicates that there has been no work done on the preliminary plans. The project is being held by the Office of Architecture and Construction pending further information from the Department of Parks and Recreation. The department indicated in its last quarterly program status report that it is preparing agreements between it and local agencies in the Lake Tahoe drainage basin.

In summary, all three of the large scale, urgent projects approved

last session are still delayed for various reasons.

In addition, the Department of Parks and Recreation is still administering three major projects funded from the Harbors and Watercraft Revolving Fund in 1969–70 budget. These three projects were for boating and marina facilities in the state parks system. The projects include:

(a) Castaic Reservoir for development of boating facilities \$163,000 The department in its September progress report did not indicate a

Department of Parks and Recreation-Continued

project cost, a start date, a percentage completion, nor a completion date. It merely indicated that the project was still in the Department of Parks and Recreation.

(b) Del Valle Reservoir for development of boating facili-

ties, phase two______\$60,000

This project will continue development at Del Valle Reservoir and consists of completing a 191 trailer and car parking area by adding a double seal coat on a previously laid base, construction of a Series 600 comfort station, six courtesy docks with access ramps, and installation of water, sewer and utility extensions for further connections. The Public Works Board approval was obtained on August 29, 1969. The working drawings are currently 70 percent completed. However, the Office of Architecture and Construction indicates that there were revisions requested by the Department of Parks and Recreation during a conference on January 9, 1970. No construction has started.

(c) Folson Lake, Browns Ravine Marina for development \$595,800 This project included the excavation for a 600 slip marina basin, rough-graded boat-launching ramp, placing of excavated material for future parking areas, and rock riprap for protection from wave action and erosion. The Public Works Board gave its approval for working drawing on July 24, 1969. Subsequently, the Office of Architecture and Construction was requested to stop work on the working plans and drawing on September 11, 1969. Apparently the department stopped work because of concession problems. This particular problem is discussed at length in the concessions operation element of the support program budget of the Department of Parks and Recreation. The project will probably remain inactive until the concession problems and contractual problems at this unit are finally determined.

The Oroville State Recreation Area was added to the budget by an augmentation last session. It has a March 15, 1970 termination date for the appropriation. The department has given this project priority attention and moved it rapidly. However, it is not known at this writing whether the project will be ready for Public Works Board approval prior to March 15, or whether the appropriation will expire.

Review of 1970 Projects

Following is a partial analysis of the projects in the department's major capital outlay program for 1970-71.

(a) San Clemente State Beach for development_____ \$2,815,000 We recommend this project for special review.

This proposal is basically a redevelopment of an existing state beach. The project consists of the construction of 300 camp units with paved access parking, seven group camping areas with 65 car parking, 250 car parking for day-use areas, and park roads. In order to enhance the usability of the unit the department also will provide the basic utilities and comfort stations to support an increased use of about four times the present use. These facilities will include eleven 200 series combination buildings, three 500 series comfort stations, one 200

series comfort station, a triple trailer sanitation station, and the usual ancillary improvements of utilities, landscaping, recreational facilities, drainage and erosion control systems.

Although the budget item appropriates about \$2.8 million, the Office of Architecture and Construction now estimates the project at \$2.9

million. Therefore the project is already underfunded.

Although the department agreed to provide the Legislature with a master planning report for each project in the 1970-71 capital outlay program, we have not received such a document on this project at the time of preparation of this analysis. We have received a two-page project justification form and a cost estimate from the Office of Architecture and Construction. Based on these documents the rationale for this project indicates that the unit has such a high visitor use that the department's analysis indicates a need for four to six times the number of existing facilities. The request in the budget provides about three times the present number of facilities. This increase of course includes the seven group areas which can accommodate 45 people each. Our preliminary analysis indicates that the present capacity of the beach is 157 family camping units. In addition there is one area for group camping which can accommodate approximately 100 people. In total, then, the department is proposing 615 possible campsites of all types. The present capacity of the park is 257 campsites of all types. Therefore, the net increase is 358 campsites. Since the project cost, as estimated by the Office of Architecture and Construction is \$2,908,765, the cost considered only on the basis of the additional campsites, is approximately \$8.125 per campsite.

In reviewing the estimate of the Office of Architecture and Construction, we note excessive paving costs of \$246,800. This cost is apparently the solution to the sand and dust problems which are inherent in beach camping. Because of the paving used to solve the sand problem, the department indicates a need for planting wells between each campsite. These planting wells apparently are designed as screening devices and as esthetically necessary to offset the excessive paving. The

cost of such planting wells totals \$45,000.

The miscellaneous items in this project total \$225,400, they include play forms, campfire area, and play equipment. Other problems include the need in this unit for both dual sewer and water systems. The dual sewer systems is a result of agreements with the local sanitation district and the dual water system is necessary for separating potable water for visitor use and nonpotable water for irrigating the various landscape plantings. The department proposes several overpass structures to prevent visitors from walking across the railroad tracks in the vicinity of the beach and specially designed combination buildings and comfort stations. The need for this type of construction is not documented, but we presume that it is based on local esthetics. However, because some of the designs for structures are still undergoing major changes we cannot be certain just what structures will eventually be proposed.

A project of this type raises several policy issues. There are also many technical issues and alternatives which must be considered in order to evaluate the project. Perhaps the major policy decision which is required is the wisdom of the complete high-cost redevelopment of an existing facility rather than a more economical refurbishing which would save enough money to permit developing additional facilities in other units of the system to meet beach needs. This would result in getting the maximum of facilities with the limited funds available. This type of decision can only be made if the data for comparative analysis are before the Legislature. These data should compare the benefits of remodeling and improving this unit with leveling all of the present facilities and constructing an entirely new and very costly project with very high design and construction costs. In addition, many of the technical decisions such as lighting and camper hookups which are made on this particular project require adequate documentation. We recommend the Legislature place this item on special review.

(b) Silverwood Lake, for development \$200,000 We recommend this project for special review.

This project is a proportional share of an effluent outfall line for the recreation facilities at Silverwood Reservoir near San Bernardino. The entire project consists of a 200,000-gallon-per-day capacity sewerage treatment plant, a sewerage pumping plant and the state's share of the cost of a sewerage effluent disposal line. The line consists of approximatly 49,000 l.f. of 10-inch, 12-inch, and 16-inch line which will carry the treated wastes from Crestline, Cedar Pines Park, the Silverwood Lake recreational development and the treated wastes from other developments in the reservoir watershed to a site outside the watershed. The treatment plant, pumping plant and effluent line are to be designed, constructed, owned, operated, and maintained by the Crestline Sanitary District, San Bernardino County.

Although we understand that the sewer line and treatment plant must be funded in the 1970–71 fiscal year to permit the sanitary district to complete the line and get all sewerage out of the watershed before the reservoir fills in 1972, we have received no information as to the type of agreement entered into between the state and the local agency. The sewer sizing and cost sharing rationale have not been provided. We understand that future state costs will approximate \$1.4 million. Because this project has been prepared without the aid of the Office of Architecture and Construction, we recommend that the project be placed on special review pending the receipt of the master planning report.

(c) Cuyamaca Rancho State Park, working drawings _____ \$60,000 We recommend this project for special review.

This project provides for the working plans and drawings for a project consisting of a 200-car parking lot, 1.5 miles of access road, swimming pool (heated), paving, shelters, bathhouse, dressing room, fencing, utilities (including water, septic system, electrical, and irriga-

tion), a permanent well will replace a test well funded in 1969-70 budget.

During hearings on the 69-70 budget the department emphasized the need for a \$5,000 minor capital outlay appropriation to drill a test well. The test well was to be dug to determine the availability of water for this project and the swimming pool. At this writing the test well still has not been drilled and it is not now known whether there is a water supply adequate for the project.

Although we have no detailed information on this project, preliminary justification material indicates that the department feels the use patterns of this unit indicate that the existing facilities are not being used to capacity. Development of the proposed swimming pool complex is apparently intended to increase the use of the existing facilities.

Without further justification material it is not possible to see how this project fits into the priorities indicated by the department in its planning work. The department has stressed that the number one priority in park system development is the camping on southern California beaches. If this is an attempt to shift demand from the beach areas, it should be fully documented as to the expected impact.

We have received a preliminary estimate on this project by the OAC. Preliminary estimates indicate the total cost for the project will be \$1,684,800. Because this item tends to commit the state to an ultimate expenditure of approximately \$1.7 million and because we have received no planning report, we recommend this project for special review.

(d) Repayment to the Department of Water Resources..... \$86,000

We recommend approval.

This item provides partial payment from the department to the Department of Water Resources for work performed on an opportunity basis for Oroville State Recreation Area. The total amount owed by the department is \$201,047.38 from the General Fund and \$44.414.27 from the Harbors and Watercraft Revolving Fund. The work by the Department of Water Resources included the service area boat ramp, additional clearing of slopes adjacent to the recreation area, a two-lane boat ramp, swimming lagoon and a sand beach at Thermalito Forebay North, a four-lane boat ramp at Thermalito Forbay South, and installation of an eight-inch sewer line across the Bidwell Bar Saddle Dam at Loafer Creek. Presumably a shortage of General Fund money prevents full repayment of the State Water Project in 1970-71.

DEPARTMENT OF PARKS AND RECREATION

Item 345 from the General Fund	Capital Outlay Budget page 292
Requested 1970–71Recommended for approvalRecommended for special reviewRecommended reduction	561,550 195,800

Sugarloaf Ridge State Park

Capital Outlay			Item 345 Analysis Amount page	
Department of Park SUMMARY OF RE				
Reduce the appropriation for sewer line at Pismo Beach by \$13,000			\$13,000 1148	
ANALYSIS AND R	ECOMMENDATIONS		•	
	des \$787,350 for a series			
or conserve the ma	an-made resources at vari	ous state l	beaches, parks, and	
historical monume				
Park Unit	Description	Cost	Recommendation	
Brannon Island State Rec. Area	Add one shower bldg. to serve two camp loops.	\$37,750	Approval	
Fort Ross	Install new water line from existing well and wharf hydrant.	54,000	Approval	
Humboldt Redwoods	Riprap and erosion protection. Bull Creek—continuing projects.	50,000	Approval	
Lake Davis	Roads and parking. No data available.	65,000	Special review	
Millerton Lake	Water line replacement project, scope reduced from data provided.	28,000	Special review	
New Brighton State Beach	Hookup to Capitola Sanitation District. Estimate may be low.	60,000	Special review	
Pismo State Beach	Additional showers and dressing rooms at existing comfort station.	26,800	Approval	
Pismo State Beach	1500 l.f. of sewer line, lift station, jack under Highway No. 1. Connect to Grover City Sanitation District. Comfort station served is operated by county.	30,000	Reduce by \$13,000 so that dept. must reach agreement with the county for the adjacent landowner to dedicate his system to the county.	
San Buenaventura	Pier repair.	25,000	Approval	
San Diego Coast (San Elijo)	Convert north day use to camping by ad- justing parking area, access road, fencing and addition of showers.	52,000	Approval	
San Diego Coast (San Elijo)	Erosion control 1200 ft. wall. May be underestimated.	50,000	Approval	
San Mateo Coast State Beach (Standish Hickey)	Realignment 200 l.f. campground access road, demolition of shop bldg., new service yard.	34,000	Approval	
		A- AAA		

65,000 Approval

Install 4 retaining bins to prevent road erosion.

Recommendation

Special review

Department of Parks and Recreation-Continued

Park Unit
Torrey Pines
State Park

Description
Historic bldg. restoration.
This "historic" bldg. was
constructed in 1923. The

This "historic" bldg, was constructed in 1923. The project apparently is to provide a bldg, for park headquarters. Its purpose and justification should

be clarified.

Alterations \$20,000 or less 17 projects.

167,000 Approval

Cost

42.800

DEPARTMENT OF PARKS AND RECREATION

Item 346 from the Funds accumulated under the provisions of Item 257,

Budget Act of 1969

Capital Outlay Budget page 293

 Requested 1970–71
 \$100,000

 Recommended for approval
 100,000

ANALYSIS AND RECOMMENDATIONS

We recommend approval.

This is a continuation of a rehabilitation and repair program by the Office of Architecture and Construction for the Hearst Castle Complex including the completion of work on Purdah Screens at "C" house; repairs to the tile roof on the Casa Grande; repair and/or replacement of the secondary wiring in the main building; repairing the tile roof, steps, landings, walks and railings at "A" house. This request also includes a new survey of the entire facility to establish a new corrective, repair and restoration program, make new cost estimates, and set new priorities.

DEPARTMENT OF WATER RESOURCES

Item 347 from the General Fund Capital Outlay Budget page 306

Requested 1970–71	\$1,120,000
Recommended for special review	1,120,000
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

We recommend special review for the amount of the appropriation and a revision in the language of the item.

This item appropriates the capital outlay funds for the Department of Water Resources to acquire lands, easements and right-of-way for the Corps of Engineers flood control projects in the Central Valley. While this item was appropriated to the Reclamation Board in past years, it is being expended by the Department of Water Resources this fiscal year and is budgeted with the department for next fiscal year pursuant to the order of the Secretary of Resources as discussed under Item 215.

Department of Water Resources-Continued

As discussed under Item 215, the Department of Water Resources is making a comprehensive resurvey of the funds needed for this item. We therefore believe that the item should be held for special review pending completion of the survey by the department. In addition, it appears that by inadvertance the language of the item is not in the same form as approved by the Legislature last session. We recommend as a technical matter that the citations to statutes be returned to the form of the 1969–70 Budget Act and that the exemption from Public Works Board review be returned to the form included in the 1960–70 Budget Act. The latter action will require design and construction of projects to receive Public Works Board approval.

COMMUNITY COLLEGES

Item_348 from the State Construction

Program Fund Capital Outlay Budget page 151

Requested 1970-71	\$19,064,322
Recommended for approval	
Recommended reduction	None

ANALYSIS AND RECOMMENDATIONS

The "Junior College Construction Program Bond Act of 1968" covering an authorization for \$65 million for community college construction assistance was adopted by the electorate in the June 1968 primary. The act required the proceeds to be deposited in the State Construction Program Fund from which all future appropriations would be made.

The Budget Act of 1968 appropriated \$15,609,333 for a schedule of projects which specified each district and the amount for each project which the state would allocate. In addition, Chapter 931, Statutes of 1968 appropriated \$1,625,000 in augmentation of the budget item to meet certain increases in the anticipated allocations. These actions left an unencumbered balance of \$47,765,467 from which the Budget Act of 1969 appropriated \$29,307,662. However, the state's inability to market its bonds, which became quite clear early in the 1969 session, led to the passage of Chapter 784. Statutes of 1969 (AB 606) which provided sufficient money from the General Fund to more than cover the unencumbered balance of over \$47 million mentioned above. As a consequence, the item now proposed is in effect being financed from the General Fund by virtue of transfers into the State Construction Program Fund.

The gross. estimated program for the community colleges for the budget year exceeds \$38 million of which the state's share will be the amount proposed in this item, the district share will be over \$15.569,000 and federal funds will provide approximately \$1.700,000. Any increases in the total cost of the program will be borne by district funds or from federal funds if they are available. The state's share is fixed at the amounts shown in the schedule and cannot be altered upward except

by act of the Legislature. The schedule covers 93 projects of various types including equipment, working drawings and construction at 35 junior college districts which is approximately one-half of the total number in the state. With respect to the total program cost as mentioned above, the state's share represents an average of approximately 50 percent. However, in any one instance the state's share may vary from a low of 20 percent to a high of over 90 percent. The state's participation is based on a formula established by Chapter 1550, Statutes of 1967 (SB 691) which takes into account the ratio of weekly student contact hours and assessed valuations districtwide and statewide. A fairly detailed description of the process will be found starting on page 1094 of our Analysis of the Budget Bill of 1969.

The proposal contained in this item uses up, for all practical purposes, the balance of the funds made available by Chapter 784 of the Statutes of 1969. The rest of the five-year program from 1971–72 through 1974–75 is projected at a state participation level of \$25 million annually although the Governor's Budget indicates that there is no commitment to this effect. Nevertheless, it indicates the need contemplated by the community colleges system and its board of

governors.

Preliminary plans, outline specifications and cost estimates were made available to the Department of Finance prior to the inclusion of these projects in the Governor's Budget. Together with the Department of Finance we have reviewed this material as carefully as possible and in many instances the Department of Finance made downward adjustments in the estimates initially proposed by the particular districts. We are in agreement with the actions taken by the Department of Finance and with the amounts shown in the budget. It should be noted that each district has the privilege of increasing the cost of a project, for its own reasons, but any increase must be financed from district funds. The amounts shown in the budget are only the state's participation, not the gross values of the projects involved. However they are based on gross estimates which were established by conference.

We indicated earlier that the total number of projects in this item was 93 which would require a prohibitive amount of space if each one were to be described and detailed in this analysis. Consequently, we propose to group the projects into five broad categories and to describe one or more projects in each. The total shown for each category is the

state's share, not the gross cost of the projects.

(a) Real property acquisition \$1,369,603 We recommend approval.

This category covers six projects in five districts. The largest single one is for the acquisition of approximately 27.3 acres at San Diego City College in the San Diego Unified School District. The state's share is \$648.180. The purchase is part of a redevelopment project being undertaken in downtown San Diego. The land would be used both for immediate expansion and to provide substantial area for future expansion particularly to accommodate minority enrollments from the areas immediately surrounding the site.

The smallest project in the group is for \$1,291 for the acquisition of three utility easements at West Valley College in the West Valley Joint Junior College District.

(b) Site development—utilities and maintenance plant__ \$1,049,458 We recommend approval.

This category covers six projects of which the largest single one, insofar as the state's share is concerned, is the site development Phase I for Butte College, a new campus, in Butte Junior College District in which the state's share will be \$627,515.

This will cover grading, drainage, internal access roads, walks and general site development and utilities all needed to make a new campus site usable. The project was carefully reviewed and its scope represents only those elements most essential to the opening of the campus.

The smallest project in the group is for clearing, grubbing and sewer services for the language arts-social science facility and some future buildings at West Valley College in the West Valley Joint Junior College District. The state's share of this project would be \$26.452. This also has been carefully reviewed and represents only those elements essential to preparing the site for the specific building and stubbing out for some future buildings.

There were actually no projects for maintenance types of facilities in the total proposal. The title that we use for the category was established by our Analysis of the 1969 Budget Bill and we felt that we should continue to use the same designation.

(c) Academic instructional facilities_____ \$8,820,885

We recommend approval

This category includes 24 projects all having some form of academic capacity implication other than physical education. The projects are both for construction and for working drawings for future construction which includes lecture facilities, laboratory buildings and vocational technical facilities.

Insofar as the state's share is concerned, the largest single project is for the construction of a science building at Long Beach City College in the Long Beach Unified School District. This project would be a three-story reinforced concrete building having a gross area of over 68,600 square feet with a net assignable area of over 48,300 square feet in which would be housed biological sciences and physical sciences facilities including chemistry, physics, geology, astronomy and mathematics. It is estimated that the total project cost, exclusive of furniture and movable equipment will be \$2,270.268 of which the state's share would represent nearly 57 percent. The unit cost at approximately \$28.62 per gross square foot for the basic building alone is significantly less than laboratory buildings built on state colleges or university campuses. The reason for this is readily explainable. In this instance slightly more than 50 percent of the assignable area is actually devoted to conventional science laboratories which are less sophisticated at this instructional level than would be required for a state college or

university. The balance of the assignable area is largely lecture room

and similar spaces including faculty offices and storage areas.

One of the smaller projects is an agriculture and welding building at Imperial Valley College in the Imperial Junior College District. The building will be a relatively simple prefabricated, steel framed, steel walled structure of one story with demountable interior partitions of metal studs and gypsum boards. It will have a gross area of approximately 9,257 square feet with a net assignable area of 9,105 square feet, giving an almost total utilization of 98 percent which is usually possible only in buildings of this type. The facility will provide teaching and laboratory spaces for animal science courses, crop science courses and agricultural-mechanics courses. The latter includes teaching-lab space for welding technology. The total project cost is estimated at nearly \$224,500 of which the state's share will be \$87,359 or nearly 39 percent. The unit cost of the basic building will be approximately \$18.58 per gross square foot which is quite reasonable in consideration of the fairly complex interior requirements.

It might be useful to discuss one of the working drawings proposals in this category. The largest insofar as state participation is concerned is for an engineering and technology building at Butte College in Butte Junior College District. This is one of the projects which will be built on the new site which was previously mentioned in connection with site development. The gross architectural fee for the project is nearly \$63,000 and the state's share at \$34,809 represents something over 55 percent of that cost. The building is contemplated as having over 29,000 gross square feet of area with more than 20,000 square feet of net assignable area. The current cost estimate indicates a gross requirement in excess of \$1.100,000 for which construction funding will probably be proposed in the 1971 Budget. Unit costs are indicated at over \$29 a gross square foot for the basic building and over \$35 a gross square foot at total project level, exclusive of furniture and movable equipment.

(d) Noninstructional academic and auxiliary facilities \$7,996,587

We recommend approval.

This category is rather broad and covers practically everything not covered by the previous one. It includes such things as libraries, administrative office facilities, faculty office facilities, audiovisual and learning resource facilities, cafeterias and physical education facilities including gymnasiums, swimming pool and outdoor activity areas.

In this instance, the category covers 26 proposals of which a majority are for physical education types of facilities with library or learning resource centers a close second and the balance for student

service related facilities.

Insofar as the state's share is concerned, one of the largest library construction projects is in Merced College in the Merced Junior College District. The building will be a three-story steel frame building with several types of exterior wall treatment including split-face concrete blocks. It will have a gross area of approximately 31,675 square feet with a net assignable area of 25,445 square feet, giving an efficiency

ratio of 80 percent which is very good for a library. The gross cost of the project will be approximately \$1,250,000, exclusive of furniture and movable equipment, of which the state's share will be over \$789,000 or approximately 63 percent. While the unit cost at nearly \$33 a gross square foot for the basic building is relatively high, this is substantially offset by the unusually high efficiency ratio. The capacity of the building is expected to be about 50,000 volumes and 350 reader stations. Included in the building will also be some space for lecture and seminar purposes.

The largest of the physical education projects, insofar as state participation is concerned, is a gymnasium building having a gross area of over 79,000 square feet with over 58,000 square feet of assignable area, giving an efficiency ratio of about 74 percent which is fairly average for this type of structure. The proposal as originally presented had a gross construction cost of nearly \$5 million exclusive of any furniture or movable equipment. The basic building cost covering just construction exclusive of site development, utilities, fees, etc., was over \$3 million or more than \$38 per gross square foot for the basic building. At total project level including all of the auxiliary work plus fees and contingencies but still excluding furniture and movable equipment, the cost was approximately \$62.80 per gross square foot. Based on these figures, the state's share was proposed at \$1,552,238 or over the 31 percent. In reviewing the project, it was determined that these costs were excessive for the purpose and accordingly the Department of Finance reduced the level of gross cost at which it would participate and consequently reduced the state's participation to \$1,412,352. This still allowed for a square foot cost of over \$33 which we would consider to be the maximum that would be acceptable on a similar state college project.

It should also be pointed out that one of the significant working drawings proposals for a physical education facility is at Butte College which contemplates a building having a gross area of nearly 64,000 square feet with a net assignable area of over 44,700 square feet which is estimated to cost in excess of \$2,730,000 for construction in the future. It is also interesting to note that the estimate in this case for the basic building is at \$27 a gross square foot although the efficiency ratio at 70 percent is somewhat lower than the project at West Valley.

One of the large auxiliary projects is a so-called student service center at the College of the Redwoods in the Redwoods Junior College District. The title is simply a substitution for what is commonly called an administration building. The facility is contemplated as a two-story structure generally of wood framing with exterior plywood and redwood sheathing. It would have a gross area of something over 26,000 square feet with a net assignable area of a little more than 16,000 square feet, giving an efficiency ratio of about 61 percent which is slightly more than the minimum considered acceptable for a building of this type. At the time of the submittal, the estimate was over \$27 a gross square foot for the basic building construction alone which was considered excessive. As a result, adjustments were made by the

Department of Finance in the gross cost which would be acceptable for purposes of determining the state's share. This resulted in a reduction in the state's share from \$643,179 to the \$572,157 now contained in the budget.

Generally the building would be used for various types of administrative offices and clerical work areas. However, some of the assignable area would be used for seminar and faculty facilities, teaching laboratories for police science, journalism and business. The academic space would probably occupy about 25 percent of the total assignable area.

(e) Equipment ____

\$1,350,213

We recommend approval.

Generally this category covers equipment for projects already under construction or previously funded and for the smaller projects proposed in this budget which could be completed within the budget year and would require equipment immediately thereafter.

The number of equipment proposals totals 27 and runs from a high of \$275,837 as the state's participation to equip the science facility having over 63,000 square feet of assignable area at the Cypress College Campus of the North Orange County Junior College District down to such minor amounts as \$5,263 as the state's share for equipping the police science building on the Golden West College Campus of the Orange Coast Junior College District or \$4,471 as the state's share for equipping the central storage building at the San Diego Mesa Campus of the San Diego Unified School District.

The cost of equipment projects for junior colleges are rather difficult to compare, with construction costs, as we do with state college and University projects, because we have little or no history or statistics on these cost relationships. Consequently, we have had to rely entirely on the equipment list and rough rules of thumb with respect to the cost of equipping a square foot of different types of space. Ultimately, we hope to be able to establish some meaningful standards to simplify comparison and justify costs.

and justify costs. Additional Comments

It may be noted from the total amounts for each category that actual capacity type academic instructional space, excluding libraries and physical education facilities, represents approximately 46 percent of the total state assistance. On the other hand, the nonacademic space including libraries, administrative offices, cafeterias, physical education facilities, etc., represent almost 42 percent of the state's participation. The balance is for acquisition, site development and equipment. It is interesting to compare these percentages with those of the proposals in the 1969 Budget Act in which academic space represented 41 percent and nonacademic space represented about 32 percent of the state's contribution. It is difficult to draw any clear inferences from these figures other than to comment that the devotion of so large a share of the state's participation to noninstructional or noncapacity projects might be open to debate.

DEPARTMENT OF PARKS AND RECREATION

Item 349 from the State Beach, Park, Recreational and Historical Facilities Fund

Capital Outlay Budget page 304

Requested 1970–71		\$95,598
Recommended for approval		None
Recommended reduction		\$95,598
	,	

ANALYSIS AND RECOMMENDATIONS

We recommend that the item be deleted for a reduction of \$95,598. This item is an appropriation of bond funds to the department's support budget for the cost of local grants administration. Because the budget does not include an appropriation for any new bond projects and because there will probably be no bond proceeds available for expenditure under prior year grant appropriations, we recommend that the item be deleted and that the department absorb any remaining workload in its support budget.

DEPARTMENT OF PARKS AND RECREATION

Item 350 from the State Beach, Park, Recreational and Historical Facilities Fund

Capital Outlay Budget page 303

Requested 1970-71	\$134,772
Recommended for approval	m None
Recommended reduction	\$134,772

ANALYSIS AND RECOMMENDATIONS

We recommend that the item be deleted.

This item provides a reimbursement to the support budget of the department for planning on bond projects. Because of the high planning costs of the department, and a projected delay in the availability of bond proceeds, and the number of projects already planned, we recommend that this item be deleted. The department should use its support funds for any further planning work which needs to be done.

This reduction will allow the department to husband the remaining bond proceeds for priority acquisition projects already in condemnation. If proceeds are not available at the time of the final condemnation judgment, the state will incur penalty payments.

DEPARTMENT OF PARKS AND RECREATION

Items 351-362 from the State Beach, Park, Recreational and Historical Facilities Funds

ANALYSIS AND RECOMMENDATIONS

These items reappropriate or revert State Beach, Park, Recreational and Historical Facilities Funds for both state and local grant projects.

Items Proposing Reappropriations

	$1970 \ Budget\ Bill \ item$	Reappropriations by Item Number, Schedule and Budget Act	Description	Legislative Analyst recommendations
	351	362 (a), (b), (c) Budget Act of 1965	Port Mugu, Delta Meadows, San Onofre, Huntington Beach, Marin Headlands, Pfeiffer Big Sur, Malibu Lagoon, Gold Beach, Topanga Canyon	Approval
	352	423 (a), (c), (g), (h), (i), (m), (q), (r), (t) Budget Act of 1966	Land Acquisition Statewide, Cayote River Parkway, Mitchell Caverns, Old Sacramento, Picacho S.R.A., Old River Islands, Augmentation Twelve Projects, Santa Monica Mountains.	Approval
1157	353	424 (c), Budget Act of 1966 as amended by Item 431.5, Budget Act of 1969	Point Mugu	Approved with addition of limiting language 1.
	354	343.3 Budget Act of 1967	Gaviota Refugio	Approved with addition of limiting language. 2.
	355	343.6 (a), Budget Act of 1967	Torrey Pines	Approved with addition of limiting language. 3.
	356	343.7 (b), (c), (e) Budget Act of 1967	Delta Meadows, Pfeiffer Big Sur, Montgomery Woods	Approval
	357	425.5 Budget Act of 1969	Language and intent unclear	No Recommendation

See No. 1 under Explanation of Limiting Language.
 See No. 2 under Explanation of Limiting Language.
 See No. 3 under Explanation of Limiting Language.

Items Proposing Reappropriations—Continued

	1970 Budget Bill item	Reversions by Item Number, Schedule and Budget Act	Description	$Legislative\ Analyst$ $recommendations$
	358	418 (f), (n), (dd) Budget Act of 1966	East Bay regional Park District, John Marsh Historical Regional Park; City of Monterey and Montebello, Repetto Regional Park; Santa, Barbara, Santa Ynez Valley Park	Approval
1158	359	341 (j), (gg), (mm), (yy) Budget Act of 1967	Marin, Deer Park—Phoenix, Lake County Park; San Bernardino, Prado Regional Park; Santa Barbara, Santa Maria Dunes Regional Park; Tulare. Kings River Park	Approval
	360	370 (d), (q), (s), (t) Budget Act of 1968	City of Monterey Park and Montebello, Repetto Regional Park; Riverside, Collis Mayflower Park; Lewis Ranch Park, Willis Palm Oasis	Approval
	361	418 (b), (n), (y), (mm), (uu), (vv), (ww), (xx), (yy), Budget Act of 1969	Kern, Kern River State Park; Mariposa, Mariposa Creek; Riverside, McCall Memorial Park, San Luis Obispo, Santa Rita Reservoir Recreation Area; Solano, Hunter Hill Regional Park, Lagoon Valley, Lake Solano—Putah Creek Trail, Twin Sisters Park and Morrow Island Aquatic Park	Approval
	362	418 (c), Budget Act of 1969	\$22,000 for King; Corcoran Regional Park	Approval

Department of Parks and Recreation—Continued Explanation of Recommended Limiting Language

1. We recommend adding the following limiting language to reappropriation Item 353: "... provided that the Public Works Board shall not approve funds for construction of any facilities financed from this item or from any other source until the Department of Parks and Recreation has prepared a master plan development report substantially as outlined on pages 772 and 773 of the Budget Analysis for 1969–70 and such report has been approved by the Parks and Recreation Commission." The above language includes in this reappropriation item the agreement reached in the 1969 Session and stated in the Supplementary Report of the Committee on Conference Relating to the Budget Bill.

2. Item 343.3, Budget Act of 1967 expired on June 30, 1969. A new

appropriation is needed.

3. We recommend that the following limiting language originally contained in Item 343.6 of 1967 be included in reappropriation Item 355: "... provided, that no more than nine hundred thousand dollars (\$900,000) shall be available for expenditure on this project; and provided further that none of the money appropriated for this project shall be available for expenditure unless and until an agreement or agreements is entered into between the Department of Parks and Recreation and some local organization which provides for a contribution to the project, in the form of funds or property, which in the opinion of the Director of Parks and Recreation will be sufficient to assure that the project will substantially conform to the report on the project dated February 1966 by the Department of Parks and Recreation with the exception that commercial lands along Highway No. 101 shall be excluded from acquisition except for a strip of land necessary for project access."

Reallocation of Bond Funds in 1971-72

The above items provide for various appropriations or reversions for bond fund projects from previous years. The State Beach, Park, Recreational, and Historical Facilities Bond Act of 1964 provided in part that on July 1, 1970, the Resources Agency secretary shall cause to be totaled the unencumbered balance remaining in the State Beach, Park, Recreational and Historical Facilities Fund. A program shall be submitted in the budget for the 1971-72 fiscal year to appropriate this balance. This program shall consist of projects deemed to be of highest priority from among the purposes expressed in Section 5096.15 (A) through (D), inclusive, and shall not be subject to the maximum amount allocated to those purposes in Section 5096.15. Section 5096.15 provided that \$85 million was made available for the acquisition of real property for the state park system including public beaches. Twenty million dollars was made available for the minimum development of real property acquired under Subdivision A of the section. The acquisition and development of real property for wildlife management received \$5 million. Grants to counties, cities or cities and counties for the acquisition and, development of real property for park and beach purposes received \$40 million. The act further provided for a formula for the computation of the amounts of money appro-

priated to each county and that a minimum of \$75,000 was authorized

for each county regardless of population.

Last year in our support analysis, we indicated that because of delays in acquisition and further delays in planning, only a portion of the \$20 million minimum development has yet been appropriated and very little of that appropriated amount has been expended. In spite of the serious need for the development of the park units acquired under the bond act, it is now apparent that most of the minimum development bond funds and a large portion of the acquisition fund will remain unencumbered by the above July 1, 1970 terminal date.

There will also remain approximately \$4.5 million of the local grants funds which have not yet been appropriated. Therefore those counties which have not received their full share of grant funds may have to await the decision of the Resources Agency Secretary in the 1971–72

budget.

CONTROL SECTIONS

Sections 4 through 36 of the Budget Bill are the so-called "control sections" which place limitations upon the expenditure of certain appropriations, extend the availability of certain specified prior appropriations, define the authority of the Director of Finance with respect to reductions and transfers within and between categories of expendi-

ture, and contain the usual severability and urgency clauses.

Although significant fiscal policy is contained in these sections, particularly with respect to extending the availability of prior appropriations, these sections have not been received by us in time to permit adequate review for purposes of recommendations to be incorporated in this analysis. These control sections will be analyzed and a recommendation thereon made to the committees in hearings on the Budget Bill.