

**Table 4**  
**Administration Workload, Man-Year and Cost Data**

<i>Detail</i>	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
Executive orders -----	400	400	400
Regulations issued -----	18	20	20
Facilities hearings -----	93	111	111
Facilities decisions -----	161	180	180
Personnel man-years -----	43.5	46	43
Cost -----	\$693,640	\$717,319	\$714,768

**ANALYSIS AND RECOMMENDATIONS**

*We recommend approval.*

The department's requested budget-year expenditure of \$2,878,475 is \$2,756 above estimated expenditures for the current year. A \$97,719 salary increase is part of current-year expenditures.

The department proposes the elimination of eight currently authorized positions in the budget year (four auditors I, two clerks, and two assistant appraisers) for a saving of \$64,752. These positions are vacant, and the department states that the lower staff level reflects the efficiencies of selective scheduling of examinations, improved evaluation procedures, and the decline in the number of associations.

**Departmental Funding**

The department is supported from the Savings and Loan Inspection Fund. Revenue for this fund is produced by an annual assessment established within statutory limitations by the commissioner on all state-regulated associations. The assessment is proportional to association assets and is set at a level to cover the department's annual operating costs. At the end of the budget year, the fund will have an estimated surplus of \$1,844,772, which is sufficient to provide for support of the department for nearly two-thirds of a year at the current level of operation.

**OFFICE OF TRANSPORTATION PLANNING AND RESEARCH**

Items 167-170 from the General Fund,  
Aeronautics Fund; Harbors and Wa-  
tercraft Revolving Fund and Motor  
Vehicle Fund

Vol. II p. 69 Budget p. 104

Requested 1971-72 -----	\$234,100
Estimated 1970-71 -----	113,750
Actual 1969-70 -----	
Requested increase \$120,350 (105.8 percent)	
Total recommended reduction -----	None

**SUMMARY OF MAJOR ISSUES AND RECOMMENDATIONS**

*Analysis  
page*

1. Recommend legislation to establish the State Transportation Board as a body separate from the Business and Transportation Agency. 343

## Office of Transportation Planning and Research—Continued

Analysis  
page

2. Transfer the staff of the Office of Transportation Planning and Research to the State Transportation Board. 343

## GENERAL PROGRAM STATEMENT

The Office of Transportation Planning and Research was established within the Business and Transportation Agency pursuant to Chapter 1551, Statutes of 1970. The major function of the office is to serve as both principal staff to the recently created State Transportation Board and in the same capacity to the Secretary of Business and Transportation, in matters concerning the growth and development of a balanced transportation system in the state. In fulfilling the latter function, the office undertakes research into the long-range effectiveness of major transportation programs of local, regional, state, and federal entities in meeting statewide transportation needs. In addition, the office aids in the coordination of planning projects relating to existing and future transportation systems.

Chapter 1551 provided a multifund source of financial support for the office during the applicable portion of the 1970-71 fiscal year. The legislation further stated that "financial support of the Office of Transportation Planning and Research be provided from public funds supporting various modes of transportation in the approximate ratio of public financial assistance to each mode to the total public funds supporting all modes." The funding schedules for the current year and the proposed expenditure level for the 1971-72 fiscal year are shown in Table 1.

Table 1  
Funding—Office of Transportation Planning and Research

	Estimated 1970-71 <sup>1</sup>	Percent of total	Proposed 1971-72	Percent of total
General Fund -----	\$16,278	14.3	\$8,000	3.4
Aeronautics Fund -----	2,034	1.8	4,200	1.8
Harbors and Watercraft Fund -----	679	0.6	1,403	0.6
Highway Users Tax Fund -----	94,759	83.3	—	—
Motor Vehicle Fund -----	—	—	220,497	94.2
Total -----	\$118,750	100	\$234,100	100

<sup>1</sup> Represents estimated expenditures from November 23, 1970 to June 30, 1971.

As shown in Table 1, the General Fund portion of the proposed budget, as a percentage of total expenditures, indicates a reduction which is proportionate to the increase in the funding level from highway users taxes.

The budget for fiscal year 1971-72 is based on a staffing level of 7.3 positions. The staff consists of four technical and 3.3 clerical positions.

In addition to providing financial support for activities related to the Office of Transportation Planning and Research, approximately \$1,800 is contained in this item for support of the State Transportation Board.

The board was established in the Business and Transportation Agency pursuant to Chapter 1404, Statutes of 1969. Membership consists of seven members appointed by the Governor. The Chairmen of the Senate and the Assembly Transportation Committees serve as ex officio

members of the board. The function and duties of the board, according to the implementing legislation, are to advise and assist the Secretary of Business and Transportation and the Legislature "in formulating and evaluating state policy and plans for transportation programs within the state."

#### ANALYSIS AND RECOMMENDATIONS

*We recommend that legislation establish the State Transportation Board as a body separate from the Business and Transportation Agency administratively responsible to the Governor or Lieutenant Governor and that the staff of the Office of Transportation Planning and Research be transferred to the State Transportation Board.*

In our view it is questionable whether the Office of Transportation Planning and Research or the State Transportation Board can function effectively as presently constituted. The office is charged with the responsibility of functioning as the principal staff adviser in matters concerning the growth and development of transportation in the state to both the Business and Transportation Agency, of which the office is a part, and also the State Transportation Board, which, while technically a part of the agency, has the responsibility to independently advise the agency secretary and the Legislature in transportation matters. Thus, at least conceptually, the State Transportation Board, lacking autonomy and a separate evaluation source, is not in position to render independent advice to the agency secretary because the latter, by definition, already possesses the same source of expert advice.

Until the state's role with regard to a total state transportation system is established, the board is in the difficult position of not being able to render an effective and objective contribution toward solving transportation problems. Aside from the question of the board's lack of independent staff, if the board is to function effectively as a source for formulating and evaluating state policy and plans for transportation programs, the board should be constituted independent of the Business and Transportation Agency.

The following are examples of problem areas in which an effective transportation board might offer valuable insight to the agency and the Legislature. Recently enacted federal legislation, i.e., the Urban Mass Transportation Assistance Act of 1970 and the Airport and Airway Development and Revenue Act of 1970 will provide a long-term, multi-billion-dollar source of funding for transportation facilities. However, lacking a state transportation plan, the administration and the Legislature will be in a difficult position when attempting to establish a basis for the most efficient and coordinated expenditure of future revenues.

Insofar as the state's current transportation program is concerned, a preliminary draft of the Annual Highway Planning Report prepared by the Department of Public Works in August 1970 and presented to the California Highway Commission contains a partial list of highway corridors in the Los Angeles and San Francisco metropolitan areas totaling 169.5 miles for which future travel demands are projected to exceed the ability of freeways to physically accommodate the traffic even

Office of Transportation Planning and Research—Continued

when the capacities of the existing structures in some cases are more than doubled. However, the agency has been reluctant to view transportation in terms of alternative solutions.

As an example, a report dated January 8, 1971, prepared by the Business and Transportation Agency utilizing the staff services of the Office of Transportation Planning and Research in answer to Assembly Concurrent Resolution No. 40 (Resolution Chapter 119, 1970 Regular Session of the Legislature) was not responsive to the legislative request. The resolution requested the agency to study the feasibility of extending rapid transit service along a Sacramento to San Francisco Bay area corridor. The resolution stated that the agency was to "thoroughly investigate the feasibility of such a project to insure the proper planning, to determine the projected costs and to determine the cost of delays in inaugurating such a project." The agency, in an eight-page study, after providing population and travel statistics, stated that "more detailed feasibility studies would cost approximately \$200,000. It is concluded that with the limited planning money and manpower presently available, this project does not have a sufficiently high priority to recommend the early allocation of funds." While we generally concur that research funds are relatively limited, we question the statement that the project is of low priority primarily because the agency, lacking a state transportation plan, does not have the ability to determine transportation priorities.

In our view, legislation establishing the State Transportation Board as an entity separate from the Business and Transportation Agency and transferring the existing staff of the Office of Transportation Planning and Research to the board would provide an objective and effective means for the Legislature to evaluate the contribution of the board in the future.

DEPARTMENT OF AERONAUTICS

Item 171 from the Aeronautics Fund Vol. II p. 75 Budget p. 106

Requested 1971-72	\$516,729
Estimated 1970-71	608,568
Actual 1969-70	452,207
Requested decrease \$91,839 (15.1 percent)	
Total recommended reduction	None

GENERAL PROGRAM STATEMENT

The primary functions of this department are: (1) stimulate the growth of private flying and general use of air transportation, (2) promote air safety, (3) provide assistance in the development of a statewide system of airports, (4) cooperate with federal agencies in the

development of a national system of civil aviation and coordinate the aeronautics activities of the federal government with the State of California, and (5) establish regulations relating to aeronautics that would be consistent with federal regulations.

The programs established to carry out the above functions are: (1) aviation systems and facilities development, (2) environment protection, (3) aviation safety and education and (4) administration.

The support of the department is financed from the Aeronautics Fund resulting from collection of a two-cent-per-gallon aviation fuel tax. The money in this fund in excess of the amount required for support of the department is allocated to eligible airports in an amount to not exceed \$5,000 for each airport. Prior to the enactment of SB 1098, 1970 session, the maximum amount was \$2,500. Any remaining balance is allocated at the discretion of the Aeronautics Board for development of airports.

#### ANALYSIS AND RECOMMENDATIONS

*We recommend approval.*

The proposed amount of \$516,729 for support of the Department of Aeronautics for 1971-72 is a decrease of \$91,839 from the amount estimated to be expended in the current fiscal year. The major portion of this decrease results from the \$134,000 for navigational systems appropriated by Chapter 700, Statutes of 1968, being shown as an expenditure in the current fiscal year and not continued in the budget proposed for 1971-72. The major items of increase which partially offset this decrease are: (1) the replacement of the engines in two aircraft at a cost of \$12,000 (the standard of use before replacement for this type of engine is 1,200 to 1,500 hours, and both of these engines will have been used this number of hours in the fiscal year 1971-72), (2) merit salary increases \$8,536, (3) Attorney General fees \$6,000, and (4) \$17,500 to determine the advantages and disadvantages to the environment of a community before the department grants a permit for an airport. The amount of \$40,000 was provided for this purpose in Chapter 1293, Statutes of 1970, and can be spent as needed in any fiscal year.

No new positions are requested.

#### Aviation Systems and Facilities Development

Airspace is becoming overcrowded with traffic. It is estimated that the demand for air transportation nationwide will at least double by 1980. It is anticipated that the increase in demand for this service in California will exceed the national average.

The Department of Aeronautics is charged with the duty of establishing standards for airports and heliports which include: (1) length and width of runway, (2) clear approach and departure routes, side clearance between runway and obstruction, (3) longitudinal runway gradient and alignment with prevailing winds and (4) hazards to persons and property that should be considered when site selection is made.

**Department of Aeronautics—Continued**

Most of the development of airports in California has been initiated by local entities with financial assistance from the state and federal Governments. As a general rule, these airports have been planned to service the local communities. Very little if any consideration has been given to tie-ins with other modes of transportation or air services of the state as a whole. A greater effort must be exerted by the state to assist local governments for statewide airport planning, for disaster airlifts, planning which takes into consideration the environmental effects, and engineering and financing for training airstrips and recreation airports. The future planning of all airports in the state should be done on the basis that each airport is an integral part of the total transportation system of California. To attain these objectives, the department of Aeronautics is in the process of developing a state master airport plan which is discussed in Item 172, page 348, of our analysis.

Table 1 shows the activity relating to the regulation of airports and heliports. Table 2 shows the mandatory \$5,000 allocation to each eligible airport under apportionments. The amounts shown under allocations are funds approved by the Aeronautics Board for acquisition of land and development of airports. The maximum that can be allocated to any one airport is \$150,000.

**Table 1**  
**Regulation of Airports and Heliports**

<i>Output</i>	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
Annual inspections of airports and heliports -----	551	600	650
Inspection of proposed airport and heliport sites --	214	225	250
New permits issued -----	28	30	35
Site approvals issued -----	57	67	75
Airspace hearings attended -----	12	12	12
Airspace cases by mail -----	196	220	240

**Table 2**  
**Apportionments to Airports**

<i>Output</i>	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
<b>Apportionments:</b>			
Eligible airports -----	166	200	170
Funds provided -----	\$413,200	\$800,000	\$850,000
<b>Acquisition and Development:</b>			
Applications reviewed and processed -----	68	75	85
Allocations -----	\$811,295	\$1,805,513	\$1,203,531

**Environment Protection**

The objective of this program is to determine if the sites selected for airports would create environmental disadvantages to the community. There are statutory requirements for the Department of Aero-

nautics to establish noise standards. Local authorities are expected to enforce these standards. The department is also charged with the responsibility for making certain that the advantages to the public are of greater value than the disadvantages to the environment when considering requests for permits for new airport sites.

#### Aviation Safety Education

The principal function of this program is to disseminate up-to-date safety information to pilots, crew members and instructors. Another function is the coordination of personnel and resources throughout the state for search and rescue activities.

The department is required to regulate sport parachuting. Minimum standards established by the department must be met before jumps can be made. At present, the department charges a fee of \$100 for the original application for a permanent drop zone, \$25 for a temporary drop zone and \$3 for a California parachutist identification card.

In our analysis of the 1970-71 fiscal year, we recommended that this program be made self-supporting by increasing the fee for temporary zone drops from \$25 to \$40. No action was taken by the Legislature on this recommendation. However, we feel that with the limited funds available for aviation needs, the department should make every effort to operate this program on a self-supporting basis by increasing fees in the amounts necessary to accomplish this objective.

#### Financial Responsibility

In 1968, the Legislature enacted a uniform aircraft financial responsibility law (Chapter 1452) which is similar in some respects to the financial responsibility for motor vehicles.

The law provides that the operator of an aircraft involved in an accident in which injury was caused to anyone except the operator or guests, or property damage was caused in excess of \$400 to property not owned by operator or owner, must file within 48 hours a report in writing to the Department of Aeronautics. The operator or owner is required to furnish proof of financial responsibility. If he cannot furnish this proof, then he is required to deposit cash in the State Treasury in the amount necessary to cover the estimated cost of the accident or the judgment for injury.

#### Administration

The Director of the Department of Aeronautics and his staff determine policy and are responsible for the execution policies through the department. The State Aeronautics Board formulates general policy. Other functions performed in this program include: (1) budget preparation and control, (2) financial and business affairs, such as negotiation of leases and contracts, (3) maintenance of pay and personnel records and (4) maintenance of records showing allocations to local governments for airports and other routine functions such as furnishing information to the general public, news letters, etc.

**Department of Aeronautics**  
**STATE MASTER AIRPORT PLAN**

Item 172 from the Aeronautics Fund      Vol. II p. 76      Budget p. 106

Requested 1971-72 .....	\$227,354
Total recommended reduction .....	None

**ANALYSIS AND RECOMMENDATIONS**

*We recommend approval.*

In the fiscal year 1968-69, the Legislature approved an appropriation of \$160,000 to enter into a contract with a consulting firm to do a study relating to Phase I of a State Master Airport Plan. This amount has been obligated and the department is making payments as claims are presented for work done by the consulting firm.

Phase I of the State Master Airport Plan, which is near completion, covers an evaluation of airport assistance which will enable the department to decide what the demand may be over the next 20 years. Cost estimates will be developed for alternative aviation systems. The completion date of this phase is scheduled for March 1, 1971. The information contained in Phase I will serve as a basis for Phase II which will enable the consulting firm, with assistance from the staff of the department, to prepare a plan which will coordinate local and regional airport plans with airport plans for the rest of the state and a plan for the implementation of an effective overall statewide system of airports.

The amount proposed in the 1971-72 Budget to complete Phase II is \$227,354 from the Aeronautics Fund and \$454,708 from the federal government. This phase should complete the study.

**CALIFORNIA HIGHWAY PATROL**

Item 173 from the Motor Vehicle Fund      Vol. II p. 92      Budget p. 108

Requested 1971-72 .....	\$132,236,035
Estimated 1970-71 .....	123,772,476
Actual 1969-70 .....	110,875,172
Requested increase \$8,463,559 (6.8 percent)	
Total recommended reduction .....	\$2,590,470

**SUMMARY OF MAJOR ISSUES AND RECOMMENDATIONS**

*Analysis  
page*

1. Officers Doing Inspection—Reduce \$2,071,212. We recommend that six schoolbus inspection officers in the "school pupil safety" program element, 231 officers in the passenger vehicle inspection program element and 47 officers in the commercial vehicle inspection at state facilities program element who are currently doing inspection duties, be transferred to road patrol duties and that the corresponding number of civilian inspection specialists be hired to perform the inspection tasks.



The transferred officers should fill positions that would otherwise be filled by newly trained officers and not further expand authorized officer positions.

2. Limited Police Powers for Civilian Employees. We recommend civilian vehicle inspectors be legislated limited police powers, for motor vehicle citation purposes only, in the performance of their duties. 357

3. Delete New Positions—Reduce \$181,230. We recommend the 23 new assistant motor carrier positions be deleted for a savings of \$181,230 in salaries and wages in addition to related operating expenses. 360

4. Noise Program—Reduce \$267,894. We recommend that the highway noise test portion of the vehicle noise control program element be deleted in its entirety. In addition, we recommend changes in the Vehicle Code to provide for better noise control, by the Highway Patrol, at manufacturing and wholesaling levels. 363

5. Passenger Vehicle Inspection. For the passenger vehicle inspection element, we recommend that the department follow its research studies and emphasize the inspection of highly correlated accident causing defects, and that within limitations, Vehicle Code violations that are not highly related to accidents be ignored in the formal inspection. 364

6. Passenger Vehicle Inspection. We recommend that the department research the accident reducing effect of the passenger vehicle inspection element. We further recommend that if the research demonstrates that the funds would better be spent elsewhere, the department present the results to the federal government and attempt to have this requirement for federal highway funds lifted. 366

7. Academy Kitchen—Reduce \$126,269. We recommend academy kitchen staff positions be deleted for a savings of \$126,269 in salaries and wages. 368

8. Technical Section. We recommend the regulation and inspection section of the Safety Services Division be staffed by civilians. 355

9. Data Processing. We recommend that the Highway Patrol's data processing be integrated into the California law enforcement telecommunication system, a centralized, statewide computerized law enforcement network under the Department of Justice. Pending resolution of the above, we withhold recommendations on the data-processing budget. 369

10. Study of Program Cost Effectiveness. We recommend that \$100,000 be allocated in order to hire a private management consulting firm to do an independent analysis of the cost effectiveness relationship of those program activities aimed at reduction of accidents, injuries and loss of life. We recommend funds be allocated to a joint committee of the Legislature in order to maximize objectivity and impartiality. 374

11. Minor Construction—Reduce \$43,865. We recommend reduction of \$43,865 in this category, for specific projects. 375

**California Highway Patrol—Continued**  
**GENERAL PROGRAM STATEMENT**

The California Highway Patrol under the Transportation Agency has primary responsibility for the safe and expeditious movement of goods and people on the California roadway system. The department's authority for the control of moving vehicles extends to all roadways in unincorporated areas and all roadways designated as freeways. The implementation of the department's responsibility is performed by two interrelated programs: (a) The utilization of traffic officers on road patrol, and (b) the regulation and inspection of vehicles.

The traffic officer's functions include visual road patrol, enforcement of the California Vehicle Code, investigation and reporting of accidents, rendering aid to distressed motorists and rendering aid to other law enforcement agencies.

The regulation and inspection duties of the department are performed both by nonuniformed specialists and traffic officers. The areas included are the inspection and regulation of schoolbuses, ambulances, armored cars, siren-equipped emergency vehicles, official lamp and brake stations, motor vehicle pollution control installation and inspection stations and installers, farm labor vehicles and the transportation of explosives. The department inspects and controls commercial traffic through the use of fixed and mobile weighing scales, major roadside inspection facilities, and by the inspection of commercial carrier terminals. The department tests, approves and regulates devices sold in retail stores for use on highway vehicles and also devices and systems installed in new vehicles offered for sale. The department conducts random inspections of passenger vehicles in lane-type operations and random noise production tests on roadways. The department maintains statewide accident records, investigates auto thefts and maintains a stolen vehicle on-line computer file. Lastly, the department checks vehicles without proper visible chassis identification numbers upon reference from the Department of Motor Vehicles. These vehicles are checked for the concealed identification number and for alteration and theft.

Support for the traffic officers and inspection specialists is provided by uniformed and nonuniformed personnel in the field offices and in the department headquarters in Sacramento. Field operations are divided geographically into zones and areas. The six zone offices are located in Redding, Sacramento, San Francisco, Fresno, Los Angeles and San Diego. These offices are responsible for the operation and supervision of 78 field area offices, each of which is commanded by a captain or lieutenant. One of the area commander's principal responsibilities is the deployment of the traffic officers onto the state highways and county roads within his jurisdiction.

The headquarters staff located in Sacramento consists of an executive staff and four functional divisions: operational planning and analysis, training, safety services, and administrative services.

The operational planning and analysis division is responsible for analyzing the efficiency of field operations, planning the implementation of recent staff increases and assisting field supervisors in determining rational field deployment.

The training division instructs cadets, conducts in-service classes and provides specialized training for potential command level personnel.

The safety services division is responsible for the development and dissemination of regulations and procedures required for the safe, mechanical operation of motor vehicles, securement of loads, sale of automotive equipment and the operation of official stations.

The administrative services division has the responsibility for all personnel services and accounting activities, the warehouse system and for the acquiring and equipping of patrol cars and motorcycles.

The executive office advises and provides information to the Commissioner of the California Highway Patrol on administration of the department's affairs.

Growth of the department during the last six years can largely be attributed to the passage of specific legislation. The most significant is Chapter 2031, Statutes of 1965. This bill authorized doubling the department's uniformed strength by December 31, 1968. To pay for these additional positions, a dollar was added cumulatively to motor vehicle registration fees in each of the three years, 1966, 1967 and 1968. The ultimate registration fee imposed in 1968 will continue in subsequent years. Pursuant to Chapter 2031, the department added 1,900 traffic officers: 1,000 in 1966, and 450 each in 1967 and 1968. The Budget Act of 1965 authorized 551 traffic officers and supervisory personnel for assignment to six major accident roadways. A further basis for patrol expansion was provided by Chapter 1451, Statutes of 1965 which modified Section 2400 of the Vehicle Code giving the department full responsibility for all urban freeways except within the Cities of Los Angeles and San Diego. Chapter 1451 amended Section 2400 to permit any city to request the department to assume the responsibility for its freeways. In 1968, formal requests were adopted by the Cities of Los Angeles and San Diego. This provided the basis for authorization in the 1969 Budget Act of 357 additional uniformed personnel.

Table 1 shows the growth of authorized positions in the department since 1964-65 and compares the level of authorized traffic officer positions with the number of filled positions on the dates indicated.

Table 1  
California Highway Patrol Growth in Authorized Position.

	Traffic officers		Supervising	Man-years overtime	Nonuni-	Total
	Authorized	(Filled)	officers authorized	all uniformed personnel	formed <sup>2</sup> authorized	authorized man-years <sup>2</sup>
June 30, 1965-----	2,566	(2,525)	455	110.8	1,082.3	4214.1
June 30, 1966-----	3,117	(3,086)	455	132.8	1,292.3	4997.1
June 30, 1967-----	4,125	(3,840)	540	172.8	1,503.3	6341.1
June 30, 1968-----	4,575	(4,340)	661	183.8	1,707.4	7127.2
June 30, 1969-----	5,025	(4,715)	711	192.8	1,754.8	7490.8
June 30, 1970-----	5,366	(4,735)	721	198.8	1,910.2	8196.0
June 30, 1971-----	4,932	(4,824)	742	198.8	1,801.7	7681.5
June 30, 1972 <sup>1</sup> ----	4,891	(4,870)	808	218.3	1,942.0	7859.3

<sup>1</sup> Proposed.

<sup>2</sup> Excludes crossing guards.

**California Highway Patrol—Continued**

**ANALYSIS AND RECOMMENDATIONS**

For fiscal year 1971-72, the department is requesting \$132,236,035. This is an increase of \$8,463,559 or 6.8 percent over the \$123,772,476 estimated to be expended in the current year. Within this increase is a request for 44.5 additional authorized uniformed personnel and 140.3 additional civilian personnel.

The department consists of five major operational programs: traffic supervision and services on the state highway system, selective deployment on the county road system, regulation and inspection, records, and auto theft. The department has a sixth program which encompasses administrative functions.

**I. TRAFFIC SUPERVISION AND SERVICES ON THE STATE HIGHWAY SYSTEM**

*We recommend approval.*

This program represents the backbone of the department's operation by putting patrolmen on the state highway system. Its cost represents approximately 72.5 percent of the department's expenditures and it is divided into two program elements: surveillance and services, and accident control.

**Surveillance and Services (A)**

The department's objective in this program element is to assure rapid removal of traffic impediments to encourage the most effective flow of traffic. Uniformed personnel with appropriate enforcement vehicles are assigned to the state highway system in relation to traffic volume and expected volume of traffic impediment occurrence. In the 1970-71 fiscal year, there will generally be an officer on duty for this purpose for every 18,500,000 motorist miles driven.

Surveillance is defined as that time when an officer is present on a highway in a distinctly marked enforcement vehicle observing traffic.

While assigned to surveillance, the officer is called upon to provide various services to individual motorists as well as to motorists in general. These services include but are not limited to directing traffic, providing information, aiding motorists with disabled vehicles, providing emergency transportation of persons and materials, rendering first aid other than at an accident scene, and storing or impounding abandoned or stolen vehicles.

Other direct services are provided which are related to or are a benefit to traffic flow on the highway system. Several examples of these are providing traffic information, verifying corrections of mechanical defects, providing assistance to allied agencies in a variety of ways including apprehending escapees, and providing relief in disaster and other emergency situations.

**Accident Control (B)**

The objective of this program element is to prevent accidents and discourage accident-causing violations by taking enforcement action when such violators are observed. The ultimate measure of achievement toward the goal is the effect that these efforts by the Highway Patrol have on the occurrence of accidents.

**Table 2**  
**Surveillance and Service Statistics**

	<i>Actual</i> 1969-70	<i>Estimated</i> 1970-71	<i>Estimated</i> 1971-72
Expenditures -----	\$68,412,772	\$76,086,670	\$81,059,766
Personnel man-years -----	3,957.3	4,034.1	4,173.1
Uniformed -----	3,447.1	3,501.4	3,607.3
Nonuniformed -----	510.2	532.7	565.8
Vehicle-miles driven on the state highway system -----	53 billion	55 billion	57.5 billion
Reportable accidents -----	35,000	37,000	40,000
Enforcement actions -----	2.5 million	3 million	3 million
Services -----	2,000,000	2,250,000	2,400,000

In carrying out the responsibility for traffic law enforcement, the officer, after making contact with the motorist, informs him of the violation observed. Such a contact will result in either a written citation, a written warning, or a verbal warning. The emphasis in this enforcement activity is to bring to the attention of the motorist those violations which are of an accident-causing nature.

**Table 3**  
**Accident Control Statistics**

	<i>Actual</i> 1969-70	<i>Estimated</i> 1970-71	<i>Estimated</i> 1971-72
Expenditures -----	\$14,773,294	\$15,141,374	\$16,154,620
Personnel man-years -----	854.4	812.5	839.4
Uniformed -----	728.1	691.5	711.8
Nonuniformed -----	126.3	121	127.6
Reportable accidents -----	35,000	37,000	40,000
Vehicle-miles driven in the state highway system -----	53 billion	55 billion	57.5 billion

## II. SELECTIVE DEPLOYMENT ON THE COUNTY ROAD SYSTEM

*We recommend approval.*

This program is similar to program I, except that officers are deployed on the county road system instead of the state highway system. It represents 10.4 percent of the department's budget request. The program is divided into two program elements: accident prevention and selective enforcement.

### Accident Prevention (A)

On certain high-volume county roads the traffic volume and the number of accidents are such that the frequency and pattern of accident occurrence are similar to those on the higher volume state highways. Such roadways make up 6,600 miles and represent 9 percent of the system.

On these roadways the objective of the department is to prevent accidents by regular visual patrol and by taking enforcement actions against accident-causing violations.

### Selective Enforcement (B)

On 70,000 miles or 91 percent of the county roadway system, 18,271 reportable accidents occurred in 1969. This represents a 7.9 percent increase over the previous year and is the greatest percentage increase

## California Highway Patrol—Continued

Table 4  
Accident Prevention Statistics

	Actual 1969-70	Estimated 1970-71	Estimated 1971-72
Expenditures -----	\$7,924,101	\$10,155,286	\$10,832,416
Personnel man-years -----	468.3	545.8	565.5
<i>Uniformed</i> -----	399.4	464.4	479.6
<i>Nonuniformed</i> -----	68.9	81.4	85.9
Vehicle-miles driven on the county road "line" beats (high-volume roads) -----	25 billion	26 billion	27 billion
Reportable accidents -----	12,000	12,400	12,700
Enforcement actions -----	1.1 million	1.2 million	1.4 million
Services -----	600,000	630,000	720,000
Accidents per roadway mile -----	2	2.07	2.12

over the past 10 years where the number has been increasing at the rate of 5 percent per year. Experience has shown that, geographically, these accidents tend to occur in clusters at locations which are more hazardous because of combined problems of driver violations and roadway design.

The 70,000-mile network of county roadways covered by this element are divided into many large "area" beats. A beat can generally be described as a geographical subdivision with insufficient accident concentration or average daily traffic volume to warrant the continuing deployment of enforcement personnel, except on a selective enforcement basis. Within these "area" beats the department assigns officers for limited periods of time at those locations and those times where and when accidents occur or are more likely to occur to detect and make contact with traffic law violators.

Table 5  
Selective Enforcement Statistics

	Actual 1969-70	Estimated 1970-71	Estimated 1971-72
Expenditures -----	\$2,071,459	\$2,736,559	\$2,915,621
Personnel man-years -----	118.1	147.8	153.4
<i>Uniformed</i> -----	100.4	125.6	130
<i>Nonuniformed</i> -----	17.7	22.2	23.4
Vehicle-miles driven on the county road "area" beats (low-volume roads) -----	5 billion	5.7 billion	6.5 billion
Reportable accidents -----	18,000	18,600	19,300
Enforcement actions -----	300,000	300,000	300,000
Services -----	150,000	170,000	180,000
Accidents per roadway mile -----	0.26	0.27	0.28

### III. REGULATION AND INSPECTION

*We recommend reduction in expenditures.*

This program is divided into two major areas of emphasis: inspection of vehicles and places of business, and enforcement of regulations. The program is implemented through 17 program elements: school pupil safety, authorized emergency vehicles, armored cars, motor vehicle pollution control, commercial vehicle inspection at state facilities, platform scale operations, mobile road commercial enforcement, official lamp

and brake, motor carrier safety operations, farm labor vehicle inspection, regulation and transportation of explosives, approval of devices, retail outlet inspection, federal standards-conformity control, vehicle noise control, vehicle identification numbering, and passenger vehicle inspection.

In the following we will discuss and comment on a number of these program elements for which we have recommendations. *We recommend approval for those program elements not discussed below.*

*Civilians Should Staff Technical Section.* The regulation and inspection section (not to be confused with the program name) of the safety services division is concerned with the technical aspects of three program elements under the regulation and inspection program. Seven out of 13 of its authorized positions are staffed by uniformed personnel. These officers form the upper management of the section. Officers are highly mobile and tend to be rotated or move upward every 18 to 24 months. Due to the transferring and advancement procedures, the technical abilities gained in this section by an officer are seldom utilized in his new position. By the time the officer has been in this section long enough to develop expertise, he moves on. Therefore, *we recommend that this section be staffed by civilian personnel.* Civilians have a lower turnover rate than officers, and they could also move upward in a normal fashion and thereby still utilize the technical knowledge gained in this section. The implementation of this recommendation should produce a cost saving, but the amount of such saving is not known at this time.

#### School Pupil Safety (A)

The objective of this program element is to promote the safe transportation of school children. The department implements this program by inspecting schoolbuses for defects, assisting the Department of Motor Vehicles in schoolbus driver certification and examination, contracting for pedestrian crossing guards, and working with schools in accident reduction programs. Schoolbus accidents are investigated and tabulated to determine the causes. The full costs of the crossing guards are recovered from the participating counties.

Table 6  
Comparative Accident Rates Data Department Estimates, 1971-72

<i>Vehicle-miles traveled on or by</i>	<i>Reportable accidents</i>	<i>Vehicle-miles traveled (billions)</i>	<i>Reportable accident rate (per 100 million miles)<sup>1</sup></i>
Highway system -----	40,000	57.5	70
Heavily traveled county roads -----	12,700	27	47
Lightly traveled county roads -----	19,300	6.5	297
Schoolbuses -----	--	--	0.119 <sup>2</sup>

<sup>1</sup> Computed from data presented in budget.

<sup>2</sup> This figure is quoted directly from the department's budget.

The department's annual "School Bus Accident Report" provides statistical data on the number and types of schoolbus accidents and the total mileage traveled by schoolbuses as shown in Table 7 following.

another mechanic. Therefore, we recommend that the department transfer the traffic officers doing inspection duties to road patrol duties and that civilian specialists be hired to inspect schoolbuses. The mechanical complexity of schoolbuses requires the specialized knowledge of a well-trained mechanic. The number of officers doing inspection duties is between 6 and 12, depending on the departmental source. The savings of transferring one officer to road patrol and hiring a civilian specialist would be about \$7,293, including benefits, in the first year and \$3,978 per year thereafter. For six men, the first-year savings would be approximately \$43,758. Furthermore, we suggest the officers so transferred be used in place of additional recruits, thus making no increase in total positions due to this change alone.

#### Commercial Vehicle Inspection at State Facilities (E)

We recommend that, instead of hiring new officers, the department hire new civilian personnel. We recommend further that 47 officers doing vehicle inspection jobs in this activity be shifted to the department's expanding road patrol functions and that civilian specialists be hired to perform the inspection duties. The transferred officers should fill positions that would otherwise be filled by newly trained officers and not to further expand authorized officer positions.

The total savings in the first year, per civilian specialist hired and officer transferred to road patrol duties, would be \$7,293 including benefits. In subsequent years, the savings would be \$3,978 including benefits. For 47 men this would mean savings of \$342,771 in the first year and \$186,966 annually thereafter.

We also recommend that legislation be enacted to give civilian specialists limited police powers, for citation purposes only, in the performance of their duties.

The objectives of this program element are to protect California's highways from damage caused by loads greater than the highway capacity, to insure the collection of registration fees and transportation taxes, and to protect the public from unsafe vehicles and loads.

In order to attain these objectives, the department operates large inspection and weighing facilities located adjacent to highways carrying large volumes of commercial traffic. Traffic officers and specially trained vehicle inspection specialists are used in this activity.

Table 9  
Commercial Vehicle Inspection at State Facilities  
Personnel Statistics

	Actual 1969-70	Estimated 1970-71	Estimated 1971-72
Personnel man-years -----	124.8	139.8	161.0
Uniformed -----	43.2	45.9	53.9
Nonuniformed -----	81.6	93.9	107.1

**Workload Information.** In 1970-71, a new commercial inspection facility was opened at Mt. Shasta resulting in increased costs and manpower for that year.

In 1971-72, another facility will be opened in Conejo, in Ventura County. For this facility, the department is requesting 18 new posi-



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tions: one traffic sergeant, six traffic officers, four brake specialists and seven commercial vehicle inspection specialists.

The department has taken the position in the 1971-72 budget, under the passenger vehicle inspection element description, that it is "... part of the department's program to substitute less costly uniformed personnel for traffic officers wherever possible." We concur on this position.

The description of the commercial inspection facility as stated in the department's program budget: "Commercial vehicle equipment and registration laws have become so complex that only by employing teams of specialists and taking the vehicle off the highway can a thorough inspection be performed without undue delay of the vehicle." The primary knowledge needed at an inspection facility is that of a mechanic. It should be easier and less costly to teach a mechanic the vehicle equipment laws than to teach a law officer to be a mechanic.

Table 10  
Increased Annual Cost of Hiring an Officer Versus a Civilian

First-year relevant costs		
First 16 weeks: Training period of new officer		
	Hire an officer <sup>1</sup>	Hire a civilian <sup>2</sup>
Inspecting officer		
Salary	\$3,080	\$3,080
Officer in training		
Salary	3,080	--
Training operating expense	339	--
Investigation auto expense	50	--
Physical exam	56	--
Officer equipment	125	--
Remainder of first year		
Road patrol officer		
Salary	6,928	6,928
Inspecting officer		
Salary	6,928	--
Civilian inspector		
Salary	--	5,580
Physical exam	--	21
Total	\$20,586	\$15,609
Staff benefits	6,598	4,282
Total including benefits	\$27,184	\$19,891
Subsequent years relevant costs		
	Hire an officer <sup>1</sup>	Hire a civilian <sup>2</sup>
Road patrol officer		
Salary	\$10,008	\$10,008
Inspecting officer		
Salary	10,008	--
Inspecting civilian		
Salary	--	\$8,064
Total	\$20,016	\$18,072
Staff benefits	6,598	4,564
Total including benefits	\$26,614	\$22,636

<sup>1</sup> Cost based on the continued use of an officer for inspection and the hiring of another officer for road patrol duties.

<sup>2</sup> Cost based on transferring the officer doing inspection to road patrol duties and hiring a civilian to do the inspection.

There are three questions which must be considered before these facilities can be staffed by only civilian personnel: (a) By whom or how will citations be written? (b) What about personnel safety now that armed officers are not present? (c) If a vehicle driver refuses to stop, who will go after him?

The best method for citation writing would be to give the civilian specialist the limited police powers to do so. This would really only be confirming that which actually occurs frequently in the field: The civilian specialist does the investigation work and the officer signs the resulting citation. After weighing, vehicles are selected to be inspected if they have not been inspected in the last three months, and an inspection lane is open. The civilian specialists inspect the vehicle and fill out several inspection forms. If a violation has been found, the driver is sent with the inspection forms to one of the officers on duty. Using the inspection forms, the officer will issue a citation, fix-it ticket or give a verbal warning. But it is the civilian specialist who identifies the violations. The officer doesn't personally check the violations and sometimes does not even see the vehicle. This would also save a considerable amount of court time. If the cited individual goes to court, then both the officer and the civilian specialist must be there. This is a waste of manpower.

The second question is that of personnel safety. The specialists in the motor carrier safety operation program element do not carry weapons in their inspections. The Department of Agriculture border guards do not carry weapons in their inspections. Also, the commercial inspection facilities usually have four or more personnel at an inspection facility at one time so there is some safety in the size of the staff. Also, belligerent drivers could be allowed to continue on their way, only to be brought back by a traffic officer who had been radioed for assistance. The officer could stay until the belligerent driver's vehicle had been inspected and any necessary citations written.

The third question is what to do with the driver who refuses to stop when there is no uniformed officer and patrol car at the facility to give chase. The staff at the facility always has the ability to call for assistance from the traffic officer who is patrolling that portion of the highway. Vehicle Code Section 2813 requires commercial vehicles to stop at facilities, and the patrolling officer could cite the offender for such violation and return the vehicle to the inspection facility. On the swing shift at the Cordelia facility on Interstate 80, for example, the officers at the facility do not have a patrol car, and they currently rely on the patrolling officer for such assistance.

#### **Motor Carrier Safety Operation (I)**

The objective of this program element is to protect the public from injury and loss of life by commercial vehicles carrying persons and heavy loads. To assure that such vehicles are properly maintained, the department sends inspection specialists to commercial carriers' terminals to check maintenance records and inspect vehicles for compliance with the Vehicle Code. Carriers are required to correct deficiencies or inadequate maintenance programs. Unsafe vehicles are

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placed "out of service." When necessary, prosecution is initiated to obtain compliance. Table 11 compares key data for a three-year period.

Table 11  
Motor Carrier Safety Operation Data Comparison

	Actual 1969-70	Estimated 1970-71	Estimated 1971-72
Personnel man-years -----	53.2	50	74.1
Uniformed -----	---	---	0.1
Nonuniformed -----	53.2	50	74
Terminals inspected -----	16,700	17,000	25,000
Terminals operated -----	25,000	25,150	25,200
Vehicles inspected -----	62,082	63,000	92,000
Vehicles operated -----	212,519	218,500	225,000
Violations corrected -----	102,323	112,200	168,500

The department proposes to hire 23 additional assistant motor carrier operations specialists in order to provide the manpower necessary to inspect and regulate each motor carriers' operation on an annual basis.

For this program element, *we recommend the 23 proposed assistant motor carrier positions be deleted for a saving of \$181,230 in salaries and wages only.* We have three reasons for this recommendation. *First, the department's policy for this element contradicts the department's policy for another similar element. Secondly, the department already has a major emphasis on the inspection of commercial vehicles in comparison to the emphasis on passenger cars. Thirdly, the department is initiating a new segment of this program element which could potentially reduce the workload program in the future by encouraging self-compliance on the part of interstate commercial carriers.*

**Contradictory Policies.** The department's policy for this activity is to inspect each commercial carrier's terminal at least once a year. During these inspections, it is estimated that 41 percent of all commercial carrier trucks and trailers will be inspected.

The policy for the passenger vehicle inspection program element (PVI) is to inspect, on a random basis, only 13 to 16 percent of the total number of passenger vehicles. The department feels that the inspection of this volume of passenger vehicles is a sufficient "threat" to encourage the remaining drivers to maintain their vehicles.

The basic premises of both program elements are the same: "Defects cause accidents, and maintenance reduces defects". Yet, PVI obtains compliance from the target vehicle population by the "threat" of a possible inspection while the motor carrier safety operation proposes to obtain compliance on the part of the target carrier population by an actual inspection. At the same time, the department finds PVI is of questionable worth at a 13- to 16-percent level (see Analysis page 364) and yet wants to expand the motor carrier safety program to a 100-percent level. We find these to be serious contradictions.

**Department Already Has a Major Emphasis on Commercial Vehicles Compared to Passenger Cars.** The department already has three program elements which are primarily directed toward truck safety and maintenance: motor carrier safety, \$1.24 million (1971-72); mobile road enforcement, \$1.66 million; and commercial vehicle inspection

at facilities \$2.40 million. A portion of the latter two program elements is aimed at vehicle weight regulation, and as such this portion is primarily for the protection of the roadways, but it is also for accident prevention, since overloaded vehicles are inherently dangerous. A fourth program element is aimed primarily at weight regulation: platform scale operation, \$1.46 million. The total expenditure for these program elements is \$6.76 million.

For passenger vehicles the department will spend \$8.2 million on PVI. The differences in the hazards of truck-trailer accidents and accidents in general can be estimated from the department's annual "Report of Fatal and Injury Motor Vehicle Traffic Accidents." In this case, the one used will be the 1969 report, the last issued at this writing. Overall there were 164,354 injury and fatal accidents and 112 billion vehicle-miles driven for a fatal and injury accident rate of 146.6 per 100 million miles. For the approximately 85,000 (1969-70) motor carrier tractors falling under the coverage of the motor carrier safety element, there were about 7,200 accidents (estimated from a 1967 figure of 6,000). Each motor carrier vehicle travels an estimated 100,000 miles per year. This computes to an injury and fatal accident rate of 84.6 per 100 million miles. The percentage of fatal accidents compared to the injury plus fatal accidents is 8.35 for truck-trailer combinations and 2.04 for passenger cars. On a per-100-million-miles-driven basis, the truck-trailer is involved in 1.73 (146.6/84.6) times fewer accidents than a passenger car, but when the truck-trailer is involved in an accident it is 4.09 (8.35/2.04) times more likely to cause a fatality. So, we might say a truck-trailer is 2.36 (4.09/1.73) times more likely to cause a fatal accident than a passenger car per 100 million miles. Thus, we might consider this as a rough estimate of the hazards of a truck-trailer in comparison to a passenger car.

In California, passenger vehicles travel about 100 billion miles per year. Trucks travel about 12 billion miles. Using the truck-passenger car fatal hazard ratio of 2.3:1, we can convert 12 billion truck-miles to 26.8 billion effective passenger car-miles. For 100 billion passenger car-miles, the department will spend \$8.2 million or \$82,000 per billion miles, while for commercial trucks the department will spend \$6.76 million or \$252,238 per billion miles for 26.8 billion effective passenger car-miles.

*New Segment Could Reduce Workload.* The department is initiating a new segment of this program element to allow qualified interstate commerce fleet owners to certify that their own vehicles are in compliance with the provisions of the Vehicle Code. These carriers would be allowed to place a special sticker on their vehicles. Such marked vehicles would normally not be inspected at roadside inspection facilities. Interstate carriers would then avoid the inconveniences and expenses of multiple inspections as the vehicles pass from state to state. This program will cost very little to implement but should encourage each carrier to maintain his vehicles according to the California Highway Patrol standards so that he can renew his certification. If this program is successful, the department should be able to concentrate its men on the remaining carriers, thus reducing the workload.

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## Vehicle Noise Control (O)

This program element is designed to keep within acceptable limits, the noise generated by vehicles operated in the state, or by new vehicles which will be operated in the state, as defined under Vehicle Code Sections 23130 and 27160.

The department uses teams of specially trained personnel to conduct random samples, at selected sites, of vehicles which are being operated on the highways in accordance with Section 23130. In cases of non-compliance, the vehicle is stopped and a citation written. In its program statement for the budget, the department estimates, "that approximately 10 percent of the 11 million vehicles operated in the state do not meet these limits." The attainment of the objective of this program element will be evaluated later using this 10 percent figure.

Special teams of engineering personnel conduct tests on representative models of all new vehicles which are offered for sale in the state in accordance with Section 27160. In cases of noncompliance, the manufacturer is given a specified length of time to correct the deficiency.

The department measures its attainment of the objective by the number of vehicle noise tests conducted.

Table 12  
Noise Control Statistics

	Actual 1969-70	Estimated 1970-71	Estimated 1971-72
Expenditures -----	\$289,042	\$291,097	\$336,781
Personnel man-years -----	17.4	17.3	17.8
Uniformed -----	12.6	12.1	12.4
Nonuniformed -----	4.8	5.2	5.4
Vehicle noise tests -----	606,000	610,000	615,000

*Measurement of Attainment of Objective.* The department's utilization of the number of vehicle noise tests given as a measurement of the attainment of the program objective is inadequate and misleading. The purpose is to reduce the number of vehicles producing noise in excess of the statutory limits. *We suggest that the measurement of the success of this program element should be in terms of the reduction obtained and not the number of tests given.*

The usage of the number of tests given as a measurement of the program element is misleading when the department states in its program budget that it estimates that 10 percent of the vehicles on the road are in violation of the vehicle noise law. From this, one is lead to beileve that, for every 10 tests given, a noise violator is cited. This is far from the truth, as will be shown below.

*Department's Research Contradicts Program Element Justification.* In January 1970, the department published the "Passenger Car Noise Survey," which includes two studies. In a 20-day study of 15,000 passenger vehicles, only two vehicles were in violation of the vehicle noise law limits. The second study involved 55,000 passenger vehicles and pickup trucks over a three-month period. Of these 55,000 vehicles, there were 105 vehicles cited. Of these 105 vehicles, 90 were cited for violations unrelated to the noise limits referred to in Vehicle Code Section

23130. Only 15 (or three in ten thousand) exceeded the statutory noise limits. Of these 15 vehicles, . . . 14 had either modified or defective exhaust systems and would have been in violation of other Vehicle Code Sections on exhaust systems . . . ”

*The department estimates in its program budget that 10 percent (or one thousand out of ten thousand) of the vehicles on the road are in violation of the noise law. But, the department's own research shows the figure to be closer to three vehicles out of ten thousand. In 1970, the noise limits were lowered by the Legislature. Under the new limits, the noise tests should find 30 violators out of 10,000 vehicles. The program element does have side benefits in that exhaust system violators that do not exceed the noise law are often detected. However, the sophisticated hardware and specialized training are not needed for the enforcement of the nonnoise exhaust system laws.*

The department also operates the passenger vehicle inspection program, where in 1971-72, 1.6 million vehicles will be inspected. This, in conjunction with the regular officer enforcement, should be able to adequately handle the exhaust system violator.

The cost for the highway noise test is about 79.5 percent of the cost of the vehicle noise control program element. This amounts to \$267,894 in 1971-72. The chief of staff expects the department to test one million vehicles in the highway noise test program (updated from the figure of 615,000 given above by the Budget Division). At a citation of noise violation rate of 30 in ten thousand, we can expect to cite 3,000 noise violators in 1971-72 at an average cost of \$89 ( $\$267,894 \div 3,000$ ) per violation. This high cost per violation is a clear waste of state funds and indicates that the activity is an exercise in futility.

*Based on the above, we recommend that the highway noise test portion of the vehicle noise control program element be deleted in its entirety.*

*We also suggest that the department pay more attention to the findings of its research staff and that the department spend more time evaluating its own programs as to their effectiveness.*

However, due to the increasing public demand for controlling vehicle noise, we recommend the department be given the authority to test replacement mufflers and exhaust systems, and to set the noise control standards for such equipment. The department has sufficient authority to control exhaust systems once the systems are installed on a vehicle operating on the highway, but this is an inefficient method of control. The replacement muffler and exhaust systems that are suspect of violating the law should be tested and compliance should be obtained at the manufacturing or wholesale level. To assure compliance of manufacturers or wholesalers, we recommend Vehicle Code Section 24005 be amended to make it “unlawful to sell, offer for sale, lease, or replace any kind of equipment whatsoever for use or eventual use in any vehicle, that is not in conformity with the Vehicle Code or regulations made thereunder.” The department currently has the machinery to operate such a testing function and to force compliance. The department's approval of devices and federal standards conformity control program elements currently test vehicles and vehicle components for

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compliance and enforce such compliance. The retail outlet inspection program element assures that these outlets only sell devices approved by the approval of devices program element.

*We further recommend that legislation be enacted to provide that all motor-driven vehicles covered under the Vehicle Code, with certain possible exceptions, be required to meet Vehicle Code exhaust system noise requirements while operated off the highway.* Vehicle noise is an irritant regardless of where it is produced, and as such it should be controlled not only on the highway, but everywhere. This would greatly aid the department in enforcing the exhaust system requirements of the Vehicle Code, since all vehicles would fall under the law. Illegal systems then could not be sold for "off-the-road use only" when in fact such is not the true intent of the seller or the buyer.

## Passenger Vehicle Inspection (P)

The purpose of this element is to reduce the number of accidents and the associated traffic congestion by a random compulsory inspection of vehicles for mechanical defects. The department utilizes a team of officers and inspection specialists in a lane-type operation. The team inspects the vehicles for compliance with the vehicle code. In cases of noncompliance, a citation is written.

The department must also satisfy the federal requirement that every state establish a vehicle inspection program and provide a periodic evaluation summary as a requirement for federal highway funds.

The attainment of the objective is postulated by the department to be the percentage of vehicles found in compliance with the Vehicle Code each year. Table 13 compares data for three years.

Table 13  
Passenger Vehicle Inspection Data Comparisons

	Actual 1969-70	Estimated 1970-71	Estimated 1971-72
Expenditures -----	\$7,437,176	\$8,362,845	\$8,217,589
Personnel man-years -----	447.3	466.7	456.6
Uniformed -----	391.7	381.3	337.3
Nonuniformed -----	55.6	85.4	119.3
Percentage of vehicles in compliance -----	39	40	41
Vehicles inspected (million) -----	1.5	1.6	1.6

*Changes in Staffing.* It is proposed for 1971-72 that a reduction of 47 traffic officer positions will be made in the activity. This will be partially offset by a proposed increase of 30 station and vehicle inspection specialists. This is part of the department's program to substitute less costly nonuniformed personnel for traffic officers wherever possible. It is the intention of the department that the released traffic officers will be used to partially fulfill the needs in the expanding road patrol activities.

The basic hypotheses of this program element are that defects cause accidents and that an inspection program will reduce defects. *On this basis, we recommend that the department follow its research studies and emphasize the inspection of the high accident-causing system defects, and that within limitation, Vehicle Code violations that are not highly related to accidents be ignored in the formal inspection except*

for exhaust and pollution violations. To implement this, we also recommend that the department transfer an additional 161 officers to road patrol needs and that 161 inspection specialists be hired to perform the passenger vehicle inspection for a savings of \$1,174,173 in the first year. The transferred officers should fill positions that would otherwise be filled by newly trained officers and not further expand authorized officer positions. The first-year savings, including benefits, would be about \$7,293 per officer transferred and civilian specialist hired. For 161 men this would be \$1,174,173 in 1971-72. In subsequent years the savings would be about \$3,978 per man per year, including benefits, and \$640,458 for the 161 men.

In February 1970, the department published a research report entitled, "Mechanical Factors Study." The department's research staff and civilian specialists studied 409 fatal single-vehicle accidents in order to find the relationship between mechanical defects and accidents. In 12 percent of the accidents a defect that might have been found in an inspection program contributed to the accident. Tires, brakes and steering in some combination or alone were the defects found in 77 percent of the contributing defect accidents. Only 4.2 percent of the contributing defects did not involve tires, brakes or steering.

In the passenger vehicle inspection (PVI) only 6.68 percent of the equipment citations were for tires, brakes or steering; 68.79 percent of the violations were for light defects.

By utilizing the research done on this defect-accident relationship, the department should be able to inspect more vehicles and have a greater impact on the objective of this program: accident reduction through a reduction of accident-causing defects.

To best implement this inspection of accident-causing defects, the department should use the men best qualified for the job: the civilian specialists. The traffic officer is a highly trained patrolman, but he is not the best qualified to inspect mechanical systems.

Two officers will still be required on each team of five men. One would be needed to direct traffic and one to write citations. *If civilian specialists by legislation are given limited police powers for vehicle defect citation purposes only, as recommended under this item, then only one officer would be needed per team and an additional 70 officers could be transferred to road duties and another 70 civilian specialists hired.* The first-year savings would be \$510,510 including benefits and annual savings thereafter would be \$278,460 including benefits.

The department has stated that it has not proceeded very rapidly in transferring officers to expanding officer-oriented functions and replacing the officers with civilian inspection personnel because of the problem of what to do with civilians in bad weather. The officers, the department states, are put onto road patrol while civilians cannot be. It has been estimated that inclement weather is a problem 20 percent of the time. The department has a number of inspection program elements where civilian inspection specialists are used. A number of these elements are not greatly affected by inclement weather nor would short-term fluctuations in staffing affect them.



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Table 14

Program Elements Utilizing Civilian Inspection Specialists  
Where Staffing Could Fluctuate on a Short-Term Basis

<i>Inspection program</i>	<i>Civilian inspection specialists</i>
Motor vehicle pollution control-----	16.4
Official lamp and brake stations-----	15.2
Motor carrier safety operations-----	48.0

We also believe civilian inspection personnel should be inspecting schoolbuses instead of officers as discussed under the analysis of the school pupil safety program element. The buses could be inspected during the Christmas holidays, a period of considerable inclement weather.

Even if the PVI civilian's time was totally lost during inclement weather, the cost savings alone would still favor the change to civilians.

*Program Element Effectiveness Should Be Evaluated.* Neither the department nor anyone else has ever properly researched the effect upon accidents to be gained by an inspection program. Yet, the department will spend \$8.2 million on this element in the budget year. Therefore, we recommend that the department's research staff, in the coming budget year, evaluate the magnitude of accident reduction due to the passenger vehicle inspection. If the resulting cost-benefit analysis demonstrates that the funds would better be spent for other purposes, the department should present the results to the federal government and attempt to have this requirement for federal highway funds lifted.

In a position letter to the federal government the department said, "Compulsory annual or semiannual inspection programs have been instituted in several states over the past 35 years with questionable results. There has been no appreciable change in types or reduction in volume of defects found in such vehicles year after year."

The department's random, compulsory inspection is much the same. In 1967-68, the percentage of vehicles in compliance was 39 percent. In 1968-69, it was 41 percent. In 1969-70, it was 39 percent again. In the first two months of operation of this activity (1965) the figure was 38.5 percent. Based on PVI experience over 90 percent of the cars in noncompliance were so because of reasons other than tires, brakes and steering.

We suggest the following methodology as one possible approach to the study. Vehicles approaching an inspection setup would be randomly separated into a test group and a control group. The test group would be given the inspection. The license numbers of both groups would be recorded. Using the license numbers, the accidents each vehicle in the study was involved in after some period of time could be ascertained from the statewide computerized accident reports. Vehicles which occurred in the study more than once would have to be discarded from the study analysis. Accident rates for both groups could then be generated versus time from the inspection date. By comparing the results of the inspected group and the noninspected group, the accident-reducing capabilities of PVI could be evaluated. If it is

shown that PVI does not reduce accidents sufficiently in comparison to the large economic investment necessary, then possibly the department could convince the federal government to allow the department to spend the funds in more effective programs.

#### IV. RECORDS

*We recommend approval.*

The objective of this program is to provide data and information for management and field decisions.

This program also aids in policing stolen vehicles and license plates. The department's staff and automated equipment stand ready on a 24-hour basis to provide departmental and other law enforcement personnel with immediate response to inquiries relating to vehicle and license plate status as well as access to files of the California Department of Justice and the Federal Bureau of Investigation relating to out-of-state vehicles, guns, stolen identifiable property and wanted persons.

This program accounts for about 1.9 percent of the department's proposed budget.

#### V. AUTO THEFT

*We recommend approval.*

The Highway Patrol is the sole California law enforcement agency with a statewide jurisdiction and enough scope to attack the auto theft problem. By providing a broad base of investigative activity coordinated on a regional as well as a statewide basis, a planned statewide effort is possible. This program accounts for seven-tenths of one percent of the department's budget. Approximately 130,000 vehicles were stolen in 1969 representing an increase of 10 percent over the number of vehicles stolen in 1968. In the past 14 years, vehicle thefts in California have increased 170.7 percent. Auto thefts result in the second largest monetary loss of all crimes against property, outranked only by the crime of burglary.

An average 85 percent of the stolen vehicles are recovered. Of these, approximately 25 percent are stripped or wrecked.

Pursuant to Chapter 1015, Statutes of 1970, the department is currently conducting a study to determine the remedial action needed to reduce the incidence of motor vehicle thefts and to facilitate the recovery of stolen motor vehicles and their parts. A total of \$180,000 was appropriated for this study.

#### VI. ADMINISTRATIVE SUPPORT

*We recommend approval except for the academy as noted below:*

Subprograms and activities contained in this program apply to all departmental operations which unify the department into a cohesive organization. This program accounts for the department's management and command, budget and fiscal management, research and planning, training services and administrative services.

The cost of this program amounts to 9.3 percent of the department's budget and is distributed among the five other programs.

California Highway Patrol—Continued  
The Highway Patrol Academy

*Kitchen is Overstaffed.* The academy kitchen staff serves family-style meals to cadets and other officers in training. The dining facility served a normal complement of 200 men in calendar year 1970. The academy's training schedule for 1971 is estimated to be quite similar to calendar year 1970, so we assume the number of men served will be approximately the same. Although the academy has an ongoing training for about 200 men, this "normal load" is not carried throughout the year because of class turnover and other factors. Nevertheless, the figure of 200 men must be the basis for kitchen staffing purposes. Using an assumed workload of 200 meals per sitting, we can compare the academy kitchen staff with kitchen staffs of other facilities. This is done in Table 15. The School for the Blind and the Maritime Academy serve cafeteria style, the others serve family style. The paid kitchen staffs in all cases do the entire job, from cooking to serving to cleanup.

Table 15  
Comparison of Academy Kitchen Staff to Other Facilities

Facility	Persons served	Authorized kitchen staff	Persons served per authorized kitchen staff
Highway Patrol Academy-----	200	37	5.41
School for the Deaf, Berkeley---	490	32.5	15.08
School for the Deaf, Riverside---	539	27.0	19.96
School for the Blind, Berkeley---	139	12.0	11.58
California Maritime Academy----	260	19.9	13.68

Based on the ratios for the different facilities, the Highway Patrol's staff might be recalculated as shown in Table 16.

Table 16  
Highway Patrol Academy Kitchen Staff Estimated from Ratios of Other Facilities

Facility	Persons served per authorized kitchen staff for facility	What the highway patrol would have in kitchen staff with this ratio
Highway Patrol Academy-----	5.41/1	37.0
School for the Deaf, Berkeley---	15.08/1	13.3
School for the Deaf, Riverside---	19.96/1	10.0
School for the Blind, Berkeley---	11.58/1	17.3
California Maritime Academy----	13.68/1	14.6

From Table 16, it is quite evident that the California Highway Patrol Academy kitchen is significantly overstaffed. Each authorized kitchen staff in the academy serves less than six people. In the other facilities noted, each kitchen staff served 11.58 people or more.

The Highway Patrol has older equipment as does the School for the Blind and the School for the Deaf in Berkeley. The other two facilities have relatively modern equipment.

Since the academy is an older facility, it would justify a staffing in line with the other older facilities. Therefore, to bring the academy kitchen staffing in line with the lowest comparable ratio (Berkeley Blind), we recommend that 19 kitchen staff positions be deleted for a saving of \$126,269 in salaries and wages only. This would leave 18 authorized positions which would provide an adequate staffing.

**Electronic Data Processing**

*We recommend that the California Highway Patrol receive its data-processing service from the Department of Justice law enforcement service center rather than install two new dedicated electronic computers. Pending resolution of this problem, we withhold recommendation of the department's EDP budget request.*

The department operates three electronic computers and will expend an estimated \$1,854,619 for electronic data processing (EDP) during the current year. The major programs which are supported by EDP are: (1) traffic supervision and services of the state highway system; (2) selective deployment on the county road system; (3) regulation and inspection; (4) records; (5) auto theft; and (6) administrative support. An additional \$67,865 or \$1,922,484 for support of EDP is being requested for fiscal year 1971-72.

**The Auto-Statix System**

Two of the electronic computers operated by the Highway Patrol support the automatic statewide auto theft inquiry system (Auto-Statix). This is an automated random access system for the immediate collection, rapid retrieval and dissemination of stolen and wanted vehicle information.

Auto-Statix is currently run on dual IBM 7740's. These machines are second-generation special-purpose communication computers with one computer used as 100-percent backup in order to provide 24-hour-a-day service to law enforcement agencies. The patrol reports that approximately 102,000 vehicles were stolen in 1968, representing a 23-percent increase over the number stolen in 1967. Continuing increases in the number of stolen vehicles have resulted in a situation where the magnetic disks used for storage of records will reach their maximum capacity by April 31, 1971, according to the patrol. The major limiting factor of the IBM 7740 is the inability to increase the disk storage capability of the machines. Even if the record storage problem were temporarily solved by purging outdated records, communication line requirements are also expected to exceed the physical capacity of the 7740 because higher utilization by law enforcement continues to require the addition of more and higher speed telephone lines. This obsolete equipment has been withdrawn from the IBM product line and no further improvements are possible.

**Batch Data Processing Requirements**

The third computer currently installed at the patrol is an IBM 360/30 (a small-scale third-generation machine), which is used for batch data processing. Typical batch processes include updating of data files, printing out selected data for report purposes, calculating relationships between various data services and performing statistical analyses. Although the CHP contends that its EDP requirements are most critical in terms of Auto-Statix, it is also stated that it is necessary to operate the IBM 360/30 on a seven-day-a-week, three-shift-per-day basis to meet batch requirements. This batch work is primarily centered around processing large volumes of punched cards and generating numerous listings and reports.

**California Highway Patrol—Continued  
Patrol Requests New EDP Equipment**

The CHP has been requesting permission to install two new IBM 360/40 computers since November 1969 when the patrol first communicated this request to the Office of Management Services (OMS). The request has been under almost continuous study since that time although, according to the OMS the CHP has never presented a complete and specific proposal for upgrade expressed in the state's required fiscal terms (including a specific statement of conversion costs and savings anticipated from upgrade by fiscal year).

In the Supplementary Planning and Budgeting Information for EDP (a document requirement of all departments each year) submitted on December 23, 1970, to OMS, the CHP discusses (in 58 pages plus appendices) its data processing program and only refers to its proposed upgrade in a footnote as follows: "At this time it is anticipated that the department will replace three equipment systems with two third-generation systems. This replacement will take place in the current fiscal year but the specific timing may depend in part on the release of appropriate equipment from another state department. The new equipment will reduce equipment rental costs, however, we are unable to determine if savings will be realized before the 1972-73 fiscal year until the timing of equipment acquisition and parallel processing requirements are known."

**Advances in Technology Suggest New Approach**

The California Highway Patrol has successfully operated Auto-Stat for the past five years, and this system has been considered a pioneer among random-access second-generation computer systems. The batch data-processing requirements of the patrol have also been met by processing large volumes of punched cards which are stored on magnetic tape and used to produce lengthy reports on a regular basis for headquarters and the field.

However, EDP technology has dramatically changed with regard to: (1) the ability of computers to handle large multiple files of data in a simultaneous manner; (2) the demonstrated capability of large computers to process data at a lower unit cost than their smaller counterparts; and (3) the ability to store large quantities of data (the data base) on new large-capacity magnetic disk files. Similarly, the department must recognize the following:

(1) The need on the part of management for exception reports which focus on problem areas rather than generating pages of tabular reports; (2) the need to consider the users of EDP (in this instance law enforcement) as having a common requirement for information from a variety of sources; and (3) the need to exploit the new technology by developing an integrated information system approach.

We do not believe that the management of the patrol has fully considered the above in its request to install a new dedicated computer system. For example, there has been little recognition of the cost of developing and installing the complex computer programs needed for a modern telecommunication system or a data base management system.

Personnel with this capability are in extremely short supply, and many vendors now charge for their support in this area.

We have seen no critical evaluation by the patrol of its future requirements with regard to data for management support. The integration of the planned new system into existing procedures has not been fully documented or certified. For example with regard to response time for inquiries, the CHP states that it must have five-second response by the computer for any inquiry. However, under existing procedures, it may take up to 1 minute 45 seconds to relay the message to an officer in a patrol car. A cumbersome manual and semiautomatic procedure exists in the middle of this process, which currently reduces the effectiveness of the computer system.

#### **Consolidated Law Enforcement Center an Alternative**

In our analysis, last year, we reported that the patrol was unilaterally planning for its EDP needs at a time when a number of other definitely viable alternatives were available for consideration. Our recommendations were accepted by the Legislature and became a part of the Supplementary Report of the Committee on Conference (Budget Bill of 1970—Item 231). This recommendation essentially called on the CHP and OMS to consider all alternatives and especially the fact that the California law enforcement telecommunication system (CLETS) would be operational on April 1, 1971. This modern communication system for law enforcement was developed at a cost of \$2,310,364 in fiscal year 1969-70 and utilizes four third-generation electronic computers.

It should be noted that CLETS was designed to carry CHP and Auto-Stat traffic and is engineered to carry a 100-percent safety factor as well. The total appropriation for CLETS through June 30, 1971, will be \$6,189,483. Support for CLETS based on system utilization is 60 percent funding from the Motor Vehicle Fund and 40 percent from the General Fund.

#### **CHP Retains Private Consultant**

The California Highway Patrol has consistently lacked specific information for its upgrade and conversion other than workload projections. Therefore, the patrol contracted with a private company to analyze its needs, assess alternatives and made a recommendation as to the best method for satisfying the CHP EDP requirements.

A report, "Analysis of Data Processing Needs of the California Highway Patrol," was completed on July 17, 1970. We normally expect a critical analysis of a department's programs and a thorough and impartial examination of all alternatives when an outside consultant is engaged. The consultant usually employs his own analytical techniques and develops data which is independent of that supplied by the user being examined.

In this instance in our opinion, the report has not employed the technique described above and, therefore, is a repeat of most of the patrol's arguments and justification for its own computer installation. As expected, the exact same conclusion is reached: that the CHP should install two IBM 360/40 computers which are to be acquired from the Franchise Tax Board. In addition, the report contains a number of

**California Highway Patrol—Continued**

erroneous statements and conclusions. The Department of Justice has reported that the factfinding and evaluation done in regard to the DOJ capabilities and especially those regarding CLETS were deficient. The vendor who designed and installed the complex software for the CLETS network (at a cost of over \$500,000) also took issue with a number of the technical points in the report.

**Little Support for CHP Position**

There is little support for the CHP position within the various technical groups who are responsible for EDP coordination and control. Consistent with Government Code Section 11701, which specifies that consolidation and optimum utilization of electronic data-processing equipment and maximum practical integration of electronic data processing system should be achieved, the state's EDP master plan requires a study of the patrol's EDP needs to determine if they can best be met through consolidation into another EDP facility or system.

To facilitate consolidation, the master plan established consolidation groups. Group No. 2 consists of the following departments: Justice, Public Works, Motor Vehicles, and Highway Patrol. The Office of Management Services requested that this group conduct an analysis of the CHP EDP requirements. A technical working committee representing the four departments was established by the consolidation group. Testimony was taken by the committee from numerous technical experts in the field during a two-week period of intensive analysis. This group issued a 54-page report on September 7, 1970, which evaluated two alternatives—a single law enforcement data-processing service center (DPSC) at the Department of Justice and separate facilities with the CHP acquiring two new computers. Their recommendation was as follows: "the committee finds that a single law enforcement DPSC at the Department of Justice is capable of meeting all the requirements of the CHP as well as or better than the 360/40's proposed by the consultant's report at less cost annually and with a 5-year saving of \$971,000 and a 10-year saving of \$1,854,000." This conclusion was supported by three of the four technical members of the work group, the sole dissenter being the CHP member.

The committee presented its decision to the consolidation group, but the group was unable to obtain a majority decision and therefore it was recommended that this issue be decided at the responsible management level, presumably the state cabinet. As of this writing, we do not know what decision, if any, has been made.

The Office of Management Services in a thorough analysis of the CHP EDP expenditure request for fiscal year 1971-72 reported to the Department of Finance its recommendation that the CHP EDP needs for both Auto-Statix and batch processing be furnished by a statewide law enforcement data-processing center established at the Department of Justice. It was further recommended by OMS that the EDP budget for the CHP be reduced by \$169,376, the estimated savings by such a consolidation in fiscal year 1971-72.

**The Consolidated Law Enforcement Service Center**

We have recommended in past analyses and continue to support the concept of a consolidated law enforcement data-processing center as a viable alternative. There is no justification, in our judgment, for the State of California to maintain two modern law enforcement computer networks. Therefore, planning should begin immediately to integrate Auto-Statix into CLETS. If a planned upgrade of the computer system at the Department of Justice takes place as discussed in our analysis under Items 39 and 40, even greater savings are possible than originally projected because CHP would share equipment costs with the proposed implementation of the criminal justice information system. If this upgrade does not occur this year because of a shortage of funds, CHP can be merged with CLETS as originally proposed.

With this integrated system as proposed, Auto-Statix will become a file on the CLETS network together with wanted persons, stolen property and guns. This approach will not compel local law enforcement agencies to duplicate Auto-Statix and CLETS terminals as is now the case in many instances and a 10-year saving to local government of \$258,120 is expected through elimination of duplicate communication lines.

**Statewide EDP Implications**

The events surrounding this issue clearly illustrate the need for technical leadership and authority in solving the numerous problems involving the application of modern EDP technology to the state's pressing problems. Lacking centralized management, the various parties in this instance were permitted to: (1) engage in a "numbers game" with regard to the ultimate cost of the various alternatives; (2) underestimate conversion costs to a modern third-generation data-processing and communication system; and (3) neglect the savings possible through using a central pool of programmers experienced in modern EDP communications techniques. Finally, there was no mechanism whereby a central agency could thoroughly evaluate the utilization of EDP in order to determine objectively how best to meet the data-processing needs of an organization such as the California Highway Patrol. For example, it is entirely possible that the EDP needs of the patrol could best be served by installing the Auto-Statix system on the law enforcement network and contracting with the Department of Public Works for capability to meet the batch data processing requirements. This department operates a large-scale IBM 360/65 and has one shift daily available during the week and all three shifts during the weekend. There is a similarity in the highway accident and traffic statistics compiled by both departments and both departments reside in the same agency. Therefore, there appears to exist a potential for sharing of equipment and programs. Such reasonable alternatives as this have not been explored because of the existing unilateral departmental approach to solving most of the major problems involving the use of electronic data processing.

Although OMS has control responsibilities as far as fiscal and coordination matters are concerned, it does not have the management authority to enforce a sound technical approach to a problem of this



**California Highway Patrol—Continued**

nature. This situation has resulted in our recommending that a Department of Data Processing Services be established to procure and operate most computers within California state government. This recommendation is discussed more fully under Item 37 of this analysis.

**Study of Program Cost-Effectiveness**

*We recommend that \$100,000 of the recommended savings in this analysis be allocated to hire a private management consulting firm to do an independent analysis of the cost effectiveness relationship of those program activities aimed at reduction of vehicle accidents, injuries and loss of life. We recommend the funds be allocated to a joint committee of Legislature in order to maximize objectivity and impartiality. Our reasons for recommending such a study are as follows:*

1. The department has failed to employ reasonable management techniques in the evaluation of its ongoing operation. There is not a formalized process of self-evaluation nor is there an effective informal evaluation.
2. The passenger vehicle inspection program element will cost \$8.2 million in 1971-72, yet it has never been properly researched to ascertain if the accident reduction benefits are worth the investment. This program hypothesizes that defects cause accidents and an inspection program will reduce defects. However, the department's inspection program primarily emphasizes defects which are not highly related to accidents, and as such, the program's benefits are probably quite small.
3. Various studies have shown mechanical defects to be a low causative factor in accidents. The department will spend over \$18 million on vehicle and component inspections in 1971-72. A department study of fatal, single-vehicle accidents, summarized in Table 17, showed 59.9 percent of the drivers were legally drunk, 28.3 percent had twice the legally intoxicated blood-alcohol level, 4.6 percent three times, and 0.5 percent four times; 69.6 percent of all the drivers had been drinking to some degree. The depart-

**Table 17**  
**Sobriety of 392 of the Drivers in a Department Study**  
**of 409 Fatal, Single Vehicle Accidents<sup>1</sup>**

Blood-alcohol level (percent) <sup>2</sup>	Number of drivers	Percentage	
0	119	30.4	30.4 percent: sober
.01-.04	15	3.8	9.7 percent: had been drinking but not legally intoxicated
.05-.09	23	5.9	
.10-.14	49	12.5	
.15-.19	75	19.1	
.20-.29	93	23.7	59.9 percent: legally intoxicated
.30-.39	16	4.1	
.40+	2	.5	
	392	100.0	

<sup>1</sup> From the case studies of the "Mechanical Factors Study," California Highway Patrol, February 1970.

<sup>2</sup> A blood alcohol level of 0.10 percent is legal intoxication.

ment's interest in mechanical defect accidents is greatly overemphasized in comparison to the accidents caused by drunk drivers.

#### Minor Capital Outlay

The California Highway Patrol minor capital outlay request is for 11 projects at a total cost of \$100,000. We recommend approval of \$56,135 for the funding of eight of the 11 projects as outlined below:

- (a) Security storage area for riot control equipment—Oakland facility ----- \$6,000
  - (b) Site clearance and paving for additional vehicle parking and storage area—Oakland facility ----- \$17,410
  - (c) Modify interior lighting—headquarters building "A" ----- \$20,000
  - (d) Parking area security fencing—headquarters building "A" ----- \$1,225
  - (e) Lump sum appropriation for unforeseen alterations ---- \$11,500
- We recommend the following be deleted.*
- (f) Maintenance—paved areas, academy emergency vehicle operations course and accident investigation areas ----- \$14,000

This request is for the maintenance of paved areas of the academy vehicle operations course and accident investigation area. The nature of this work is such that it does not fall in the scope of minor capital outlay. It is more properly located in the special repairs and maintenance portion of the department's support budget. *We recommend this project be placed in the correct portion of the support budget, under the special repairs and maintenance item.*

- (g) Provide curbs, gutters, sidewalks and area paving—Mt. Shasta ----- \$11,000

The California Highway Patrol Mt. Shasta facility is located in the City of Mt. Shasta adjacent to Interstate 5. The California Highway Patrol is requesting \$11,000 to provide a cul-de-sac turnaround with curbs, gutters and sidewalks and for the paving of adjacent state-owned property. The adjoining private property is not developed or improved, hence, the development of these improvements would not tie into any existing sidewalks, etc. We have discussed this with the patrol and they agree that the project can be deleted at this time.

- (h) Pave unimproved areas—miscellaneous field office ----- \$18,865

A total of \$18,865 is requested for paving and additional area lighting of unimproved areas at three leased facilities and one former leased facility recently purchased by the state. The improvement of these areas is basically for weed control and is not due to an increase in space needs. These facilities were all designed to standard plans and specifications based on the needs of the patrol. The lessors property at these facilities is larger than the standard requirement, hence, the excess land was left unpaved. The requested extra paved space is not required for expansion of the facilities. Therefore, we recommend that these projects be deleted and that weed control be applied using support maintenance funds.

**Department of the California Highway Patrol****DEFICIENCY PAYMENT**Item 174 from the Motor Vehicle Fund Budget p. 109


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Requested 1971-72 .....	\$500,000
Estimated 1970-71 .....	500,000
Actual 1969-70 .....	
Requested increase—None	
Total recommended reduction .....	None

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**ANALYSIS AND RECOMMENDATIONS***We recommend approval.*

The Department of the California Highway Patrol receives its support from the Motor Vehicle Fund. Section 42272 of the Vehicle Code prohibits the creation of deficiency payments in support of this department and it cannot obtain aid from the Emergency Fund. The Legislature realized that emergencies could occur in a department of this size, and beginning with the Budget Act of 1957 has provided an annual amount for the purpose of funding unanticipated contingencies involving purchase and operation of patrol vehicles.

**Department of the California Highway Patrol****VEHICLE EQUIPMENT SAFETY COMMISSION**Item 175 from the Motor Vehicle  
Transportation Tax Fund Vol. II p. 128 Budget p. 110


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Requested 1971-72 .....	\$10,107
Estimated 1970-71 .....	8,835
Actual 1969-70 .....	8,585
Requested increase \$1,272 (14.4 percent)	
Total recommended reduction .....	None

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**SUMMARY OF MAJOR ISSUES AND RECOMMENDATIONS***Analysis  
page*

1. We recommend legislative action to withdraw from the compact which created the commission.

**GENERAL PROGRAM STATEMENT**

The Vehicle Equipment Safety Compact (Chapter 238, Statutes of 1963) was adopted by California to:

- “(1) Promote uniformity in regulation of and standards for equipment.

"(2) Secure uniformity of law and administrative practice in vehicular regulation and related safety standards . . .

"(3) . . . Provide means for the encouragement and utilization of research which will facilitate the achievement of the foregoing purposes . . ."

The legislation also designated the Administrator of the Transportation Agency as the California representative on the "Vehicle Equipment Safety Commission," which was created as part of the compact. The Administrator of the Transportation Agency in turn designated the Commissioner of the California Highway Patrol as California's representative in accordance with authority contained in the legislation.

The legislation also established the basis for financial participation in the costs of the commission. Each signatory state shares equally in one-third of the costs, and the balance of the costs are shared in proportion to the vehicle registration of each signatory.

At present 44 states are members of the compact.

#### ANALYSIS AND RECOMMENDATIONS

Initially, most of the representatives on the commission were at levels below that of the Transportation Agency Administrator or the Commissioner of the California Highway Patrol or their equivalents in other states. The representatives were largely technically oriented people rather than top administrators.

To date, the Vehicle Equipment Safety Commission has accomplished little of significance. We believe that the mobility of motor vehicles and the propensity of the American motoring public to travel extensively are such that questions relating to standardization of equipment and the establishment of uniform regulations throughout the country could best be accomplished by federal preemption of the subject field. Such preemption would not limit the individual states in adopting more stringent standards or regulations but it would assure a minimum level of uniformity throughout the country. It might be pointed out that in a somewhat related field, that of pleasure boating, the federal government has largely preempted the field of equipment and safety regulations, although some individual states do have more stringent levels than those established by the federal government.

For these reasons, we recommend that California withdraw from the compact. We do not at this time recommend the deletion of the support item because the compact requires that the Legislature take action to withdraw and that such withdrawal cannot take effect until one year after the executive head of the withdrawing state has given notice in writing to the executive heads of all other party states.

**DEPARTMENT OF MOTOR VEHICLES****For Support of the Department of Motor Vehicles**Items 176 through 179 from  
various funds

Vol. II p. 129 Budget p. 111

Requested 1971-72	\$69,257,671
Estimated 1970-71	67,035,805
Actual 1969-70	60,601,668
Requested increase \$2,221,866 (3.31 percent)	
Total recommended reduction	\$1,150

**SUMMARY OF MAJOR ISSUES AND RECOMMENDATIONS***Analysis  
page*

1. We recommend that the department make available to the Legislature as soon as possible, but not later than the 1972 session, the results of in-depth studies of various automated processes for improving service and achieving economies through the use of its data processing equipment. 387
2. We recommend that RCA be required to make any necessary engineering effort to provide compatibility between its new disc storage equipment and the RCA computer complex now installed in the department. 388
3. We recommend that the department take positive and emphatic steps to merge its two separate data processing divisions into one central operation under a single control to assure economy, efficiency and flexibility. 388
4. We recommend a reduction of \$1,150 in minor capital outlay. 389

**GENERAL PROGRAM STATEMENT**

The principal objectives of the department are to: (1) Secure the ownership of motor vehicles by mandatory registration of such vehicles, (2) assure the financial ability to respond to cost of damages by persons involved in accidents, (3) provide consumer protection by licensing and regulation of occupations and businesses relating to the sale, disposal, manufacture, transporting of vehicles, and driving schools and instructors, (4) license and control drivers to insure, to the extent possible, that licensed drivers meet certain standards of driver ability and have a knowledge of the rules of the road and (5) provide to the public and state agencies other services not related to motor vehicles. These services include issuance of identification cards to qualified California residents and registration of vessels (boats) and transactions related thereto.

**ANALYSIS AND RECOMMENDATIONS**

We recommend that this budget be approved in the amount of \$69,256,521, a reduction of \$1,150. Table 1 below shows funding.

**Table 1**  
**Funding Sources**

Item 176, Motor Vehicle Fund .....	\$59,674,539
Item 177, Motor Vehicle License Fee Fund .....	8,762,963
Item 178, Harbors and Watercraft Revolving Fund .....	594,569
Item 179, Californian Environment Protection Program Plan .....	225,600
<b>Total Proposed Appropriation for 1971-72 .....</b>	<b>\$69,257,671</b>
Driving training .....	51,532 <sup>1</sup>
Reimbursements .....	4,833,783
<b>Total Proposed Expenditures .....</b>	<b>\$74,142,986</b>

<sup>1</sup> This amount is from an appropriation provided for a study of commercial driving school training as directed by Chapter 1454, Statutes of 1969 and can be spent without regard to fiscal years. \$126,664 is provided in the current fiscal year.

**Expenditures**

The proposed expenditure for the 1971-72 fiscal year is \$74,142,986, an increase of \$1,990,717 or 2.75 percent over the amount estimated for the current fiscal year.

Table 2 is a summary of program expenditures for actual 1969-70, estimated 1970-71 and proposed for 1971-72.

**Table 2**  
**Summary of Program Expenditures**

	<i>Actual</i> 1969-70	<i>Estimated</i> 1970-71	<i>Estimated</i> 1971-72	<i>Increase or decrease over 1970-71</i>
I. Vehicle licensing and titling	\$29,438,752	\$34,122,298	\$36,047,059	\$1,924,761
II. Driver licensing and control	30,221,136	31,913,588	31,517,115	-396,473
III. Occupational licensing and regulation .....	2,713,909	3,064,759	3,248,643	183,884
IV. Security following accident law .....	2,154,435	2,252,333	2,350,845	98,512
V. Department of Motor Vehicles associated services...	300,803	597,809	777,309	179,500
VI. Administration—undistributed .....	101,446	201,482	202,015	533
Administration—distributed to programs...	(3,629,978)	(3,894,618)	(3,994,810)	(-100,192)
<b>Totals .....</b>	<b>\$65,020,481</b>	<b>\$72,152,269</b>	<b>\$74,142,986</b>	<b>\$1,990,717</b>

The above increase in expenditures is explained in Table 3. Included for the first time is minor capital outlay which heretofore had been shown both in the Governor's Budget and the Budget Bill in special sections apart from support. In the bill it will appear as a lettered category in the schedule attached to the support item. This is discussed at the end of this analysis.

**VEHICLE LICENSING AND TITLING**

This program has been divided into five program elements:

**Vehicle Ownership, Registration Documentation and Certificate Issuance**

The duties of this element are to: (1) Register new vehicles and reregister older vehicles, (2) issue registration cards and certificates of ownership and (3) maintain a record of data relating to vehicles and and their owners.

**Table 3**  
**Explanation of Differences From Current Year Program**

	<i>Man-years</i>	<i>Amount</i>	<i>Percentage</i>
1. Workload adjustment -----	137.1	\$1,115,243	1.7
2. Merit salary adjustment -----	--	690,045	1
3. Increase staff benefits costs of authorized positions -----	--	232,032	0.4
4. Price change -----	--	202,913	0.3
5. Equipment costs not related to proposed new positions -----	--	281,450	0.4
6. Departmental administration pro rata share -----	--	78,858	0.1
7. Pro rata general administration charges -----	--	-14,000	--
8. Salary savings due to personnel turnover -----	--		
9. New Laws:			
a. SB 505, Chapter 766/70, requires certificate of compliance for pollution control device -----	-6	-23,730	--
b. AB 1338, Chapter 1252/70, requires certified statement of seller if not dealer -----	-0.5	72,979	0.1
c. AB 395, Chapter 1352/70, establishes field office in Simi Valley-Thousand Oaks area -----	0.5	13,122	--
d. AB 262, Chapter 887/70, requires motorcycle registration application to contain motor and frame numbers -----	1	3,396	--
e. SB 343, Chapter 813/70, provides for staggered motorcycle registration -----	--	-23,353	--
f. SB 262, Chapter 779/70, establishes personalized license plates program to provide funds for California Environmental Protection Program -----	--	-116,700	-0.2
g. AB 1628, Chapter 1012/70, requires \$5 fee for reinstatement of driving privilege license -----	-3.2	29,576	--
h. AB 2233, Chapter 1290/70, requires snowmobile dealers to obtain occupational license -----	--	8,452	--
i. SB 1192, Chapter 1381/70, requires dismantler compliance with zoning ordinances -----	--	5,546	--
j. SB 417, Chapter 819/70, provides for regulation of new car dealers repair service -----	--	61,140	0.1
10. Study of commercial driving school training, fully reimbursed by Driver Training Penalty Assessment Fund, Chapter 1454/69 -----	--	-75,132	-0.1
11. Federal grants, SR 160 (fully reimbursed) -----	-3.6	-318,567	-0.5
12. Research on highway safety -----	-7	-91,603	-0.1
13. Transfer of accident reports typing and filing function to California Highway Patrol -----	--	-46,000	-0.1
14. Study of commercial vehicle population, SCR 87, Chapter 228/70 (1970-71 only) -----	--	-95,000	-0.1
<b>Totals -----</b>	<b>118.3</b>	<b>\$1,990,717</b>	<b>3</b>

#### Vehicle Fee Collection and Accounting

This element determines the various amounts of fees assessed vehicle owners, collect fees and keep account of fees received and remit collection for deposit in the Motor Vehicle Fund, the Vehicle License Fee Fund and the Environmental Protection Program Fund. The volume of activity and revenue is shown below.

	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
Vehicle registrations -----	13,609,000	14,214,000	14,891,000
Registration, weight and related fees--	268,209,000	282,600,000	282,200,000
Motor vehicle license fees -----	\$230,644,000	\$247,500,000	\$262,400,000

#### Vehicle Record and File Maintenance

The objective of this program element is to maintain reliable records of vehicles and their owners. Table 4 covers the input-output activity in these files.

**Table 4**  
**Input-Output Activity**

	<i>Actual</i> <i>1969-70</i>	<i>Estimated</i> <i>1970-71</i>	<i>Proposed</i> <i>1971-72</i>
Correspondence files -----	641,582	869,000	1,179,800
Alphabetical files -----	10,929,206	11,415,600	11,959,400
Numerical files -----	22,605,643	23,611,600	24,735,500
Prior year license files -----	517,455	540,700	566,400

#### **Vehicle Information and Sale of Records**

This element provides registration information from the above records as required. Information is supplied to governmental agencies without charge and to private citizens, companies and corporations for a fee. Table 5 shows the magnitude of this service.

**Table 5**  
**Information Request and Revenues**

<i>Individual Requests</i>	<i>Actual</i> <i>1969-70</i>	<i>Estimated</i> <i>1970-71</i>	<i>Proposed</i> <i>1971-72</i>
Fee paid requests -----	274,000	299,000	326,000
Revenue -----	(\$194,000)	(\$239,900)	(\$255,000)
No fee requests -----	5,790,500	7,528,000	8,281,000
<b>Total</b> -----	<b>6,064,500</b>	<b>7,827,000</b>	<b>8,607,000</b>
<b>Bulk sales</b> -----	<b>38,958,000</b>	<b>14,951,000</b>	<b>15,662,000</b>
<b>Revenue</b> -----	<b>(\$168,000)</b>	<b>(\$375,000)</b>	<b>(\$391,500)</b>

The department states that until 1970-71 it charged 40 cents to private citizens and companies or corporations per individual search. A fee of \$2 was charged for any request for information from the alphabetical file of registered owners. The sale of bulk information was at \$7 per thousand.

The Legislature at the 1970 session, on our recommendation, approved a higher fee schedule for sale of vehicle information of which the most significant was the bulk sale increase from \$7 to \$25 per thousand. It will be noted that from 1969-70 to 1970-71, the bulk sales workload dropped to less than half but the income more than doubled and the same relationship is projected for the budget year.

#### **Use Tax Computation and Collection**

The principal function of this program element is to collect a 5 percent tax from the purchaser of a motor vehicle resulting from a private sale. This tax is equivalent to the city-county state sales tax collected by the Board of Equalization from motor vehicle dealers. Its productivity is shown below in Table 6.

**Table 6**  
**Use Tax Revenues**

	<i>Actual</i> <i>1969-70</i>	<i>Estimated</i> <i>1970-71</i>	<i>Proposed</i> <i>1971-72</i>
Use tax collected for Board of Equalization	\$32,189,202	\$40,379,000	\$38,245,000

#### **DRIVER LICENSING AND CONTROL**

The primary objectives of this program are to license drivers, promote safe driving practices and exercise control over those drivers who are judged to be unsafe. The various functions related to these objectives are discussed below.



## Department of Motor Vehicles—Continued

## Drivers License Issuance

To obtain a drivers license, an applicant must fill in a department form, take a written test, an eye test and have a photograph taken. In some cases, an oral and a driving test are given. The department may require a medical report from some applicants. The motorist may apply for a drivers license at any one of the 146 field offices or use the services provided by mobile crews. Table 7 shows the number of drivers' licenses issued and the revenues received.

Table 7  
Licenses Issued and Revenues Received

	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
Drivers' licenses issued -----	4,471,000	4,527,000	4,151,000
Drivers' license fees -----	\$12,747,752	\$12,907,000	\$11,835,000

## Postlicensing Control

The purpose of this subprogram is to identify those drivers who are: (1) Convicted of serious offenses, (2) have had more than one accident or several moving traffic violations, and (3) who have physical or mental disorders of a nature that would impair their driving ability. To accomplish this objective, the following processes are initiated.

1. When information such as abstracts of conviction, medical reports and referrals from enforcement agencies, courts, the medical profession and citizens that an individual has a driving problem is received by the department, the record is pulled and reviewed by specialized personnel.

2. When the record shows the driver has been convicted of a major offense and the statutes provides for mandatory action, it is taken based on the court abstract.

When a record shows that a driver is not maintaining safe driving standards, the department may institute such action as it deems necessary.

This segment of the postlicensing control activity was questioned by our office last session. It appeared to us that the cost of the program element that deals with discretionary action exceeded the benefits. We also felt that the methods being used might not be an effective approach to this problem. We agreed with the department that a special study was desirable to develop a system for reporting and evaluating the effectiveness of postlicensing control. A contract with a consulting firm was negotiated and the study initiated. In its first phase, the study will include:

1. A clear description of the postlicensing driver control activity and related tasks.

2. A definition of the objectives and the legislative authority for the postlicensing driver control activities.

3. An estimate of the fixed and variable costs of performing each of the postlicensing driver control activities.

4. A glossary of terms used in defining or describing postlicensing driver control activities.

The second and final phase of this project is expected to be completed by March 1, 1971 and will include:

1. Identification of criteria or yardsticks for measuring the effectiveness of each of the postlicensing driver control activities.
2. Development of the methodology by which the selected criteria can be applied to evaluate effectiveness.
3. Development of criteria and methodology for evaluating postlicensing driver control operational levels.
4. Development of a reporting system which will provide management with the data necessary for program evaluation and future program planning and budgeting.

The driver record file has been converted from manual to electronic data processing and the following will now be produced by this method.

1. Negligent operator and warning letter case selection.
2. Record analysis print out.
3. Hearing notices and orders.
4. Mandatory actions selected and orders written.
5. Statutory actions selected and orders written.

Workload statistics of postlicensing control are shown in Table 8.

**Table 8**  
**Workload Statistics—Post Licensing Driver Control**

	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
Hearings and interviews and reexaminations-----	131,112	136,000	141,000
Warning letters sent (negligent operator)-----	121,264	125,800	130,400
Warning letters sent (failure to appear)-----	312,763	348,000	365,400
Licenses suspended, revoked, canceled or driver placed on probation -----	176,126	182,700	189,400
Reinstatement of driving privilege -----	140,731	146,000	151,400

#### **Certificate Issuance**

The purpose of this subprogram is to make certain that drivers who are responsible for transporting children, farm workers and the disabled or ill are of good moral character and have the skills and knowledge to safely transport these persons. This is accomplished through the issuance of school bus certificates, ambulance driver certificates, special construction equipment certificates and farm labor vehicle certificates.

School bus activities are administered jointly by the Department of Motor Vehicles, Department of Education and California Highway Patrol. The Department of Education has responsibility for the regulations, the Department of Motor Vehicles for the issuance of the certificates and the California Highway Patrol for enforcement of the program and the testing and examination of applicants for certificates. Additionally, the Department of Public Health has responsibility for prescribing examinations on first aid practices and may make further investigation of the applicant for medical or other reasons and may suspend or revoke the certificates as indicated by the California Administrative Code.

**Department of Motor Vehicles—Continued**  
**Information Services**

The main purpose of this program element is to furnish law enforcement entities, as rapidly as possible, information relating to driver's records. Requests for information by other governmental agencies, commercial organizations and the general public are responded to at a lower priority.

Requests received in the department by teletype, Western Union, microwave, radio, telephone, letters and standard forms are separated into urgent and nonurgent groups and further depending whether or not a fee is required. Table 9 shows the information responses by type.

**Table 9**  
**Information Responses**

	<i>Actual 1969-70</i>	<i>Estimated 1970-71</i>	<i>Estimated 1971-72</i>
Driver's License Information Responses:			
Commercial -----	5,912,000	5,843,000	5,970,000
Noncommercial -----	1,563,000	2,019,000	2,131,000
Totals -----	7,475,000	7,872,000	8,101,000

**OCCUPATIONAL LICENSING AND REGULATION**

The purpose of this program is to protect the public in its dealings with persons and firms engaged in the business of manufacturing, selling, buying, transporting or dismantling of vehicles. To accomplish this objective, the following functions are performed:

**Occupational Licensing**

This element is responsible for licensing vehicle dealers, manufacturers, transporters, salesmen, dismantlers, driving schools and instructors. When applications for these occupational licenses are received, the department collects the statutory fees and checks for proof of financial responsibility.

The moral character of the applicant is checked and the criminal record, if any, is investigated. The physical business facilities must meet certain standards for the type of business for which a license is being sought.

**Occupational Regulations**

This element is responsible for the regulation of vehicle dealers, manufacturers, transporters, salesmen, dismantlers, and driving schools and instructors. The purpose of this subprogram is to: (1) Identify those persons or firms engaged in buying, selling, manufacturing, transporting or dismantling vehicles or offering driving instruction, (2) investigate licensees to ascertain whether they are complying with laws, rules and regulations and to take action against those firms or persons not complying.

During the 1967 legislative session, legislation was enacted creating in the Department of Motor Vehicles a New Car Dealers Policy and Appeals Board whose major duties are to:

(1) Prescribe rules and regulations relating to the licensing of new car dealers, (2) hear and consider appeals presented by applicants for

licenses or holders of licenses dissatisfied with decisions made by the department, and (3) take any one or a combination of several specified actions to resolve a given situation. Final orders of the board may be taken to court by either party.

#### SECURITY FOLLOWING ACCIDENT LAWS

The objective of this program is to protect the insured drivers or those that can satisfy a judgment who are involved in an accident against the noninsured who do not have the financial ability to satisfy a judgment.

The driver of every motor vehicle involved in an accident which has resulted in a damage to the property of any one person in excess of \$200 or in bodily injury or death of any person is required to file a report within 15 days after the accident on a form approved by the department. Unless the report shows clearly that a driver was not at fault or has the ability to satisfy a reasonable judgment for damages until final determination of fault has been made, or establishes an exemption provided by law within a certain time limitation following the accident, the driving privilege and the registration of the involved vehicle must be suspended.

#### DEPARTMENT OF MOTOR VEHICLES ASSOCIATED SERVICES

The purpose of this program is to provide certain services to the general public that are not directly related to motor vehicles or drivers licensing but that can be provided easily and economically by the Department of Motor Vehicles. These services fall into two categories: (1) Personal identification cards and (2) registration of undocumented vessels.

California identification cards are issued to persons 18 years of age or over who do not have a California driver's license. There are more than two million persons in California in this general class. Applications for these cards are screened to verify proof of date of birth. Fees are collected and photographs of the applicants are taken. The fees collected exceed slightly the cost of this service.

Undocumented vessel registration and fee collection encompasses the registration of all vessels (boats) and the collection of fees as required by law and maintaining a file that can provide service to law enforcement and search and rescue agencies, and the Board of Equalization, county assessors and other individual agencies requiring information. The cost of this service is charged to the Harbors and Watercraft Revolving Fund.

#### DEPARTMENTAL ADMINISTRATION

The purpose of this program is to provide the director and his administrators with the management and "housekeeping" services necessary to carry out their executive duties.

The services performed are: (1) Fiscal and business management and other duties assigned by the director, (2) personnel and training, (3) operations and management analysis, (4) research and statistical management information system coordination (AMIS), and (6) liaison with the Legislature.

## Department of Motor Vehicles—Continued

## ELECTRONIC DATA PROCESSING

## Automated Management Information System (AMIS)

The installation of an Automated Management Information System (AMIS) in the Department of Motor Vehicles was authorized by the Legislature in 1965. As originally presented, AMIS was intended to serve as a total management information system for the department which would suppress the trend of increasing Department of Motor Vehicle employees and costs as well as more efficiently process essential transactions, respond to legally authorized inquiries, perform accounting and provide meaningful management reports.

To accomplish this, the department installed four third-generation RCA computers, 21 RCA mass storage units to provide random access to data, video data terminals for data input, and a large complement of other electronic data processing (EDP) peripheral devices.

## Conversion of Basic Records

The first task of the automation program was to convert the massive files which are an integral part of the Department of Motor Vehicles operation. The vehicle registration files did not present a significant problem because the original vehicle registration system was processed on a second-generation computer and the records were contained on magnetic tape. In the case of drivers license records, a total conversion from manual records was necessary. The conversion using video data terminals as input devices experienced considerable problems and delays. However, all driver records were converted in June 1970.

The Department of Motor Vehicles automated files now contain 14,500,000 drivers records and 20 million vehicle records which means that the AMIS system now provides real time access to over 34,500,000 driver and vehicle records 24 hours per day, 365 days per year. The achievement of operational status of the California Law Enforcement Telecommunication System (CLETS) on April 1, 1970, now makes it possible for the Department of Motor Vehicles computers to provide instantaneous information from their files to law-enforcement agencies through over 1,000 terminals in the CLETS network.

## Enhancements of the Basic AMIS

Although the AMIS program is a large and complex EDP operation, it should be noted that the basic AMIS approach as outlined above is only the first phase of system implementation. As we have discussed in previous analyses, the original presentation of the AMIS program to the Legislature conveyed the concept that on-line issuance of drivers licenses was possible. The instantaneous issuance of drivers licenses in the 146 Department of Motor Vehicles field offices was presented as a potential major improvement in service to the driving public. We further noted that the department was not doing advance planning in this regard or in the provision of other services to field offices, and in fact, had presented data to our office which indicated that the costs would exceed those of present procedures with few related benefits.

Recognizing that a number of other states were successfully using EDP to provide service to field offices or provide remote on-line issuance

of drivers licenses, we recommended that the Department of Motor Vehicles survey comparable states with automated systems to determine ways in which a reduction in personnel or a reduction in the number of paper transactions required in license or vehicle registration information could be achieved through the application of EDP. This became a recommendation of the Supplementary Report of the Committee on Conference (Budget Act of 1970—Item 234).

#### On-Line Issuance Study

The Department of Motor Vehicles completed the required study and transmitted the final report on December 3, 1970. Senate Concurrent Resolution No. 96 (Collier), 1970 Regular Session, requested that this study be expanded to include a survey of the state's utilizing "encoding" and color on-line or off-line processes in the issuance of drivers licenses. As a result of the study, the department concluded that "although additional field office costs for equipment and personnel could be significant, they might be offset by savings in headquarters processing and mailing costs." Therefore, an indepth feasibility study was recommended.

This survey also generated considerable interest and a willingness on the part of the Department of Motor Vehicles to study ways to improve almost all facets of their operation. On page seven of the December 3 report, 14 subjects are recommended for additional study. These subjects have been assigned priorities and committees are now actively working on the following: (1) mailing of driver's license renewal notices, (2) color photos on drivers licenses and better validation (by encoding) of drivers licenses, (3) on-line issuance of drivers licenses (drivers license accounting), (4) creation of a vehicle registration status file, and (5) multipurpose vehicle registration forms and bulk mailing. These committees are scheduled to finish their work before the end of this fiscal year, but probably not in time to place their findings before the appropriate committees. *Therefore, we recommend that the Department of Motor Vehicles make the results of its studies available to the appropriate policy and fiscal committees in the Legislature at the 1972 session in order that the committees may evaluate the cost and benefits of an improved level of service from the Department of Motor Vehicles.*

#### Adequacy of Existing RCA Equipment

The Department of Motor Vehicles was apparently instructed by the Transportation Agency to prepare a preliminary gross cost estimate for the on-line issuance of drivers licenses. In our judgment, this request was premature because a thorough analysis must be conducted to arrive at meaningful cost comparisons. We therefore do not accept these gross estimates as being meaningful or that they justify the assumption that a new computer system will be required.

In the original RCA presentation to the Department of Motor Vehicles, the objectives of its proposed computer installation were listed as: (1) service to the California public—rapid, over-the-counter, one-stop service, (2) efficient, economic operation paced to rapid population growth, (3) up-to-the-minute information for Department of

## Department of Motor Vehicles—Continued

Motor Vehicles and related state and local activities, and (4) information for management decision. It was also stated that the proposed RCA Spectra 70 System was designed to meet the Department of Motor Vehicles objective in the 1970's and beyond.

Given the above, the primary reason that the Department of Motor Vehicles assumes the requirement of a new computer system is that the current RCA mass storage units (utilizing magnetic cards) do not have the speed and reliability of a new series of magnetic disc devices. Therefore the department contends that this new device will be required to permit implementation of on-line issuance or any of the major system changes now being studied. It was originally anticipated that faster and more reliable storage devices would be required to upgrade AMIS, and it was not anticipated that there would be any incompatibility of any required new device with the present RCA computer systems.

Recent announcements by certain computer vendors, including RCA, feature new computer systems which will support the required disc devices. We object to the requirement that the Department of Motor Vehicles must change its central processors to permit this upgrade. The state is purchasing these computers on a seven-year lease-purchase plan and such a change will result in increased costs to the state and a loss on the investment made to date. *Therefore, we recommend that RCA take the necessary engineering steps to make its new disc storage devices compatible with the presently installed RCA computer complex.*

If these modifications are not forthcoming and an improved level of service is deemed necessary, it will be necessary for the Department of Motor Vehicles to enter into a competitive bidding procedure to replace the existing equipment.

## Centralization of the Department of Motor Vehicles Data Processing Services

Traditionally, within the Department of Motor Vehicles, data processing services have been separated within the Division of Drivers' Licenses and the Division of Registration. In 1964, a high-level position of assistant to the director—EDP was established. For the past five and one-half years, this position has functioned as an adviser to the director, and more recently as the coordinator of data processing with a small staff of AMIS control specialists.

In our judgment, there is no longer reason to maintain two separate data processing groups within the Department of Motor Vehicles. AMIS actually functions as an integrated system. Therefore, we believe that there will be better control, coordination, use of equipment and utilization of technical resources if these two EDP divisions are merged into a single Department of Motor Vehicles EDP service center. *We recommend that the Department of Motor Vehicles take positive steps to merge the two separate EDP divisions into a unified EDP service center in order to achieve economy, efficiency and flexibility.*

## 1971-72 AMIS Program and Budget

One major new application, the automated name index, is scheduled for implementation within the Division of Drivers' Licenses in July

1971. The current requirement for accessing an automated driver record is the driver's license number. This new application will provide the capability of accessing the file based upon name and specified other identifiers. Once installed, this approach will greatly improve the Department of Motor Vehicles service to law enforcement.

The AMIS budget for fiscal year 1971-72 is \$11,657,941. This represents an increase of \$222,891 (2 percent) over the current year. This amount is less than originally projected because of a decision to defer the acquisition of optical character recognition equipment pending resolution of the on-line issuance study and a program to reallocate \$348,000 to programs other than EDP. *We recommend approval.*

#### MINOR CAPITAL OUTLAY

The department is requesting \$65,000 for one project at the San Francisco field office for the improvement of existing parking and driver testing areas. The Office of Architecture and Construction has prepared preliminary plans for this improvement and the estimated total project cost is \$63,850. We have reviewed the plans and concur with the design and justification. *We recommend funding in the amount of \$63,850 only, a reduction of \$1,150.*

### Department of Motor Vehicles

#### FOR PAYMENT OF DEFICIENCIES IN APPROPRIATIONS

Item 180 from the Motor Vehicle Fund	Budget p. 113
Requested 1971-72 -----	\$500,000
Estimated 1970-71 -----	250,000
Actual 1969-70 -----	250,000
Requested increase \$250,000 (100 percent)	
Total recommended reduction -----	None

#### ANALYSIS AND RECOMMENDATIONS

*We recommend approval.*

Existing statutes forbid the creation of a deficiency in appropriations from the Motor Vehicle Fund. This means that the Department of Motor Vehicles cannot borrow from the regular Emergency Fund to meet unforeseen and unanticipated financial needs. In recognition of this the Legislature for many years has provided a special contingency authorization to protect the Department of Motor Vehicles. In 1965 and 1966, the amount was \$350,000 in each year. In 1967 and 1968, it was \$500,000 in each year and in 1969 and 1970, it was \$250,000.

In recognition of rising costs of services and supplies and the still unresolved problems with electronic data processing, it would appear to be reasonable to increase this contingency to \$500,000. It does not appear in the budget bill as an expenditure amount nor does it appear in the Governor's Budget since no actual expenditure from it is forecast.



## Public Utilities Commission

## GRADE CROSSING PROTECTION WORKS

Item 181 from the  
State Highway Fund

Vol. II p. 184 Budget p. 116

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Requested 1971-72 -----	\$1,000,000
Estimated 1970-71 -----	1,101,689
Actual 1969-70 -----	1,433,237
Requested decrease \$101,689 (10.2 percent)	
Total recommended reduction -----	None

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## GENERAL PROGRAM STATEMENT

The Public Utilities Commission manages three interrelated railroad crossing safety programs, all supported by the State Highway Fund. Chapter 1302, Statutes of 1961, requires the commission to allocate to cities and counties such monies as may be appropriated by the Legislature to assist local entities in financing the installation of automatic protection devices at grade crossings. The Budget Bill has been used subsequently as the appropriation mechanism for this first railroad crossing safety program. The state contributes 25 percent of the cost of installing each crossing device, local government matches the 25 percent and the railroad company pays the balance.

Chapter 1644, Statutes of 1965, amended the Public Utilities Code to provide support for maintenance of the automatic grade crossing using the same cost-sharing basis. Prior to adoption of the 1965 amendment, the railroad companies were responsible for assuming the full cost of maintenance. The 1965 amendment provides for a continuing appropriation of the funds required as determined by the Public Utilities Commission, up to a maximum of \$1 million per year for maintenance.

The third railroad crossing safety program is the support of grade separation construction pursuant to Chapter 2091, Statutes of 1957. The grade separation program is supported by a continuing appropriation of \$5 million annually.

## ANALYSIS AND RECOMMENDATIONS

*We recommend approval.*

The demand expressed by local government for matching funds has been used by the Public Utilities Commission to substantiate its request for funds to support the grade crossing program. Based on projected demand for state matching funds for the 1971-72 fiscal year, the commission estimates a need of \$1 million.