ASSESSMENT OF WEIGHT FEES
ON FARM VEHICLES IN CALIFORNIA

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INTRODUCTION

The construction and maintenance of California's highway system is financed primarily with tax revenues from two sources: (1) federal and state taxes assessed on the sale of gasoline and diesel fuel, and (2) weight fees imposed on commercial vehicles weighing more than 2,000 pounds.

Motor fuel taxation and weight fee assessment in California date back to 1923, when the state first adopted the concept of "user-fee" financing for highways. The major objectives of these two tax programs are (a) to provide ongoing sources of revenue sufficient to cover the costs of constructing, rehabilitating and repairing the state's highways, and (b) to provide for an equitable distribution of these costs among the users of the highways.

Since its inception, the tax on motor vehicle fuel has applied to all highway users, and has been the principal source of highway revenues. In contrast, the weight fee assessment applies only to commercial vehicles, and is designed to apportion to the operators of these vehicles the added or marginal costs that they impose on the state's highway system as a result of the vehicles' greater weight.

Currently, farm vehicles that operate on the highways (defined in this report as predominantly small trucks involved in the seasonal transportation of crops, livestock, and other farm goods) are assessed weight fees in the same manner as commercial trucks carrying heavy loads. It has been argued that assessing weight fees on farm vehicles results in an unfair distribution of highway costs among highway users, to the benefit of commercial carriers.

Recognizing the importance of assuring that highway costs are financed in an equitable manner, the Legislature adopted Resolution Chapter 119, Statutes of 1982 (ACR 112). This resolution requested that the Legislative Analyst's Office (1) develop information which can be used by the Legislature to determine the most cost-effective method for assessing weight fees on farm vehicles, and (2) report its findings to the Legislature. Specifically, the resolution requests that the Analyst's Office consider:

- The desirability of adopting a separate schedule of weight fees for farm vehicles;
- The desirability of placing limitations on the usage, vehicle weight, and mileage traveled by vehicles eligible for lower weight fees;
- Alternative means by which the Department of Motor Vehicles could verify an applicant as a bona fide farmer and identify a farm vehicle;
- Alternatives for keeping net revenues at the current level if revisions are made in existing weight fees.

The resolution also requested that the report provide an analysis of the costs that would be incurred in establishing a separate schedule of weight fees for farm vehicles.

This report responds to the Legislature's request contained in ACR 112. Chapter I describes the current system of allocating highway costs in California and the conceptual basis for and evolution of weight fees. This chapter also provides an historical account of how farm vehicles have been viewed in the context of financing California's highways, and describes the roles of the Department of Motor Vehicles (DMV) and the California Highway Patrol (CHP) in administering and enforcing the weight fee program.

Chapter II provides a summary of what certain other states are doing with respect to farm truck registration and weight fee assessment, and the implications of these differing approaches.

Chapter III examines whether farm vehicles in California pay their "fair share" as compared to other highway users in the state, and analyzes the current system of weight fee assessment.

Chapter IV defines what constitutes a farm vehicle and describes the nature and the size of the farm vehicle population in California. Information from this chapter serves as a foundation for the cost analysis provided in Chapter V.

Finally, Chapter V analyzes the potential elements of separate "farm vehicle" weight fee classifications and provides cost analyses of various alternatives. This chapter also reviews options that would be available to the Legislature for keeping net revenues to the State Highway Account constant if a separate weight fee schedule for farm vehicles is adopted.

This report was prepared by Steve Juarez, under the supervision of Wayne Keithley.

EXECUTIVE SUMMARY

Since 1923, California law has provided for the assessment of weight fees on commercial and farm vehicles based solely on the vehicle's <u>unladen</u>, or empty, weight rather than on its weight when loaded. In addition, the weight fee assessment in California does not take into account the number of miles traveled by the vehicle during the year. As a result, the current weight fee system, in many cases, fails to allocate the cost of maintaining the state's highways in accordance with the actual use of, and damage inflicted on, those highways by commercial vehicles of various types. These disparities have become more pronounced as improved truck design has increased the carrying capacities of commercial vehicles.

Recognizing the disparities produced by the existing weight fee system, the Legislature adopted Resolution Chapter 119, Statutes of 1982 (ACR 116). This resolution directed the Legislative Analyst to develop information that could assist the Legislature in determining the most cost-effective and equitable method for assessing weight fees on farm vehicles. This report was prepared in response to that directive.

Consistent with the Legislature's directive, we have not included in this report specific recommendations concerning the adoption of a separate fee schedule for farm vehicles or reductions in weight fees applicable to such vehicles.

WEIGHT FEES IN OTHER STATES

In order to provide a basis for comparing weight fee assessments in California with highway fees levied elsewhere, we conducted a telephone survey of assessment practices in 10 other states having significant farm vehicle populations. We found considerable variances among these states with respect to the basis for weight-related fees, discounts provided to farm vehicles, and the general treatment accorded to farm vehicles as a special class. Seven of the 10 states surveyed provided some type of registration fee discount to farm vehicles. Of the remaining three states, two--Idaho and Wyoming--provided relief to farm vehicles by imposing taxes based on mileage traveled by these vehicles.

We also found that while the fees paid on both farm vehicles and commercial vehicles are higher in California than they are in other states, the difference is significantly greater in the case of farm vehicles. If the registration/weight fee paid for an 8,000-pound farm truck in California was adjusted to reflect the relative condition of similar farm vehicles registered in other states in our survey, the fee would be $121, rather than $179, or $58 less than the fee currently due.

FARM VEHICLES PAY MORE THAN THEIR "FAIR SHARE"

We found that farm vehicles generally weigh less and travel fewer miles than for-hire and contract commercial vehicles. Furthermore, farm vehicles often travel without a load in one direction, while commercial vehicles generally carry loads in both directions. Since the assessment of weight fees makes no allowance for these differences, we concluded that farm vehicles pay more than their "fair share" of highway maintenance costs, while for-hire and contract commercial vehicles pay less than their "fair share."

While our analysis indicates that farm vehicles tend to pay more than their "fair share" of highway maintenance costs, it also indicates that the disparities between weight fees and costs imposed on the state's highway system go well beyond this one class of vehicles. Accordingly, we believe that the Legislature should revise California's weight fee schedule as it applies to all commercial vehicles rather than simply make adjustments for an individual class of vehicles, such as farm vehicles. Moreover, we believe that the assessment of fees based on mileage and gross weight may be preferable to granting fee reductions or exemptions selectively to various groups of highway users.

FARM VEHICLE POPULATION AND CHARACTERISTICS

Information on California's farm vehicle population is not maintained in any systematic way. While the Department of Commerce makes periodic estimates of the farm truck population in each of the fifty states, the reliability of these estimates is not known. Consequently, our efforts to compile the data needed for an in-depth review of farm vehicles in California were not entirely successful.

Nevertheless, we are confident that the information on which our estimates are based is sufficiently reliable to support the contention that farm vehicles, as a group, carry lighter loads and travel fewer miles than the general commercial vehicle population and, thus, pay more than their "fair share" of highway user charges. Although partial-year registration provisions reduce the inequities for those farm vehicles which are operated on a seasonal basis, this option is not available to owners of farm vehicles that are used on a limited or intermittent basis throughout the entire year.

IMPACT ON REVENUES AND COSTS

Our analysis indicates that the State Highway Account, State Transportation Fund, would experience a maximum annual revenue loss of $7.7 million beginning in 1985, if 150,000 farm vehicles (including 100,000 farm pickups) were given a 69 percent discount (the highest average discount offered by any of the 10 states covered by our survey) in weight fees. On the other hand, if farm pickups were excluded from special weight fee discounts and if the remaining 50,000 farm vehicles were given a 30 percent discount, the loss to the State Highway Account would be $2.5 million annually. The General Fund, in turn, would experience a revenue increase ranging from $126,000 to $384,000 in 1985 if weight fees on farm vehicles were reduced, due to the reductions in the amounts deducted from income on state income and bank and corporation tax returns. The exact amount of the General Fund revenue increase would depend on a number of factors.

In order to offset partially or fully the revenue losses that would occur if a separate fee schedule were established for farm vehicles, the Legislature could take one of two actions. It could (1) enlarge the universe of vehicles that pay weight fees by expanding it to include such vehicles as motor homes, or (2) increase the fees paid by nonagricultural commercial vehicles.

Based on information provided by the Department of Motor Vehicles, we estimate that DMV would incur a maximum state administrative cost of $1,600,000 (payable from the Motor Vehicle Account, State Transportation Fund) in 1985 and costs of $1,350,000 annually thereafter, if it were required to administer a separate schedule of weight fees for farm vehicles. (This figure assumes a maximum eligible farm vehicle population of 150,000.) In addition, the Franchise Tax Board would incur a maximum cost of $35,000 (payable from the General Fund) in 1985 to verify the occupational status of farmers applying for weight fee discounts. The cost to the Motor Vehicle Account and the General Fund in 1985 would be reduced to $592,000 and $15,000, respectively, if the eligible population was restricted to the estimated 50,000 farm vehicles weighing in excess of 6,000 pounds and traveling less than 10,000 miles annually. Moreover, if limitations were applied to the usage, weight, or mileage of farm vehicles eligible for weight fee discounts, the department would incur substantial, but unknown, <u>enforcement</u> costs. Local governments might also incur additional costs if their assistance were needed to verify the occupational status of applicants.

CHAPTER I

REGISTRATION AND WEIGHT FEE ASSESSMENT IN CALIFORNIA

As a prelude to the analysis of a separate weight fee schedule for farm vehicles, this chapter discusses (1) the conceptual basis for weight fees, (2) the evolution of weight fees as part of California's user fee system for financing highways, and (3) how weight fees are administered in California--that is, how weight fees are collected, allocated, and enforced.

In this chapter, we discuss weight fee assessment and collection in the context of vehicle registration activities. This is because (a) weight fee collection is part of the registration process in California, and (b) a majority of the other states surveyed in the course of preparing this report incorporate the concept of a weight fee into their registration fee schedules.

CONCEPTUAL BASIS FOR WEIGHT FEES

Highway user charges to supplement the motor fuel tax, the primary source of financing for highways, were adopted initially to compensate for the shortcomings of the state's fuel tax. As early as 1920, state policy officials recognized that fuel consumption did not rise proportionately with increases in the size and weight of commercial vehicles, while the wear and tear on roadbeds rose <u>more</u> than proportionately with incremental increases in size and weight. Accordingly, the fuel tax contributions made by larger vehicles toward funding the construction, rehabilitation and maintenance of the highway system did not reflect the wear and tear attributable to these vehicles.

The adoption of weight fees was intended to accomplish what motor fuel taxes could not: account for the marginal costs associated with heavy vehicle travel. While a very elaborate structure of motor fuel pricing could be devised to charge various classes of highway users for the wear and tear caused by each, the cost of administering and policing such a system undoubtedly would exceed the benefits received. Thus, early on, state and federal policymakers looked to other methods of financing in order not only to address the disparities between costs and benefits that are inherent in taxing motor vehicle fuel, but also to provide for growing highway needs. A system of weight-based fees could satisfy both objectives.

HISTORY OF WEIGHT FEES

The California Legislature first imposed registration and commercial vehicle weight fees in 1923. The initial weight fees ranged from $5 to $20, and accompanied the introduction of a motor fuel tax set at 2 cents per gallon, a vehicle registration fee set at $3, and a gross receipts tax of 4 percent on specified for-hire commercial carriers. These user charges clearly reflected legislative intent that there be an ongoing, stable source of revenue for the construction, rehabilitation and maintenance of highways, the administration of highway travel, and the enforcement of traffic laws.

As might be expected, however, periodic adjustments to California's system of highway financing were needed in order to reflect increased highway travel, the changing composition of the state's vehicle fleet, and greater truck weights. Accordingly, weight fees were increased by approximately 100 percent in 1948, 33 percent in 1953, 19 percent in 1963, and 30 percent in 1974, when the gross receipts tax was eliminated. The latest fee hike occurred in 1981 when Chapter 541 increased the weight fee schedule by approximately 50 percent, effective January 1, 1982, and by an additional 7 percent, effective January 1,1985. As a result, beginning in 1985, unladen weight fees will start at $8 and increase at 1,000-pound increments, to a maximum of $660.

THE ADMINISTRATION OF WEIGHT FEES

Collection. In California, vehicle weight fees are collected as part of the annual registration process administered by DMV. In most cases,[1] a payment card (known as a "registration potential") is issued to the owner of a vehicle indicating the fees that are due on the vehicle. The registration application lists the year and the make of the vehicle, as well as its body type, number of axles, and unladen weight.

The weight fees are determined based on schedules contained in Section 9400 of the Vehicle Code. Separate schedules have been devised for two-axle vehicles and those having three or more axles. For a two-axle commercial vehicle with an unladen weight of less than 3,000 pounds, the weight fee is $8. For vehicles with an unladen weight exceeding 3,000 pounds, the fee is increased for each 1,000-pounds of additional weight, up to a maximum of 14,000 pounds. Consequently, the maximum weight fee for a

1. A slightly different process is used to collect fees on vehicles which are part of a commercial fleet (three or more commercial vehicles with the same owner).

commercial vehicle with two axles, weighing more than 14,000 pounds, currently is $371.

The fee schedule for vehicles with three or more axles begins at 2,000 pounds and is similar to the schedules used to set fees for two-axle vehicles. The minimum weight fee for vehicles with three or more axles is $26 (2,000-3,000 pounds). The maximum assessment is $620 and applies to vehicles weighing in excess of 15,000 pounds. Pursuant to Ch 541/81, weight fee schedules will be adjusted upward by approximately 7 percent, beginning January 1, 1985.

Certain classes of commercial vehicles are exempt from weight fees. Included in the exempt category are:

- station wagons used in the transportation of passengers that are not available for hire;
- commercial vehicles manufactured prior to 1937;
- agricultural water-well boring rigs;
- forklift trucks used primarily for loading and unloading;
- commercial vehicles weighing less than 6,001 pounds which are registered to or used for the transport of disabled persons;
- publicly owned vehicles; and
- implements of husbandry (tractors, self-propelled harvesters, and other vehicles used off the highway in agricultural operations).

In addition, a separate weight fee schedule applies to electrically powered vehicles. Finally, certain classes of vehicles, such as garbage trucks and vehicles with refrigeration units, are subject to weight fees based on only a portion of the total vehicle weight.

Partial-Year Payment. Section 9700 of the Vehicle Code allows an owner of a commercial vehicle who does not intend to operate the vehicle for the entire registration period (one full year) to pay only a portion of the annual weight fee (1/12 of the weight fee due times the number of months during which the vehicle will be in operation). The minimum partial payment is 1/12 of the fee. The DMV charges a fee of $3 for each application for partial-year registration, and requires payment of full-year registration and vehicle license fees, even when partial weight fees are charged.

The Department of Motor Vehicles indicates that a large number of farmers take advantage of partial-year weight fee provisions, as do owners of large commercial vehicle fleets who either (1) do not intend to operate all of their vehicles simultaneously, or (2) wish to spread out weight fee payments by filing partial-year applications at various times throughout the year.

Allocation. The weight fees collected by DMV are deposited directly into the State Highway Account, State Transportation Fund, after the cost of DMV administration has been deducted. For 1984-85, the Department of Finance estimates that approximately $267,380,000 in weight fees will be collected, with $16,620,000 of that amount allocated to DMV to cover its administrative costs and the remainder--$250,760,000--deposited in the State Highway Account.

Weight fees deposited in the State Highway Account are not earmarked for any specific purpose. Instead, they are commingled with federal and state fuel tax and other revenues for the purpose of financing (1) construction, rehabilitation and maintenance costs of state highways, (2) state transportation planning, (3) certain mass transit projects, (4) subventions to local agencies for various road and highway-related activities, and (5) miscellaneous highway-related activities.

Enforcement. The Department of Motor Vehicles and the California Highway Patrol share responsibility for ensuring that commercial vehicles are properly registered and that the weight fees on these vehicles have been paid. In addition to assessing and collecting weight fees on commercial vehicles registered to operate in the state, the DMV also utilizes auditors to check the mileage logs of vehicles which operate on an interstate basis, in order to ensure that California receives its proper share of vehicle registration, licensing and weight fees. These fees are apportioned among the states in which a commercial vehicle travels.

Under a special enforcement program--the Commercial Vehicle On-Site Fee Collection Program--the DMV places registration personnel at numerous weigh stations and inspection facilities throughout the state. In conjunction with traffic officers of the California Highway Patrol, DMV personnel identify those vehicles which are not in compliance with California's registration requirements and assess fees and penalties at the inspection facility. The penalty for late registration is 20 percent of all fees due. Owners or operators of commercial vehicles cited for registration violations must remit the entire amount of fees due before they are allowed to continue operating on California's highways.

Finally, officers of the CHP are responsible for verifying the registration status of any vehicle operating on the highway if the vehicle is suspected of being in violation of registration requirements. As part of their regular highway beat assignments, CHP officers (1) check for registration stickers on the license plates of all vehicles, (2) periodically check the registration status of vehicles cited for traffic violations via computer records maintained by the DMV, and (3) cite violators found to be out-of-compliance with registration and weight fee requirements.

CHAPTER II

FARM VEHICLE REGISTRATION--PRACTICES OF OTHER STATES

In its 1977 survey, the California Farm Bureau identified 22 other states which had given farm vehicles some form of special consideration with regard to registration or weight fees. In order to provide a more up-to-date comparison of California's farm vehicle registration practices with those of other states, we conducted a telephone survey of these practices in 10 states with significant farm vehicle populations. These states are Colorado, Florida, Idaho, Illinois, Iowa, New York, Ohio, Oregon, Texas, and Wyoming.

We requested information from each state on: (1) registration and weight fee payments, (2) application and verification activities, (3) enforcement activities, and (4) the availability of partial-year registration. In almost all instances, comparisons relating to fees paid have been limited to assessments on <u>farm trucks</u>, rather than farm <u>trailers</u>, because of (1) the ease of securing information on such trucks, and (2) the wide range of practices used to assess trailers in the various states. In this chapter, we discuss the results of our survey.

FARM VEHICLE REGISTRATION

Seven of the 10 states surveyed provide some form of special consideration to owners of farm trucks in assessing registration and/or weight fees. Of the three states (other than California) which do <u>not</u> grant farm vehicles special consideration with regard to registration fees, two--Idaho and Wyoming--provide for special treatment of farm vehicles in connection with a mileage-based tax assessed on commercial vehicles in those states. Two states--Colorado and Oregon--provide for special treatment of farm vehicles in connection with both vehicle registration and mileage taxation. Florida was the only state other than California which does not provide special treatment for farm vehicles in at least one of these two categories. (Florida does, however, provide a reduced registration fee to "goat" trucks used to transport citrus fruit.)

Fee Discount Rates Vary. The range of the registration fee discounts offered to farm vehicles varies greatly among the states we contacted. For example, in Colorado, Iowa, Illinois and Ohio, the size of the discount increases as the weight of the farm truck increases. Thus, a farm truck in one of these states weighing 20,000 pounds would receive a larger percentage reduction than would a 10,000-pound farm truck. Fee schedules of this type are said to offer progressive discounts.

In Texas and New York, the fee discount for farm trucks is, in percentage terms, the same regardless of how much the vehicle weighs or the level of fees assessed. In Texas, the discount is 50 percent; in New York the discount is 30 percent. Fee schedules of this type are said to offer proportional discounts.

Finally, the state of Oregon grants special treatment to farm trucks by assessing registration fees on the basis of the vehicles' unladen weight, while nonagricultural commercial trucks are assessed on the basis of their gross (laden) weight. The discount granted to farm trucks in Oregon, therefore, is not a specified percentage of the normal fee. Given the various types of farm trucks and the different carrying capacities of each, the size of the discount tends to fluctuate in a fairly random manner, making it difficult to estimate the average fee reduction for farm trucks of any given weight.

Farm Truck Registration Summary. Table II-1 summarizes characteristics of the weight fee structure in California and the 10 survey states as it applies to farm vehicles.

Table II-1

Assessment of Weight Fees on Farm Vehicles in California and Certain Other States

State	Basis of Registration	Registration Fee Discount For Farm Trucks	Type of Discount at Higher Weight
California	Regis. & Unladen Wt. Fee	No	N/A
Colorado	Unladen Wt.Fee & Ownshp.Tax	Yes	Progressive
Florida	Varied Weight Fee[a]	No	N/A
Idaho	Gross Weight Fee[b]	No	N/A
Illinois	Gross Weight Fee	Yes	Progressive
Iowa	Gross Weight Fee	Yes	Progressive
New York	Gross Weight Fee	Yes	Proportional
Ohio	Unladen Weight Fee	Yes	Progressive
Oregon	Varied Weight Fee[a]	Yes	Variable
Texas	Gross Weight Fee	Yes	Proportional
Wyoming	Unladen Wt.Fee & Ownshp.Tax	No	N/A

N/A--not applicable.

a. Florida imposes an unladen weight fee on trucks and a gross weight fee on truck tractor-trailer combinations as part of its registration process. Oregon imposes an unladen weight fee on farm trucks and a gross weight fee on nonagricultural trucks.

b. Those commercial vehicles with a maximum gross weight exceeding 60,000 pounds in Idaho are required to pay a weight-distance tax as part of that state's registration process.

COMPARING FEE ASSESSMENTS STATE-BY-STATE

Our attempts to compare California's registration and weight fees to fees charged in other states proved to be very difficult, for a number of reasons. First, our survey revealed that only four of the 10 states assessed farm trucks on the basis of unladen weight, as California does. The remaining six states assess all or part of their farm truck populations on the basis of combined gross weight--that is, the weight of the truck, trailer, and maximum load to be transported. Thus, the 10 states use two very different systems of fee assessment. Consequently, the number of states in the survey whose assessment practices could be compared to California was limited. To compensate for this limitation, we chose to consider the assessment practices of additional states not covered by our initial telephone survey when comparing fee assessments.

Second, the structure of California's weight fee schedule is fairly unique. Nine of the 10 states included in the survey incorporate a weight fee in their registration fees; they do not make a separate weight fee assessment. Only Illinois maintains a separate weight fee schedule that is similar to California's. Hence, the only meaningful comparison that can be made is between registration fees in other states and the combination of registration and weight fees in California.

Finally, we found that California is one of only three states in our survey (Ohio and Wyoming are the others) that assess fees on trailers and semitrailers which are equal to fees imposed on motortrucks. The fees for trailers and semitrailers charged in the other eight states covered by the survey are substantially less than the fees charged for motortrucks. Thus, any comparison which includes trailer fees will tend to inflate the amount paid by California farm vehicles vis-a-vis farm vehicles in these eight other states. Given the relatively minor use of trailers in farm operations, we believe a comparison of fees paid solely on farm trucks generates more useful information than does a comparison of fees paid on farm vehicles.

Notwithstanding these difficulties, we were able to compare registration/weight fees paid on farm trucks in California and the eight other jurisdictions which assess fees on the basis of unladen weight. In making this comparison, we focused our attention on a gasoline-powered farm truck with an unladen weight of 8,000 pounds. The California Farm Bureau has indicated that, in its opinion, this represents a typical farm truck. The results of the comparison are shown in Table II-2.

Table II-2

Farm Vehicle Registration Fees
Imposed on a Truck with an Unladen Weight of 8,000 Pounds
California and Selected Other Jurisdictions

State	Registration Fee	Weight-based Registration Or Weight Fee	Total
California	$23.00	$156.00	$179.00
Alaska	30.00	--	30.00
Colorado	--	30.50	30.50
Dist. of Columbia	--	200.00	200.00
Hawaii	3.15	120.00	123.15
Nevada	--	48.00	48.00
Ohio	--	160.00	160.00
Oregon	--	40.00	40.00
Wyoming	--	60.00	60.00
Average for eight jurisdictions (excluding California)			$86.46

Table II-2 reveals that the owner of a typical farm truck in California must pay fees totaling $179, or $92.54 (107 percent) more than the average fee of $86.46 that is paid in the other eight jurisdictions surveyed.

In order to determine how the taxation of farm trucks in California compares with the taxation of commercial trucks generally, we computed the registration/weight fees for commercial trucks in California and the seven other jurisdictions which assess commercial truck fees on an unladen basis. (Although Oregon assesses farm trucks on the basis of their unladen weight, it assesses nonagricultural commercial vehicles on a gross weight basis.) Table II-3 provides this comparison.

Table II-3

Commercial Truck Registration Fees
Imposed on a Truck With an Unladen Weight of 8,000 Pounds
California and Selected Other Jurisdictions

State	Registration Fee	Weight-based Fee	Total
California	$23.00	$156.00	$179.00
Alaska	--	135.00	135.00
Colorado	--	105.50	105.50
Dist. of Columbia	--	200.00	200.00
Hawaii	3.15	120.00	123.15
Nevada	--	48.00	48.00
Ohio	--	224.00	224.00
Wyoming	--	60.00	60.00
Average for seven jurisdictions (excluding California)			$127.95

A comparison of Tables II-2 and II-3 shows that fees paid on a light-duty farm vehicle, relative to fees paid on commercial vehicles generally, are higher in California than they are in the other states. Whereas fees paid on California farm trucks exceeded the average of other jurisdictions by approximately $93, or 107 percent, commercial truck fees in California were only $51, or 40 percent, above the average for these jurisdictions.

Thus, although the fees paid on <u>both</u> farm vehicles and commercial vehicles are higher in California than they are in other states, the difference is significantly greater in the case of farm vehicles. If the registration/weight fee for the 8,000-pound farm truck used in our example was the same percentage of the fee for commercial trucks generally that it is in the average state covered by our survey, the fee would be $121, rather than $179, or $58 less than the fee currently due.

VERIFICATION OF APPLICATIONS

Each of the jurisdictions that levy a reduced fee on farm trucks requires that the applicant for the reduced fee be a bona fide farmer. Colorado, Oregon and Texas require the applicant for a farm vehicle permit to submit a signed affidavit stating that he or she is a bona fide farmer. Texas requires that this affidavit be witnessed by a notary public. The other states covered by the survey require only that the person indicate somewhere on the application form that he or she is, indeed, a farmer.

None of the states surveyed maintains a systematic process to ensure that applicants are, in fact, farmers and are complying with regulations governing farm vehicle registration. The Oregon Public Utilities Commission, however, does conduct investigations into the use of Oregon's "apportioned farm plate," which allows one farmer to haul for another farmer on a part-time basis and pay reduced fees. Oregon officials have found that misuse of the apportioned plate is widespread. As a result, it will discontinue the special plate in 1984.

Special Farm Plates

Currently, only the states of Colorado, Illinois, Iowa, Ohio, Oregon, and Texas provide special license plates for farm vehicles. (Idaho is considering the issuance of special farm plates.) In these states, the plate is either of a distinctive color or contains letters or numbers which are of a special series and are issued only to farm vehicles. To be eligible for a farm plate in Ohio, the vehicle must weigh over 1,500 pounds.

ENFORCEMENT

Given the apparent lack of any formal processes for verifying the eligibility of applicants for reduced fees on farm vehicles, one might assume that the states covered by our survey would make a special effort to enforce the regulations governing farm vehicles on the highway. Based on the results of our survey, however, this is not the case. In fact, none of the states covered by the survey conducts a compliance program aimed at farm vehicles. Instead, state officials rely on the traditional on-site enforcement efforts of their highway/state patrol agencies and inspection facilities to ensure that farm vehicles are complying with state laws and regulations. Because this type of enforcement tends to be random, these states were unable to document the degree to which farm vehicles are complying with applicable statutes.

Where farm vehicles are found to be in violation of state laws and regulations governing their operation, the penalties vary from state to state. Seven of the nine states which provide fee discounts to farm vehicle operators make violation of farm vehicle provisions a misdemeanor. The penalty for such a violation ranges from a small fine in Illinois to a $300 fine and up to six months in jail in Idaho. Furthermore, eight of the states covered by our survey indicate that they may also revoke or suspend the registration of a farm vehicle operator found guilty of violating the applicable statutes. In addition, six states in the survey require that, in addition to the aforementioned punitive measures, the full complement of commercial vehicle fees be paid when a person is found to be out-of-compliance with farm vehicle statutes.

PARTIAL-YEAR REGISTRATION

In order to determine whether the availability of partial-year registration for farm vehicles in California might serve as an alternative to fee discounts provided for such vehicles elsewhere, we questioned the states covered by our survey as to whether they, too, allow registration for less than a full year. Four of the 10 states told us that they offer a form of partial-year registration similar to that available in California. Three of those four states also provide fee discounts.

Specifically:

- Florida, which does not provide registration fee discounts to owners of farm vehicles, allows all of its commercial vehicle operators to register on a quarterly (three-month) basis.
- New York and Oregon provide partial-year registration exclusively for farm vehicle operators for a period as brief as one month.
- Although Wyoming requires full-year payment of fees at the time of registration, the Wyoming Division of Motor Vehicles will issue refunds for those months a commercial vehicle is not in use, upon surrender of the vehicle's license plates.

CHAPTER III

DO FARM VEHICLES IN CALIFORNIA PAY THEIR "FAIR SHARE" OF HIGHWAY COSTS?

As the survey of states in Chapter II evidenced, California is one of the few states which do not provide some sort of registration fee discount for farm vehicles. Consequently, the registration and weight fees paid on an 8,000-pound farm vehicle in California are more than double the average for the eight other jurisdictions cited in Table II-2 (page 21).

Such a comparison, however, fails to provide an answer to the question: do farm vehicles in California pay their "fair share" of highway costs? "Fair share," in this context, means fees which reflect the wear and tear on highway pavements caused by the operation of farm vehicles.

The best method of determining each class of vehicles' "fair share" costs would be to calculate annual pavement costs--that is, the cost of constructing, rehabilitating, and maintaining the highway (excluding ancillary costs such as right-of-way acquisition, grading or commuter facilities) and allocate these costs to each class of vehicles, based on precise measurements of wear and tear attributable to that class. Such precise measurements, however, are not available. Accordingly, we have attempted to determine generally to what extent farm vehicles are responsible for pavement costs and whether California's weight fee schedule adequately assesses farm vehicles for these costs.

FACTORS RESPONSIBLE FOR PAVEMENT COSTS

There is little or no dispute over what are the primary causes of wear and tear on highway pavements. It is the weight of the vehicle and its payload that is transmitted to the pavement. Moreoever, heavy vehicles are responsible for an overwhelming percentage of the costs to construct, repair and maintain this country's roadways. Numerous studies and road tests conducted by the U. S. Department of Transportation, the American Association of State Highway and Transportation Officials, and a host of state, local, and private agencies have confirmed this to be the case. This finding recently was summarized by the U. S. Department of Transportation in a January 1984 report on alternatives to the use tax currently imposed on heavy trucks. The report concludes that:

> "Cost responsibility is far greater for vehicles with heavier axle loadings and high mileage than vehicles with light axle loads and low mileage as pavements are designed for a fixed number of applications of equivalent loadings. Greater responsibility for pavement costs is attributed to trucks with axle loadings that tend to fall in the heaviest weight classes."[1]

This conclusion is consistent with a 1976 report issued by the California Department of Transportation[2], which found that:

- Approximately 99 percent of the structural damage done to highway pavement is caused by vehicles weighing more than 6,000 pounds.
- Increases in axle weight <u>geometrically</u> increase the damage to the highway, so that a 10 percent increase in axle weight results in over 50 percent more structural damage to pavement.

Thus, to determine whether farm vehicles pay their "fair share" of pavement costs, we must compare these vehicles to commercial vehicles generally in terms of:

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1. "Alternatives to Tax on Use of Heavy Trucks", U. S. Department of Transportation, January 1984.
2. "Heavy Vehicle Cost to State Highways in California", California Department of Transportation, July 1976.

- weight
- mileage
- fees paid

FARM VEHICLES COMPARED TO OTHER COMMERCIAL VEHICLES

Weight. There is no comprehensive data available on the gross weight of farm vehicles, relative to the gross weight of other commercial vehicles. Nevertheless, given the nature of the farm business, it is virtually certain that the gross weight of farm vehicles generally is less.

Typically, farm operators rely on flatbed trucks and large pickup trucks to haul their livestock and agricultural products. In contrast, for-hire and contract carriers primarily utilize tractor-trailer combinations. The carrying capacity of these combinations per pound of unladen weight usually is considerably larger than that of the typical farm vehicle. This disparity is magnified by the fact that agricultural vehicles operate without a payload more often than other commercial vehicles. This, according to the California Farm Bureau, occurs because farm vehicles often return from hauling agricultural products to market, either without a load or with a minimal load consisting of raw materials or supplies. In contrast, the California Trucking Association indicates that commercial operators generally haul a full load in both directions.

B. Mileage. The survey conducted by the California Farm Bureau in 1977 provides an indication of the average annual mileage logged by farm vehicles (trucks and trailers) of various weights. This information is shown in Table III-1.

Table III-1

Average Annual Mileage Logged
By Farm Vehicles of Various Weights
1977

Weight	Trucks		Trailers	
	No. Surveyed	Ave. Mileage	No. Surveyed	Ave. Mileage
5,001 - 6,000	80	4,800	34	8,605
6,001 - 7,000	102	4,945	27	8,202
7,001 - 8 000	119	4,785	11	6,282
8,001 - 9,000	88	6,102	10	12,461
9,001 - 10,000	50	6,450	na	na[a]
10,001 - 11,000	33	11,647	na	na
11,001 and above[b]	77	9,877	na	na
Totals	549	6,306	82	8,631

Source: California Farm Bureau Survey

a. Only four responses were received for trailers with weight in excess of 9,000 pounds and, therefore, mileage figures for trailers weighing more than 9,000 pounds were not included.
b. Includes mileage logged by two-axle and three-axle farm trucks.

As indicated in the table, the average annual mileage for all farm trucks surveyed in 1977 was 6,306 miles, while the average annual mileage for the 82 farm trailers in the survey was 8,631 miles. These amounts are substantially less than annual mileage traveled by most contract carriers. Although statistics on mileage traveled by these vehicles are not available, the California Trucking Association indicates that in 1982 the average commercial vehicle owned and operated by the state's 800 largest trucking firms traveled 42,000 miles.

Thus, it appears evident that farm vehicles are causing less damage to the roadway than other, heavier classes of vehicles. The next section examines the extent to which this difference is reflected in California's weight fee schedule.

ANALYSIS OF CALIFORNIA'S WEIGHT FEE SCHEDULE

Although California's weight fee schedule has been revised periodically to yield increased revenues for highways, its basic structure has remained generally unaltered since its adoption in 1923. Two features of the schedule are especially relevant to the question of whether farm vehicles pay their fair share of highway costs. Under this schedule, weight fees for all vehicles (1) are based on the unladen or empty weight of the vehicle and (2) make no allowance for the mileage traveled by a particular vehicle during the course of a year.

Unladen Versus Gross Weight Assessment. Ironically, the adoption of weight fees--a move designed initially to provide a more equitable allocation of costs among highway users--has created inequities of a different type. The State Highway Commission had recommended in 1922 that weight fees be based on the gross weight of commercial vehicles, in order to better reflect the wear and tear on the highways attributable to different vehicles. The highway revenue program approved by the Legislature, however, provided for the assessment of weight fees based solely on the unladen, or empty, weight of such vehicles. Thus, the weight fee on two vehicles with an equal unladen weight and the same number of axles is the same.

A vehicle's unladen weight, however, often is not proportional to its laden weight, and consequently may not provide an accurate measure of its contribution to highway wear and tear. In fact, two separate vehicles with the same unladen weight and number of axles might have gross vehicle weights (GVW) which differ considerably--perhaps by a factor of four. It is possible, for example, that one vehicle with an unladen weight of 15,000 pounds and four axles would normally have a GVW of 20,000 pounds, while another vehicle with the same unladen weight and number of axles has a legal maximum GVW of 80,000 pounds. Under these circumstances, even though one vehicle's GVW exceeds the other's by 300 percent, the weight fee for each would be the same--$620. Consequently, California's weight fee system does not allocate the costs of maintaining the state's highway system in line with the actual use of, and damage inflicted on, the highway by vehicles having the same unladen weights but very different gross weights. This imbalance between weight fees and associated pavement costs is particularly evident in the case of farm vehicles, as explained in the previous section.

With improvements in truck design, the carrying capacities of commercial vehicles per pound of unladen weight have increased in recent years, causing the disparities between costs and fees under a weight fee assessment system based on unladen weights to become more pronounced. In response, most states which assess truck weight fees now impose fees on a gross weight basis. In a 1976 report, the California Department of Transportation had recommended that California adopt a similar policy and change the basis for the weight fee schedule from unladen to laden weight in order to eliminate the bias in favor of heavy vehicles at the expense of light vehicles (defined in the report as those vehicles weighing less than 10,000 pounds with two axles).

The California Legislature also has been concerned over this disparity problem. Last year, it enacted Resolution Chapter 116, Statutes of 1983, requesting the Department of Motor Vehicles to conduct a study of alternative fee schedules based on the laden weight of commercial vehicles. In this report ("A Study of Alternative Strategies For Assessing Fees on Commercially Registered Vehicles," California Department of Motor Vehicles), which was completed in July 1984, the DMV recommends that a combined gross weight fee schedule for commercial vehicles be adopted, to replace California's current system of separate assessments for registration, vehicle license, and unladen weight of the vehicle.

Annual Versus Mileage-Based Assessment. The controversy over weight fees goes beyond the issue of unladen versus laden weight. Recently, this issue has been overshadowed by the issue of whether weight fees should reflect differences in the number of highway miles traveled annually. Currently, weight fees in California are assessed on an annual basis, without regard to mileage. Critics of this system maintain that the annual fee favors heavy commercial vehicles because, typically, these vehicles travel many times the mileage traveled by smaller vehicles and, thus, impose a greater cost on the highway system, even though they pay a similar annual fee.

In 1976, reports issued by the Auditor General and the State Department of Transportation both urged the state to adopt a weight fee system based on mileage. The Auditor General's report concluded that, "Compared to other states, California's owners of small vehicles pay a larger share of highway user taxes and heavy trucks pay a lower share. By implementing a tax on large vehicles which considers miles of travel and weight exerted on the road facilities, these disparities can be reduced."[1] A 1980 report prepared for the California State Senate's Transportation Committee[2], while somewhat critical of the conclusions reached by the Department of Transportation and the Auditor General in their reports, acknowledged that annual weight fees were not as effective as mileage-based taxes in addressing the disparities which exist between various classes of highway users.

Here again, these disparities are particularly evident in the case of farm vehicles. According to a survey conducted by the California Farm Bureau in 1977, farm vehicles tend to operate on a seasonal basis, and their annual mileage often is substantially less than that registered by commercial vehicles. Representatives of the farm community have argued that the annual weight fee system should be revised to reflect this difference.

The California Farm Bureau acknowledges that, as an alternative to establishing a separate weight fee schedule, farmers could continue to apply for partial-year registration. The Bureau believes, however, that the need to travel to the DMV office and pay the $3 fee which is assessed for each application are disincentives for farmers to use partial registration. Moreover, the Bureau notes that partial-year registration does not address the problems facing farmers who operate vehicles the entire year, but do so on a limited or intermittent basis.

1. "Equity of Highway User Taxes," Office of the Auditor General, California Legislature, June 1976.
2. "Highway Cost Allocation and Tax Recovery in California, A Report to the California State Senate Transportation Committee," by Richard Zettel, February 1980.

There are drawbacks, however, to a mileage-based tax. In its July 1984 report,[1] the Department of Motor Vehicles cites three major reasons why a mileage-based tax may be undesirable: (1) the tax is self-assessing and therefore subject to misrepresentation; (2) there are high administrative costs associated with the tax; and (3) enforcement is ineffective without the construction and staffing of numerous points of entry.

Conclusion

It is evident that under the state's current weight fee system, owners of farm vehicles in California, as a group, pay more than their fair share of highway costs. In this regard, however, they are not alone. Owners of automobiles, light trucks and vans also appear to pay more than their fair share. In its 1976 report on the feasibility of a ton-mile tax, the California Auditor General concluded:

> Compared to other states, California's owners of small vehicles pay a larger share of highway user taxes, and heavy trucks pay a lower share. By implementing a tax on large vehicles which considers miles of travel and weight exerted on the road facilities, these disparities can be reduced."[2]

As part of its report, the Auditor General recommended that vehicles with a gross weight exceeding 26,000 pounds or with more than two axles should be subject to an axle-mile tax similar to the one imposed in Ohio. If this more comprehensive approach advocated by the Auditor General were implemented, farm vehicles undoubtedly would benefit because only a

1. "A Study of Alternative Strategies for Assessing Fees on Commercially Registered Vehicles," California Department of Motor Vehicles, July 1984.
2. "Equity of Highway User Taxes," Office of the Auditor General, California Legislature, June 1976.

relatively small number of farm vehicles would exceed the thresholds identified (i.e. a gross weight of 26,000 pounds or more than two axles).

Accordingly, we conclude that the California weight fee schedule, as it applies to all commercial vehicles, should be revised to link more closely the level of fees paid by various classes of vehicles and the costs imposed on the state's highway pavements by these classes. Specifically, the fee schedule should take into account the gross weight and mileage exerted on the highway by various classes of vehicles. A complete revision of the schedule would be preferable to making adjustments for an individual class of vehicles, such as farm vehicles.

If, however, the Legislature wishes to limit weight fee relief to owners of farm vehicles, while maintaining the current structure of weight fees, a separate fee schedule could be devised which would more closely link farm vehicle weight fees to the actual wear and tear imposed on the highway by these vehicles. Chapter IV attempts to define the population which would benefit from a separate fee schedule and Chapter V provides a discussion and an analysis of such a schedule.

CHAPTER IV

NUMBER AND CHARACTERISTICS OF FARM VEHICLES IN CALIFORNIA

Any attempt at developing a separate schedule of weight fees for farm vehicles requires that two basic questions be addressed:

1. What, specifically, is a farm vehicle?
2. What is the size and nature of the farm vehicle population in California?

WHAT IS A FARM VEHICLE?

If "farm vehicles" in California are to be treated separately for purposes of weight fees, it is important that this class of vehicles be well-defined. Obviously, a precise definition is needed to administer a separate fee schedule. Presumably, this should not present a serious problem since the rationale for granting special fee consideration to farm vehicles implies that these vehicles can be differentiated from the general commercial vehicle population. Failure to adopt a precise definition of farm vehicles could, in addition to presenting serious administrative problems, reduce revenue to the State Highway Account that is needed to construct, rehabilitate, and maintain the state's highway system.

Unfortunately, however, there is no one agreed-upon definition of a "farm vehicle." Although the California Vehicle Code defines "implements of husbandry" (tractors, self-propelled harvesters and other vehicles used off the highway in agricultural operations) and provides for the identification of such vehicles, it makes only passing reference to "farm vehicles," and does not differentiate between commercial vehicles and farm vehicles for the purpose of assessing weight fees. Moreover, although ACR 112 refers to "farm vehicles," it does not specify which types of vehicles should be assigned to this category.

Consequently, in preparing this report, we had to develop our own definition of what constitutes a "farm vehicle." In doing so, we relied on two sources. First, we talked with officials from other states to determine how they defined "farm vehicle." We found that, while the states differed somewhat with respect to the terminology they used (for example, farm truck, agricultural truck, and farm trailer), they generally consider vehicles which are owned and operated by a farmer and which are used to transport agricultural commodities, livestock, or farm supplies on the highway to be "farm vehicles." In those states where separate weight fees for farm vehicles are in effect, a distinction is usually drawn for fee purposes between a farm (or agricultural) truck and a farm trailer.

Second, we asked the California Farm Bureau to define such vehicles. The bureau's definition of a farm vehicle is as follows:

> "Any motor vehicle or trailer over 6,000 pounds in unladen weight used or maintained when registered to or used by the owner or operator of a farm solely for his own use in the transportation of agricultural products or farm supplies. Farm vehicles shall not include contract carriers, for-hire vehicles, or other commercial vehicles. In order to be eligible for fees set forth in this section, farm vehicles shall be restricted to 10,000 miles use annually."

The bureau contends that a 6,000-pound minimum weight is necessary in order to exclude pickups used on a multipurpose basis. In addition, the bureau believes that a mileage restriction would ensure that farm vehicles are used only for agricultural purposes.

While we agree that both elements of the bureau's definition would reduce the potential for abuse, we found no consensus among other states regarding the exclusion of vehicles from the "farm" category on the basis of weight or annual mileage. Furthermore, a mileage restriction would pose enforcement problems which would have to be overcome. For these reasons, we adopted <u>two</u> separate definitions of what constitutes a farm vehicle:

1. The <u>narrow</u> definition includes a 6,000-pound weight floor and a mileage ceiling of 10,000 miles annually, as the Farm Bureau proposed.

2. The <u>broad</u> definition is similar to the narrow definition, but does not include weight and mileage restrictions.

An analysis of costs associated with a separate farm vehicle weight fee based on both of these definitions is included in Chapter V.

WHAT IS THE SIZE AND NATURE OF THE FARM VEHICLE POPULATION IN CALIFORNIA?

Efforts to determine the size and nature of California's farm vehicle population, using the definitions described above, proved to be very difficult. No public or private agency collects meaningful statistical data on farm vehicles. Thus, in compiling information on farm vehicles, we found it necessary to use information from a number of different sources, including the U. S. Department of Commerce's census report on California farm operations, the Department of Motor Vehicle's monthly report on commercial vehicle fee collections, and the Motor Vehicle Manufacturer's Association (MVMA) annual report on all motor vehicle classes. Even so, we were not able to find in these reports complete information on the status of farm vehicles in California.

The most useful information on farm vehicles in California was compiled from a 1977 survey of farm vehicle owners, conducted by the California Farm Bureau. The bureau undertook this survey in order to establish that the average farm vehicle travels fewer miles on the state's highways each year than does the average nonfarm commercial vehicle. The bureau's survey generated statistical information on 549 farm trucks weighing over 5,000 pounds and 84 farm trailers. The information included statistics on vehicle weight, number of axles, months in operation, and mileage traveled.

The results of this survey, however, have important limitations. Specifically, the survey covered a relatively small number of vehicles (631 out of an estimated total of approximately 50,000), and employed questionable survey techniques by making no attempt to ensure that the survey sample was random or representative. Moreover, the information drawn from it is now seven years old. Nevertheless, we believe the survey results still provide the most comprehensive and detailed information available on farm vehicles in California.

Using data from the 1977 survey, together with information provided by the other reports listed above, we have made estimates of farm vehicle characteristics including (a) the number of farm vehicles, (b) the distribution of these vehicles by type (truck or trailer), (c) distribution by weight, and (d) the annual mileage traveled by these vehicles.

A. Size of population. Given that no public or private agency regularly collects meaningful statistical data on farm vehicles in California, we were unable to determine the exact number of such vehicles in the state. We were able, however, to construct a rough estimate of the number of farm vehicles that might be eligible for special weight fees if a separate fee schedule for these vehicles is adopted.

Maximum Number of "Farm Vehicles". Using the U. S. Department of Commerce's latest estimate of farm motortrucks, including pickups, in California (143,000), and our estimate of farm trailers (9,900) weighing above 2,000 pounds currently in the state (see page 42) we conclude that the maximum number of farm vehicles in the state is 153,000.

According to statistical data obtained from the California Department of Motor Vehicles, vehicles weighing less than 6,000 pounds comprise approximately 70 percent of all motortrucks registered in the state. On this basis, we estimated that of the 143,000 motortrucks used on farms, approximately 100,000 are pickups which weigh less than 6,000 pounds and 43,000 are trucks which exceed 6,000 pounds in weight.

Minimum Number of "Farm Vehicles". In order to determine the minimum number of farm vehicles, we combined our estimate of farm trailers weighing in excess of 6,000 pounds (5,600) with the number of farm vehicles weighing more than 6,000 pounds (43,000). This yielded an estimated minimum number of farm vehicles amounting to approximately 48,600.

B. Distribution by weight. We used the results of the Farm Bureau survey together with statistical information from DMV on the commercial vehicle population in 1973 to compute the distribution of farm and commercial vehicles by weight. This distribution appears in Table IV-1. We could make such computations only for vehicles weighing more than 6,000 pounds, because the Farm Bureau did not collect data on lighter vehicles in

1977. The distribution, therefore, covers only some of the vehicles which might be eligible for a special weight fee in the event a separate weight fee schedule is adopted for farm vehicles.

Table IV-1

Distribution of Commercial and Farm Vehicles, by Weight
(6,000 pounds or more)
1977

Weight Category	Farm Vehicles	Commercial Vehicles[a]
6,001 - 8,000 pounds	49.9%	35.6%
8,001 - 10,000 pounds	28.6	20.6
10,001 - 12,000 pounds	12.9	19.0
12,001 - 14,000 pounds	4.6	10.6
14,001 pounds and above	4.0	14.2
	100.0%	100.0%

a. Including farm vehicles.

Table IV-1 indicates that in 1977 the farm vehicles included in the Farm Bureau survey were, on the average, lighter than commercial vehicles generally.

C. Annual mileage traveled. The Farm Bureau survey indicated that farm vehicles weighing more than 5,000 pounds traveled an average of 6,608 miles in 1977. This survey covered 549 farm trucks, which averaged 6,306 miles annually, and 82 farm trailers, which averaged 8,631 miles in 1977. Of the 631 farm vehicles in the survey, only 45, or 7 percent, traveled more than 10,000 miles in 1977.

No comparable mileage figures are available for the general population of commercial vehicles weighing in excess of 5,000 pounds. The California Trucking Association, however, reports that in 1982 commercial vehicles owned by 800 of the state's largest trucking firms averaged 42,000 miles.

D. Distribution by type. As a means of determining the number of farm trailers, we reviewed DMV's monthly report on the registration of motor vehicles for the month of August 1983. According to this report, trailers represent 22 percent of all commercial vehicles registered in California. This percentage, however, included approximately 670,000 small utility trailers weighing less than 2,000 pounds, which, according to DMV, probably do not receive extensive use in farming operations. When these vehicles are disregarded, we find that trailers (those weighing in excess of 2,000 pounds) comprised 6.5 percent of the remaining commercial vehicle population. If this percentage is applied to our estimate of the farm truck population in California (143,000), the estimated number of trailers used on farms becomes approximately 9,900, with a total maximum farm vehicle population of approximately 153,000.

As a means of determining what percentage of these trailers might be eligible for a weight fee discount if a 6,000-pound weight floor were established, we again looked to the DMV statistics on the commercial vehicle population at large and found that trailers in excess of 6,000 pounds constituted approximately 57 percent of all commercial trailers in California (excluding utility trailers). Assuming that the farm trailer population in some way mirrors the commercial trailer population generally, we estimated that approximately 5,600 trailers weighing in excess of 6,000 pounds would be eligible for a weight fee discount if the 6,000-pound threshold were applied. This would raise the minimum farm vehicle population to 48,600 vehicles.

Summary

In the absence of any "hard" data concerning the size and nature of farm vehicles, we found it necessary to extrapolate the bulk of our estimates from a number of different sources. In so doing, we recognize that these estimates may not, in some cases, precisely reflect California's farm vehicle population. Nevertheless, we are confident that the information on which they are based is sufficiently reliable to support the contention that farm vehicles, as a group, carry lighter loads and travel fewer miles than the general commercial vehicle population, and thus pay more than their "fair share" of highway construction, rehabilitation and maintenance costs. The next chapter discusses and examines a separate weight fee schedule for farm vehicles which could address the inequities discussed here.

CHAPTER V

COSTS OF ESTABLISHING A SEPARATE WEIGHT FEE SCHEDULE FOR FARM VEHICLES

ACR 112 requires the Legislative Analyst's Office to provide information pertaining to a separate weight fee schedule for California farm vehicles, and to analyze the cost of adopting such a schedule. In this chapter, we (1) present the requested information, (2) provide an estimate of the costs associated with separate weight fee schedules having various alternative characteristics, and (3) explore alternatives for keeping net revenues to the State Highway Account unchanged in the event a separate weight fee schedule is adopted.

In making the estimates contained in this chapter, we have relied primarily on the survey of California farm vehicles conducted by the California Farm Bureau (CFB) in 1977. We have used data provided by the Department of Commerce to supplement this information. In addition, we have utilized (1) statistical information compiled by the Department of Motor Vehicles (DMV) on commercial vehicles, and (2) information pertaining to the assessment of weight fees drawn from our 10-state survey. Finally, we have discussed the question of a separate weight fee schedule with the DMV, the California Highway Patrol, and Caltrans. This has helped us in filling some of the remaining information gaps.

We have used this information to develop two hypothetical populations of farm vehicles in California in order to evaluate the impact on costs and revenues of a separate weight fee schedule for such vehicles.

The first model considers only those farm vehicles weighing in excess of 6,000 pounds which travel less than of 10,000 miles annually (50,000 vehicles). The second model includes vehicles weighing less than 6,000 pounds and makes no allowance for mileage traveled (150,000 vehicles).

LIMITATIONS ON THE USE OF VEHICLES ELIGIBLE FOR A SEPARATE WEIGHT FEE SCHEDULE

Assembly Concurrent Resolution 112 requires that we consider the question of how vehicles qualifying for reduced fees would be limited in terms of usage, weight, and mileage. In this section, we examine these alternatives for limiting eligibility from the standpoint of enforcement and cost-effectiveness.

A. Usage Limitation. Among those states which grant a fee reduction to farm vehicles, the restrictions that apply to the use of farm vehicles are similar. In most instances, the fee reduction is available only to vehicles which transport (1) unprocessed agricultural goods, livestock, and dairy products produced or raised by the farmer owning or leasing the vehicle, or (2) farm supplies used in the operation of the farm. In Ohio, however, buses transporting farm workers also qualify for a fee reduction as farm vehicles.

According to the CHP, if California (1) adopted usage limitations on farm vehicles similar to those described above, and (2) performed only random verifications on the highway, adoption of a special weight fee schedule would result in no additional enforcement costs to the state. If, however, the farm vehicle use classification were broadened to include (1) buses or vans used for purposes such as the transportation of farm workers, or (2) if farm pickups qualified for special farm vehicle weight fees, enforcement costs would increase by an unknown, but significant, amount.

The potential increased cost associated with regulating the movement of farm buses, vans, or pickups stems from the fact that these vehicles often are used for purposes that are not strictly agricultural. A pickup truck, for example, can be used for personal transportation or to haul groceries and other personal items. When used for these purposes, the truck would not appear to warrant a reduced fee. The CHP contends that if it were placed in the position of having to identify whether farm vans or pickups were operating in concert with farm vehicle restrictions, the department could incur unknown but potentially substantial costs to handle related vehicle stops and inspections.

B. Weight Limitation. A special weight fee schedule for farm vehicles could be available to vehicles weighing more or less than a certain amount. The Department of Motor Vehicles states that the unladen weight of every commercial vehicle registered in California is reflected on its registration and title documents. Consequently, the cost incurred in documenting compliance with either a minimum or maximum weight requirement in connection with farm vehicle registration would be minimal.

If the Legislature opted to establish a minimum weight, the logical threshold would be 6,000 pounds. This would exclude 99.7 percent of all pickups (which can be used for nonagricultural purposes) registered in California, without excluding more specialized farm vehicles. If pickups were not able to qualify for weight fee discounts, the revenue loss to the State Highway Account resulting from the discounts would be considerably less than otherwise.

It does not appear that setting a maximum weight limit on farm vehicles eligible for a fee reduction would be worthwhile. Information provided by the California Department of Motor Vehicles, the Farm Bureau, and other states indicates that the use of heavy commercial vehicles--those vehicles with an unladen vehicle weight exceeding 26,000 pounds--on farms is extremely limited. Thus, establishing a maximum weight limit at a "reasonable" threshold would not disqualify very many farm vehicles. Even if the threshold were established as low as 10,000 pounds (which, according to industry standards, is the threshold for "light vehicles"), 80 percent of the vehicles covered by the CFB's survey (that is, vehicles exceeding 6,000 pounds) would still qualify for a weight fee reduction.

C. Mileage Limitation. The Legislature may wish to consider adoption of a mileage restriction on farm vehicles as a means of ensuring that special fee considerations granted to farm vehicles are warranted by the extent to which such vehicles are used. For example, special treatment would not seem to be warranted where a large farm operation uses commercial vehicles on a regular basis to transport a variety of goods, in the same way that nonagricultural firms use their commercial vehicles.

Given the results of the Farm Bureau's 1977 survey (see Table III-1, page 29), if preferential fee treatment were limited to vehicles traveling less than 12,500 miles per year, virtually all trucks and trailers used on farms would qualify for reduced fees. Of the 631 farm vehicles included in the survey, only 11 vehicles, or 1.7 percent of the total, actually traveled more than 12,500 miles in 1977. According to the Farm Bureau, a mileage limit of 10,000 miles would be acceptable to a majority of its members. The number of farm vehicles traveling more than 10,000 miles in 1977 was 45, or approximately 7 percent of the vehicles surveyed. Even an annual limit of 7,500 miles would allow nearly 90 percent of the total to register as farm vehicles.

Enforcing a limitation on annual mileage, however, would be extremely difficult. First, it frequently is not possible to determine whether a vehicle's odometer has been broken or tampered with. Second, most farm trailers do <u>not</u> have odometers, so there is no reliable way to measure their mileage.

Furthermore, ensuring compliance with mileage limitations could require the DMV to check and record mileage information on the vehicle registration form of every applicant eligible for the reduced weight fee. The data processing costs associated with this activity would fall between $25,000 and $39,000 annually, depending on the size of the vehicle population. In addition, the DMV indicates that the cost to administer a minimal enforcement program probably would range from $10,000 to $30,000 annually, again depending on farm vehicle population size. A more extensive effort naturally would result in increased costs.

Ostensibly, a less complex alternative might be for the DMV to conduct a reduced enforcement effort. As part of such an effort, the applicant could be allowed to enter his own mileage on the application form and DMV could choose to only conduct "spot checks" on the veracity of the applicant's mileage entries. Compliance could suffer under such a proposal, however, if fee discounts were large enough to tempt some applicants into misrepresenting their annual mileage.

A SEPARATE SCHEDULE OF WEIGHT FEES

As required by ACR 112, we considered the potential impact of adopting "a separate schedule of weight fees not to exceed a specified percentage of those specified in Section 9400 of the Vehicle Code." Specifically, we reviewed (a) the revenue loss that might result from adopting a special weight fee schedule for farm vehicles, (b) the implications for the General Fund, and (c) the likely administrative cost associated with adopting such a schedule.

A. Potential Revenue Loss. As a means of determining the potential revenue loss that might result from the adoption of a separate weight fee schedule, we reviewed the registration and weight fee reductions granted to farm vehicles by six other states covered by our survey. These reductions are shown in Table V-1.

Table V-1

Registration and Weight Fee Reductions
Granted to Farm Vehicles By Six Other States

State	Minimum	Maximum	Weighted Average[a]
Colorado	18%	73%	69%
Illinois	35[b]	42	38[b]
Iowa	6	52	42
New York	30	30	30
Ohio	28	64	45
Texas	50	50	50
6-State Mean Averages:	28%	52%	46%

a. "Weighted Average" reduction is determined by (1) adding fee savings at 1,000-pound intervals, (2) adding regular fees assessed at 1,000-pound intervals, and (3) dividing the first sum by the second sum.

b. At maximum gross weights below 12,000 pounds, farm trucks conceivably could pay more than regular commercial vehicles in Illinois. The minimum and average discounts, therefore represent discounts above 12,000 pounds.

If the lowest weighted average reduction--30 percent, as granted by New York--were extended to California farm vehicles other than pickup trucks (approximately 50,000), the State Highway Account would experience an annual revenue loss of about $2.5 million. We believe this is the minimum revenue loss that the state would be likely to incur if it adopted a special weight fee schedule for farm vehicles. If, on the other hand, the highest weighted average reduction--69 percent, as granted by Colorado--were extended to all California farm vehicles (approximately 150,000), including pickups, the annual revenue loss would be about $7.7 million. This is probably the maximum revenue loss that would result from the separate schedule.

These and various other intermediate revenue losses are shown in Table V-2.

Table V-2

Potential Annual Revenue Loss to the State Highway Account Resulting From Various Weight Fee Reduction Rates[a]

State Model	Average Reduction Rate Percent)	Revenue Loss With 50,000 Eligible Vehicles	Revenue Loss With 150,000 Eligible Vehicles[b]
New York	30%	$2,525,560	$3,335,740
Colorado	69	5,808,790	7,672,200

a. Based on 1985 weight fee schedule.
b. The revenue loss from exempting 150,000 vehicles is not three times the revenue loss from exempting 50,000 vehicles because pickup trucks (which make up an estimated 70 percent of the larger number) would receive much smaller fee reductions than trailers, flatbed trucks and diesel motor units.

B. Additional General Fund Revenue. If weight fee reductions were granted to farm vehicles in California, the General Fund would experience a net revenue increase. This is because weight fee deductions claimed on many personal income and bank and corporation tax returns would be lower. The exact amount of the revenue gain would depend on a variety of factors, including (1) the size of the weight fee reductions, (2) the extent to which farm vehicle operators did not "shelter" the additional taxable income resulting from the fee reductions, and (3) the marginal tax rates at which the additional income would be taxed.

Based on discussions with the staff of the Franchise Tax Board, we assume that owners of farm vehicles have an average marginal tax rate of 5 percent. Applying this rate to the maximum and minimum reductions in weight fees shown in Table V-2, we estimate that the additional General Fund revenue which would be generated by the fee reduction would range from $126,000 to $384,000 annually. These estimates are shown in Table V-3.

Table V-3

Increase in Annual General Fund Revenues
Resulting from Various Reductions in Weight Fees
Levied on Farm Vehicles

Farm Vehicle Population	Weight Fee Reductions (Percent)	Wt. Fee Savings to Farm Vehicle Owners	General Fund Revenue Increase
50,000	30%	$2,525,560	$126,280
150,000	69	7,672,200	383,609

C. Potential Administrative Cost. We asked the Department of Motor Vehicles to estimate its costs to implement a separate schedule of weight fees for farm vehicles as part of its new automated registration system. This system will be fully implemented in 1985. In addition, we asked the department to estimate the administrative cost associated with providing a full exemption from weight fees to farm vehicles in lieu of adopting a separate fee schedule.

The DMV estimates that it would incur additional administrative costs ranging from $472,000 (assuming 50,000 vehicles qualify) to $1,347,000 (assuming 150,000 qualify) annually if a separate weight fee schedule were adopted. On the other hand, DMV estimates that the cost of a full exemption, including the issuance of special equipment plates, would range from $424,000 (50,000 vehicles) to $1,203,000 (150,000 vehicles) annually. These estimates take into account departmental overhead, but do not make allowance for the cost of an additional application form needed to verify that an applicant is a farmer, the expense of issuing a separate full-size license plate, or the cost associated with enforcement efforts. These costs are discussed in separate sections of this report.

APPLICANT VERIFICATION

None of the jurisdictions we contacted maintains a systematic or formal process to verify that an applicant for reduced farm vehicle weight fees is, in fact, a bonafide farmer. Our analysis indicates, however, that an applicant verification program, consisting of affidavit and compliance components, could be implemented at a low cost. Such a program should serve to discourage abuse of the fee reduction program.

According to the Department of Motor Vehicles, the additional cost of imposing an affidavit requirement is attributable primarily to the cost of printing application forms. The cost of these forms would range from $225 (50,000 forms) to $675 (150,000 forms) annually. The administrative and overhead costs associated with the applicant verification process probably could be absorbed within the cost cited above for administration.

If the DMV were to go one step further and utilize the services of county agricultural commissioners to document the occupational status of persons applying for weight fee reductions, it could achieve a higher degree of compliance with applicant restrictions. This alternative, however, would increase annual costs to local governments, which could be reimbursable by the state under Article XIIIB of the State Constitution.

In order to determine the feasibility of using county agricultural commissioners to verify the eligibility of applicants for reduced fees, we discussed this option with seven counties. The counties of Imperial, Kern, San Diego and Stanislaus advise us that they could perform this function at a fairly minimal cost. The county agricultural commissioners in Los Angeles, Sacramento, and Fresno, however, indicated that because they are not familiar with all of the farmers in their jurisdictions, it would be difficult, and possibly costly, for them to conduct a meaningful verification program. Thus, it appears that some counties might incur state-mandated costs annually to document eligibility for reduced fees. We have no way of estimating what these costs would be.

Verification of an applicant's occupational status could be greatly simplified if applicants were required to submit a copy of state Tax Schedule CEF (Farm Income Report) along with their request for a reduced weight fee. The cost of collecting, filing and maintaining these records, however, might exceed the benefits associated with the increased compliance that such a requirement would produce.

As an alternative to requiring applicants to submit tax forms, the DMV could review a 10 percent sample of all farm vehicle applications. This sample could then be matched against a list of persons who reported farm income to the Franchise Tax Board (FTB) in the previous year. If an applicant had not reported such income in the previous year, the DMV could issue a collection letter requesting either proof of occupational status or full payment of weight fees and applicable DMV penalty fees.

The cost to verify the occupational status of applicants in this manner is estimated by DMV to range from approximately $10,000 (50,000 applicants) to $30,000 (150,000 applicants) annually. The FTB indicates that its cost to provide a listing of all persons who have filed farm income would be $5,000, regardless of the number of applicants reviewed. (The FTB added that, because it would need to rely on information provided by the Internal Revenue Service (IRS) to compile such a list, the DMV might need clearance from the IRS in order to use the information.)

On the whole, our analysis indicates that the costs to administer an applicant verification program would be self-financing.

FARM VEHICLE IDENTIFICATION

If the Legislature opted to implement a separate weight fee schedule for farm vehicles, it would need some method for identifying those vehicles benefiting from the schedule. There are two viable options for doing so available to the Legislature: issue special license plates or issue tags or stickers which could be affixed to the vehicle.

Special License Plates for Farm Vehicles. According to DMV, the issuance of 50,000 special plates would cost about $85,000, with an undetermined, but significantly lower, cost annually thereafter. The cost to issue 150,000 special plates would be about $253,000 initially.

Tags or Stickers. Farm vehicles could be identified by means of a tag or sticker applied to the windshield and/or bumper of the qualifying farm vehicle. This alternative would result in an initial cost of $25,000 for a farm vehicle population of 50,000 and $75,000 for a farm vehicle population of 150,000, assuming two tags or stickers per vehicle. This alternative is obviously less expensive than the issuance of special plates. A tag or sticker, however, would be more difficult for law enforcement officials to identify, and the durability of a tag or sticker is not as great as that of metal plates.

REVENUE OPTIONS

Assembly Concurrent Resolution 112 requested that we develop and include in this report information which would assist the Legislature in keeping net revenues from weight fees unchanged in the event it decided to adopt a separate fee schedule for farm vehicles.

Our analysis indicates that there are two primary ways in which the Legislature could hold the State Highway Account harmless from a loss of revenue: (1) increase the number of vehicles subject to weight fees and (2) increase the weight fee assessed on nonagricultural commercial vehicles.

Enlarging the base. In Chapter I, we listed the various classes of commercial vehicles which currently are exempt from weight fees. According to DMV records, removal of these exemptions would increase by 142,000 the number of vehicles subject to the fee, and would increase revenues by $12.2 million annually, beginning in 1985 (based on a 1983 average weight fee payment of $80.34, adjusted for the 1985 weight fee schedule).

Clearly, the increased revenue resulting from this option would offset the maximum annual revenue loss to the State Highway Account resulting from reduced farm vehicle weight fees (see Table V-2, page 51). The additional revenue, however, would be realized only if currently exempt vehicles were assessed on the same basis as other commercial vehicles. In light of the fact that these vehicles travel considerably fewer miles than other commercial vehicles, the Legislature might wish to consider a lower fee schedule for these vehicles, as well. We estimate that if, for instance, all vehicles which currently are exempt from the weight fee assessment were required to pay a fee equal to 50 percent of the average commercial vehicle weight fee projected in 1985, it would produce approximately $6.1 million in revenue annually. This would fully offset a $5.6 million annual revenue loss that would result if farm vehicle weight fees were reduced by 50 percent, as well.

Another means of enlarging the weight fee assessment base would be to levy weight fees on the approximately 400,000 recreational vehicles (RVs), or house cars, currently operating in California. Because they are not used for commercial purposes, recreational vehicles are exempt from weight fees. Because a recreational vehicle is much larger and heavier than an automobile, such vehicles may impose a burden on highway rehabilitation and maintenance, and thus warrant the payment of a weight fee.

Increasing current fees. In order to offset the maximum annual revenue loss ($7.7 million) which could occur from reducing weight fees for farm vehicles, an additional across-the-board increase of 2.3 percent for all other commercial vehicles would be needed in 1985. This would increase the average weight fee payment by $1.96. The maximum payment (for a three-axle truck weighing in excess of 15,000 pounds) would increase by $19.80. These estimates assume (1) a nonfarm commercial vehicle base of approximately 3.9 million vehicles, and (2) a 69 percent reduction in weight fees for 150,000 farm vehicles. If instead, a 30 percent fee reduction were granted to 50,000 farm vehicles weighing in excess of 6,000 pounds, the increase in commercial vehicle weight fees needed to hold the State Highway Account harmless would be less than 1 percent.

Enlarging the base/increasing fees. The Legislature could, of course, decide in favor of a combination of both options in order to offset the loss of revenue resulting from a separate weight fee schedule for farm vehicles. This would distribute the additional revenue burden among (a) those commercial vehicles that currently pay weight fees and (b) vehicles which currently are exempt from or not liable for weight fees. If vehicles in both categories were to contribute equally toward offsetting the maximum annual revenue loss ($7.6 million), the average fee increase would amount to $1.73, with currently exempt vehicles (including RVs) paying this amount in addition to registration and license fees. The additional administrative cost that the DMV would incur in collecting weight fees from currently exempt vehicles, however, could diminish the attractiveness of this alternative.

CONCLUSION

Based on our analysis of the administrative costs associated with a separate weight fee schedule for farm vehicles, we estimate that, at a maximum, costs initially would not exceed $1.6 million to the Motor Vehicle Account and $35,000 to the General Fund. The annual Motor Vehicle Account cost thereafter would approximate $1.3 million. This amount includes the maximum cost to process applications, verify eligibility and issue distinct farm plates to 150,000 farm vehicles. If a full fee exemption were provided for 150,000 farm vehicles, in lieu of a separate schedule, the maximum cost would be $1.2 million to the Motor Vehicle Account and $35,000 to the General Fund in 1985. Table V-4 displays the minimum and maximum costs associated with both options, if a change were implemented on January 1, 1985.

Table V-4

Costs Associated With a Separate Weight Fee Schedule
And Full Fee Exemption for Farm Vehicles
Beginning January 1, 1985

	Separate Weight Fee Schedule		Exemption From Weight Fees	
	50,000 Vehicles	150,000 Vehicles	50,000 Vehicles	150,000 Vehicles
General Administration[a]	$472,000	$1,347,000	$424,000[b]	$1,203,000[b]
Special License Plates	85,000	253,000	NA	NA
Enforcement of Mileage Restriction	35,000	--	35,000	--
Occupation Verification--FTB[c]	15,000	35,000	15,000	35,000
Totals	$607,000	$1,635,000	$474,000	$1,238,000

a. Includes absorbable cost for affidavit forms.
b. Includes issuance of special equipment plates.
c. Payable from the General Fund.

The estimates in Table V-4 do not include any additional state costs associated with on-the-highway enforcement of use, weight, or mileage limitations applying to farm vehicles. These costs are unknown but potentially significant. Nor does this estimate make allowance for any additional costs to reimburse local governments for verifying an applicant's occupational status.

Assuming maximum participation in the reduced fee program (150,000 vehicles) and a weight fee reduction of 69 percent, the maximum annual revenue loss to the State Highway Account in 1985 would be $7.7 million. Assuming minimum participation (50,000 vehicles) and a weight fee discount of 30 percent, the minimum annual revenue loss would be $2.5 million in 1985. The General Fund likely would receive increased revenue ranging from $126,000 to $384,000 in 1985, depending on (a) the size of the eligible farm vehicle population, (b) the size of the weight fee reduction, and (c) the tax status of eligible applicants.

Revenue losses associated with a separate fee schedule could be offset entirely by increasing the number of vehicles subject to weight fees, increasing the fees paid by nonagricultural commercial vehicles, or some combination of the two.