



EVALUATION OF CALIFORNIA'S COMMERCIAL DRIVER LICENSE PROGRAM

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13. ABSTRACT (Maximum 200 words) This report evaluates the impact of the Commercial Driver License (CDL) program on fatal and fatal/injury accidents involving heavy vehicles operated by drivers licensed in California. The program, which was initiated in January 1985, began a new commercial-license classification and endorsement system, implemented stronger licensing standards and more comprehensive tests of knowledge and driving competency, required drivers to report specific violations to employers, and provided for more stringent post-licensing sanctions to negligent operators. Intervention time series analysis was used for data analysis. The results indicate that the CDL program did not have a statistically significant effect on the fatal or fatal/injury accident series.				
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PREFACE

This report presents findings of an evaluation of the impact of California's Commercial Driver License program on fatal and fatal/injury accidents involving heavy vehicles operated by drivers licensed in California. The present report is being issued as an internal monograph of the Department of Motor Vehicles' Research and Development Section rather than as an official report of the State of California. The findings and opinions may therefore not represent the views and policies of the State of California.

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This report presents results of an evaluation of California's Commercial Driver License (CDL) program. The study was conducted under the general direction of Raymond C. Peck, Research Chief, and Dr. Mary Janke, Research Scientist III. William Marsh, Research Program Specialist II, provided technical and research design assistance. Dr. Richard McCleary of the University of California, Irvine provided technical consultation on time series analysis. Debbie McKenzie, Staff Service Analyst, produced the tables and graphs.

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The authors are also indebted to Tim O'Neill of Star Mountain Inc. for pointing out an error in one of the time series models contained in an earlier draft of the report.

EXECUTIVE SUMMARY

Background

- The United States Congress enacted the Commercial Motor Vehicle Safety Act of 1986 to increase the safety on the nation's highways. The Federal Highway Administration (FHA) was required to develop minimum federal standards for testing and licensing all commercial drivers including those presently licensed. The Act prohibited operators of commercial vehicles from being licensed in more than one state. The FHA was required to establish a clearinghouse to identify drivers with invalid commercial licenses. Each state was required to implement a program that met the requirements of the Act by September 30, 1993.
- California implemented its Commercial Driver License (CDL) program on January 1, 1989. The program's provisions are contained in Senate Bill 2594 (Deddeh and Duplissee, 1988). The program began a new commercial-license classification and endorsement system, implemented stronger licensing standards and more comprehensive tests of knowledge and driving competency, required drivers to report specific violations to employers, and provided for more stringent post-licensing sanctions to negligent operators.

Objective

The purpose of the present study was to evaluate the impact of the CDL program on fatal and fatal/injury accidents involving heavy vehicles operated by drivers licensed in California.

Research Design and Data Analysis

- Analysis of fatal accidents nationwide involving heavy vehicles operated by California-licensed drivers. Data on monthly fatal accidents nationwide were obtained from the National Highway Traffic Safety Administration's Fatal Accident Reporting System (FARS). Monthly fatal accidents nationwide involving heavy vehicles or vehicles carrying hazardous materials operated by California-licensed drivers during January 1985 through December 1992 were analyzed using intervention time series analysis. The intervention time series model included a control series consisting of monthly nationwide fatal accidents involving heavy vehicles operated by drivers licensed in selected states other than California. The function of the control variable was to reduce bias associated with events or processes other than the CDL program. Covariates were also included in the time series modelling process in an attempt to account for any effect of extraneous variables that was not already accounted for by the control series. The covariates were California unemployment rate, California personal income, California employment in the trucking and warehousing industry, and California diesel fuel sales. An additional explanatory variable was considered for inclusion in the model to account for differences in the proportion of week days from month to month and the fact that commercial drivers are at greater risk of involvement in a fatal accident on a week day than they are on Saturday or Sunday.
- Analysis of fatal/injury accidents in California involving heavy vehicles operated by California-licensed drivers. Data on monthly fatal/injury accidents in California

involving heavy vehicles or vehicles carrying hazardous material during 1985 through 1992 were obtained from California Highway Patrol's Statewide Integrated Traffic Reporting System (SWITRS). These data were matched to driver records from the Department of Motor Vehicles' Driver License (DL) masterfile to identify those accidents in which one or more of the involved heavy-vehicle operators were licensed in California. The matched accidents were analyzed using intervention time series analysis. The analysis technique and design was the same as that used for the analysis of fatal accidents nationwide, except that a control series was not used.

A supplemental time series analysis of SWITRS fatal/injury accidents in California involving heavy vehicles or vehicles carrying hazardous material operated by drivers licensed in any state was also performed. This analysis, which disregarded the driver's license state, was conducted in order to avoid bias caused by drivers possibly holding multiple licenses or having switched state-of-licensure to a state other than California in order to avoid the CDL program. The explanatory variables considered for inclusion in the time series models in the supplementary analyses were the same as those used in the primary analysis of fatal/injury accidents.

Results

None of the intervention effects were statistically significant.

Conclusion

The results do not provide evidence that the CDL program had a significant impact on traffic safety.

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INTRODUCTION

The United States Congress enacted the Commercial Motor Vehicle Safety Act of 1986 in order to increase safety on the nation's highways. The key provisions of this legislation are listed below.

- The Federal Highway Administration (FHA) was required to develop minimum federal standards for testing and licensing commercial drivers, making it illegal for a person to operate a commercial motor vehicle without having met the new licensing requirements. This provision became effective April 1, 1992.
- Beginning July 1, 1987, an operator of a commercial motor vehicle was not permitted to be licensed in more than one state.
- The FHA was required to establish an information clearinghouse for use by states and employers of heavy-vehicle operators to identify drivers with an invalid (suspended, revoked, or expired) commercial driver license and to monitor compliance with the single-license requirement.
- Each state was required to implement a program to enforce requirements of the legislation by September 30, 1993. The FHA was required to withhold 5% of fiscal year 1994/95 federal highway funds from any state not in compliance. The penalty was to increase to 10% starting in fiscal year 1995/96.

California implemented its Commercial Driver License (CDL) program on January 1, 1989. The program's provisions are contained in Senate Bill 2594 (Deddeh and Duplissee, 1988). The complete text of the bill is included in the Appendix. The program began a new commercial-license classification and endorsement system, implemented stronger licensing standards and more comprehensive tests of knowledge and driving competency, required drivers to report specific violations to employers, and provided for more stringent post-licensing sanctions to negligent operators.

Although, the CDL program was implemented on January 1, 1989, the number of drivers under the program was very low in the beginning and increased gradually over time. Only those drivers applying for a new license or needing a license renewal would have entered the program each month. In addition, the goal to have all California commercial drivers licensed under the CDL program by April 1992 was not met because drivers whose licenses were scheduled to expire by the end of that year were allowed to retain their old license until their normal renewal date. The phase-in of the CDL program was gradual also in the sense that only drivers licensed under the program were subject to its stronger post-license control sanctions.

The more comprehensive knowledge and skill tests initially failed a higher percentage of applicants than was the case before the start of the CDL program. Subsequent decreases in the written test failure rate (Hagge, 1989; Romanowicz, 1990) and the drive test failure rate (Williams & O'Dell, 1990) suggest that the more difficult tests motivated drivers to study and practice harder to pass the tests, thereby increasing their driving competency.

It should also be noted that drivers already holding a commercial license before the program may have qualified for a waiver of the CDL program's driving skill test if they maintained a good driving record, were regularly employed as a commercial driver, and either had operated a commercial vehicle for at least 2 years immediately preceding application for a CDL license or had previously taken a drive test in the type of vehicle they would be licensed to drive.

A CDL license is required for all operators of the following vehicles: (1) any vehicle towing another vehicle or trailer with a gross vehicle weight rating (GVWR) over 10,000 pounds, (2) any vehicle towing more than one vehicle, (3) any bus, (4) any single vehicle with a GVWR over 26,000 pounds, (5) any single vehicle with three or more axles and weighing 6,000 pounds or more, and (6) any farm labor vehicle. The following vehicles require an endorsement in addition to a CDL license: (1) any double trailer, (2) any vehicle designed, used, or maintained to carry more than 10 persons including the driver, (3) any tank vehicle, and (4) any vehicle carrying hazardous materials.

The Program and Policy Administration Division within the California Department of Motor Vehicles (DMV) requested an evaluation of the traffic safety effect of California's CDL program. This report presents the evaluation results. Specifically, the study addressed the following questions.

1. Did the program increase or decrease the number of **fatal accidents nationwide** involving heavy vehicles operated by California-licensed drivers?
2. Did the program increase or decrease the number of **fatal/injury accidents in California** involving heavy vehicles operated by California-licensed drivers?

METHODS

An intervention time series technique was used for data analysis. A description of this technique is presented below, followed by a discussion of the data collection procedures and specific time series design used for each analysis.

Intervention Time Series Analysis

Time series analysis is a statistical technique for analyzing longitudinal data. Ordinary least squares regression was not appropriate for this application because that technique assumes independent observations over time. This assumption is seldom met for traffic accident time series data commonly exhibiting trends and seasonal cycles.

The method of time series modeling used in these analyses is based on the autoregressive, integrated, moving average (ARIMA) technique developed by Box and Jenkins (1970) and applied by McCleary and Hay (1982) and McCleod (1983). The specific intervention times series analysis procedure that was employed enabled explanatory time series variables, or covariates, to be included in the model in order to

reduce bias in the estimation of the treatment effect due to the possible influence of extraneous, non-program factors (Krishnamurti, Narayan, and Raj, 1986).

Program 2T of BMDP (Dixon, 1990) computer software was used for data analysis. The backcasting method was used for parameter estimation. Tests of the statistical significance of model parameters were based on alpha (the probability of identifying a chance difference as an intervention effect) equal to .05, meaning that a parameter estimate would differ from zero due to chance less than 5 times out of 100. All significance tests were two-tailed and therefore negative as well as positive intervention effects could have been detected.

Basically, each time series analysis produced a final model or equation that included:

1. each covariate or explanatory variable multiplied by a transfer function representing the variable's cross-correlational relationship with the dependent variable;
2. a transfer function multiplied by the intervention variable (equal to 0 before intervention and 1 after intervention);
3. a multiplicative combination of autoregressive (ϕ) and/or moving average (θ) factors that best described the seasonal and nonseasonal behavior—trends, cycles, autocorrelations, etc.—in the treatment series that was not accounted for by other elements in the model; and
4. error, that portion of variance that remained unexplained.

In the modeling process, each covariate series was lagged or shifted backward or forward in time if doing so significantly improved the predictive value of the model. An identification of the covariate's lag and transfer function structure for the initial tentative models were made empirically from its cross-correlations with the dependent variable shifted forward and backward in time after prewhitening both series. (More specifically, the dependent variable was prewhitened—purged of within-series autocorrelation due to trend and seasonality—and the covariate was then filtered through the same ARIMA structure that was applied to the dependent variable.) If the initial cross-correlations were not statistically significant, indicating the absence of a month-to-month relationship between the covariate and the dependent variable, the covariate was not included in the model. Refinements of the covariate's transfer function were made on the basis of the prewhitened covariate's cross-correlations with the model residuals (the transfer function being considered adequate when the low-order cross-correlations were nonsignificant). In addition, covariates were removed from the model if their contribution to the predictive value of the model was not statistically significant. A thorough description of the empirical process of identifying and diagnosing transfer functions for independent variables in time series analysis is provided by McCleary and Hay (1982) and McCloud (1983).

In the modeling of fatal accidents (explained below), the control series was treated somewhat differently than were the other explanatory covariates. The function of the control series was to reduce unexplained variance in the dependent variable, including any variation caused by factors other than the CDL program that may have obscured the true effect of the program. Since the control and dependent variable series were

assumed to be influenced by the same set of exogenous forces (including those responsible for trends and seasonality), the raw control series was used in the model without any time lags and its relationship with the dependent variable was represented by a simple first-order transfer function. Thus, any concomitant variation in the two series was accounted for by the control variable, and the noise (ARIMA) parameters were identified from the model residuals after the control variable was entered.

The intervention transfer function represents the characteristics of the treatment effect being tested. If the transfer function parameters are statistically significant, it can be said that a change in the level of the series occurred following implementation of the program. Three possible intervention-effect hypotheses were tested: (1) abrupt/permanent, (2) gradual/permanent, and (3) abrupt/temporary.

An abrupt/permanent effect would be characterized by an immediate change in the level of the series following intervention that continued throughout the post-intervention period. The transfer function parameter ω estimates the magnitude of this change in units of accidents per month.

The possibility of a gradual/permanent intervention effect was tested by adding a second parameter, δ , to the transfer function in the model. In this more complicated intervention structure, ω represents the magnitude of the change in the series level the first month after intervention, and δ represents the rate of change over subsequent months until the series stabilized at a new level. The total change in series level is equal to $\omega / (1 - \delta)$. It should be noted that both ω and δ must be statistically significant in order to reject the null hypothesis for this effect and the abrupt/temporary effect described below.

An abrupt/temporary intervention effect would be characterized by a sudden change in series level immediately following intervention that would diminish over time until the series returned to its pre-intervention level. In the intervention transfer function for this effect, ω represents the magnitude of the change in series level the first month and δ represents the rate at which the series returned to its baseline level.

Given the nature of the CDL program, one would expect the gradual/permanent intervention effect to be the most likely of the three mentioned above, since, as mentioned earlier, only new commercial drivers, and previously licensed commercial drivers needing a license renewal, were affected by the new testing and licensing standards initially. The volume of drivers licensed under the CDL program gradually increased as more people were issued new or renewal licenses.

Although the most likely effect of the program would be expected to be gradual/permanent in nature, the other two outcome possibilities (sudden effects) were also evaluated because it was conceivable that awareness of the CDL program's requirements may have had an impact on the driving behavior of a large number of commercial operators even before they entered the program.

Did the Program Increase or Decrease the Number of Fatal Accidents Nationwide Involving Heavy Vehicles Operated by California-Licensed Drivers?

Data collection. Data on monthly fatal accidents nationwide were obtained from the National Highway Traffic Safety Association's Fatal Accident Reporting System (FARS). Fatal accidents involving heavy vehicles operated by California-licensed drivers during January 1985 through December 1992 were used as the dependent variable in the analysis. The 8-year period consisted of 48 months before, and 48 months after, implementation of the program on January 1, 1989. For this analysis, heavy vehicles were defined as buses (school, cross country, city, and other types), trucks over 26,000 pounds GVWR, and truck-tractors capable of pulling one or more trailers. Fatal accidents involving vehicles carrying hazardous materials were also counted in the dependent variable. Although these criteria did not identify an unknown (but presumably small) number of accidents involving vehicles requiring a CDL license to operate, it was decided to be conservative in the selection of accidents to reduce the possibility of including any that did not involve a driver with a CDL license.

Analysis. The intervention time series model included a control time-series variable in order to reduce bias associated with events or processes other than the CDL program. The control series consisted of monthly nationwide fatal accidents involving heavy vehicles operated by drivers licensed in selected states other than California. In creating this control variable, an attempt was made to minimize its being contaminated by the effects of commercial driver license programs implemented in other states during the post-intervention period. Therefore, accidents involving heavy-vehicle operators licensed in any of the seven states initiating an enhanced commercial driver license program within 18 months after implementation of California's CDL program were excluded from the control series. Accidents involving heavy-vehicles operated by drivers with commercial licenses in states bordering California were also excluded because of the possibility that some commercial drivers formerly licensed in California changed their state of licensure to a neighboring state to evade California's CDL program.

The final selection of control states was based on each candidate state's similarity to California before intervention on the following variables: (1) monthly fatal accidents nationwide involving heavy vehicles operated by drivers licensed in the state, and (2) the monthly percentage of these accidents that occurred in the state. Each state was ranked according to its correlation with California on the first variable. Next, each state was ranked according to the similarity of its mean on this variable to the mean for California. Only nine states ranked among the top 20 in both comparisons. The summed monthly accidents for these nine states on the first variable correlated .43 ($p < .01$) with the California accident series. Of these states, the four that individually correlated most highly with California were Georgia, Pennsylvania, South Carolina, and Virginia. The summed monthly accidents for these four states on this variable correlated .46 ($p < .01$) with the California series. The means for the California and four-state combination were 25.8 and 48.1, respectively.

Next, all of the candidate states, except those with extremely low means on the first variable, were ranked on their similarity to California on the second variable (monthly percentage of nationwide fatal accidents involving heavy vehicles and occurring in the operator's state of licensure). This ranking was also based on correlations and means.

None of the states correlated significantly with California on the second variable. However, the four states selected from the rankings on the first variable (Georgia, Pennsylvania, South Carolina, and Virginia) ranked among the top 14 states on the second variable based on similarity of means. The individual means for these four states ranged from 62.3% to 69.8%. The means for California and the four-state combination were 91.4% and 65.9%, respectively.

Because greater importance was placed on the comparability to California on the first variable, it was decided to use the combined accident frequencies for Georgia, Pennsylvania, South Carolina, and Virginia as the control series. (A very small number of accidents involving one or more drivers licensed in any of these four states were excluded from the control series because they also involved commercial drivers licensed in states that were not selected.)

Although the purpose of including the control series in the model was to statistically control or account for the effects of non-program factors, this objective was almost certainly not realized completely in the analysis. For example, bias would probably not have been fully controlled if there were any extraneous factors that influenced the California and control series differently. In an attempt to minimize bias associated with such differential influences on the two series, additional explanatory variables were included in the time series model. These covariates were California unemployment rate, California personal income, California trucking and warehousing employment, and California diesel fuel sales.

Because diesel fuel sales and employment in trucking and warehousing may have been affected by the CDL program, the results of the time series analysis when either of these covariates were included in the model should be interpreted with caution. For example, the CDL program may somehow have caused a reduction in the amount of commercial-vehicle travel in California which, in turn, may have led to a reduction in diesel fuel sales and the number of people employed in trucking and warehousing. In this hypothetical (and admittedly somewhat implausible) example, it is possible that including the contaminated covariates in the model would have biased the results against finding an intervention effect.

An additional explanatory variable was considered for inclusion in the time series model to account for variation in the dependent variable due to differences in the proportion of week (as opposed to week-end) days from month to month. This was done because the risk of a fatal accident involving a commercial vehicle was higher on a week day than on a week-end day; in the dependent variable the average number of accidents per week-end day was only 49% of the average number per week day. The explanatory series (called "week day") was created by multiplying (weighting) the number of week-end days in each month by 0.49, and adding the result to the number of week days in that month.

Two additional factors may have biased the time series analysis. The first factor had the potential to affect both the control series and the California series, and stems from the national legislative requirement that commercial drivers be licensed in only one state after July 1, 1987. Illegal holding of multiple licenses would be expected to have decreased as more and more drivers obtained new or renewal commercial licenses

under the new federal guidelines, since only licenses issued after passage of the law were subject to monitoring for violation of the single-license requirement. Hence, the proportion of drivers holding more than one commercial license would be expected to have been greater before implementation of the CDL program than would have been the case after implementation. This change over time in the proportion of multiple license holders might have introduced bias into the time series analysis because drivers who held more than one license could choose which license to show the investigating officer at the scene of an accident, and the license displayed would have determined in which data series (California or control states) the accident was to be counted. (The accident would have been excluded from the analysis altogether if the license shown was not issued by California or one of the control states.) For example, if a driver licensed in both California and South Carolina showed the South Carolina license at the accident scene, the accident would have been counted in the control series. The overall "shifting" of accidents between the two data series that may have occurred as a result of this problem is unknown, and therefore it is uncertain how much, if any, of the estimated intervention effect was caused by this factor as opposed to the CDL program.

The second potentially biasing factor is that some drivers previously licensed in California may have switched licensure to another state to avoid the CDL program. If this occurred, it would have decreased the proportion of accidents that were tallied in California. (Conversely, some previous out-of-state licensees may have switched their base state of licensure to California, but this would probably have been rare). What is perhaps most problematic is that substantial switching of licensure from California to another state could have appeared in the analysis as a positive (beneficial) intervention effect even though the number of drivers, their driving habits, and the amount of their driving in California versus other states may not have changed. In this scenario, the intervention effect would be the result of how accidents are tallied rather than the program's having actually reduced accident risk. The extent to which commercial drivers actually changed licensure to outside California following the program is unknown. This point is offered only as a speculative qualification rather than as an observed phenomena.

Did the Program Increase or Decrease the Number of Fatal/Injury Accidents in California Involving Heavy Vehicles Operated by California-Licensed Drivers?

Data Collection. Data on fatal/injury accidents in California involving heavy vehicles were obtained from California Highway Patrol's (CHP's) Statewide Integrated Traffic Reporting System (SWITRS). For this analysis, heavy vehicles were defined as single trucks or truck-tractors, single trucks or truck-tractors pulling trailers, and buses. Accidents involving vehicles transporting hazardous materials were also counted. Pickups and panel trucks were excluded from the vehicle criteria for selecting accidents unless they were transporting hazardous materials.

Accidents selected from SWITRS were matched to driver records from DMV's Driver License (DL) masterfile in order to identify those accidents in which one or more of the involved commercial-vehicle operators were licensed in California. The matched accidents were used as the dependent variable in the time series analysis. However, because of a purge of the DL masterfile affecting the first 4 months of 1985, and the fact that updated DL masterfile data were not available for the last 2 months of 1992, only accidents occurring from May 1985 through October 1992 were analyzed.

Analysis. The technique and design used for this analysis was similar to that used for the analysis of FARS data, except that there was no control series. The same four covariates as before (monthly unemployment rate, personal income, employment in trucking and warehousing, and diesel fuel sales) were considered for inclusion in the model in an attempt to reduce bias caused by unknown factors related to accident exposure. An explanatory variable to account for monthly differences in the proportion of week-end days was also included in the model. The latter series was calculated as before, but this time using a 0.34 weighting for week-end days.

This analysis is subject to the same limitations mentioned above for the analysis of FARS fatal accidents—potential biases due to possible multiple licensing, switching of licensure state, and contamination of covariates by treatment effects. In an attempt to eliminate any bias due to multiple licensing and switching of licensure state, a supplementary time series analysis was performed on SWITRS fatal/injury accidents in California involving heavy vehicles operated by drivers licensed in **any** state. Multiple licensing and switching of licensing state should not have affected the total number of commercial accidents in California in this design because the driver's state of licensure was disregarded. (The downside of the supplemental analysis was that the dependent variable included many accidents—approximately 20% of all that occurred in California—in which the involved commercial driver was licensed out of state and therefore would not be expected to be directly affected by the program.) The same explanatory variables employed in the previous analysis of SWITRS accidents involving California licensees were used in an attempt to account for factors related to accident exposure. The week day explanatory variable for this analysis was created based on a week-end day weighting of 0.39.

RESULTS

Did the Program Increase or Decrease the Number of Fatal Accidents Nationwide Involving Heavy Vehicles Operated by California-Licensed Drivers?

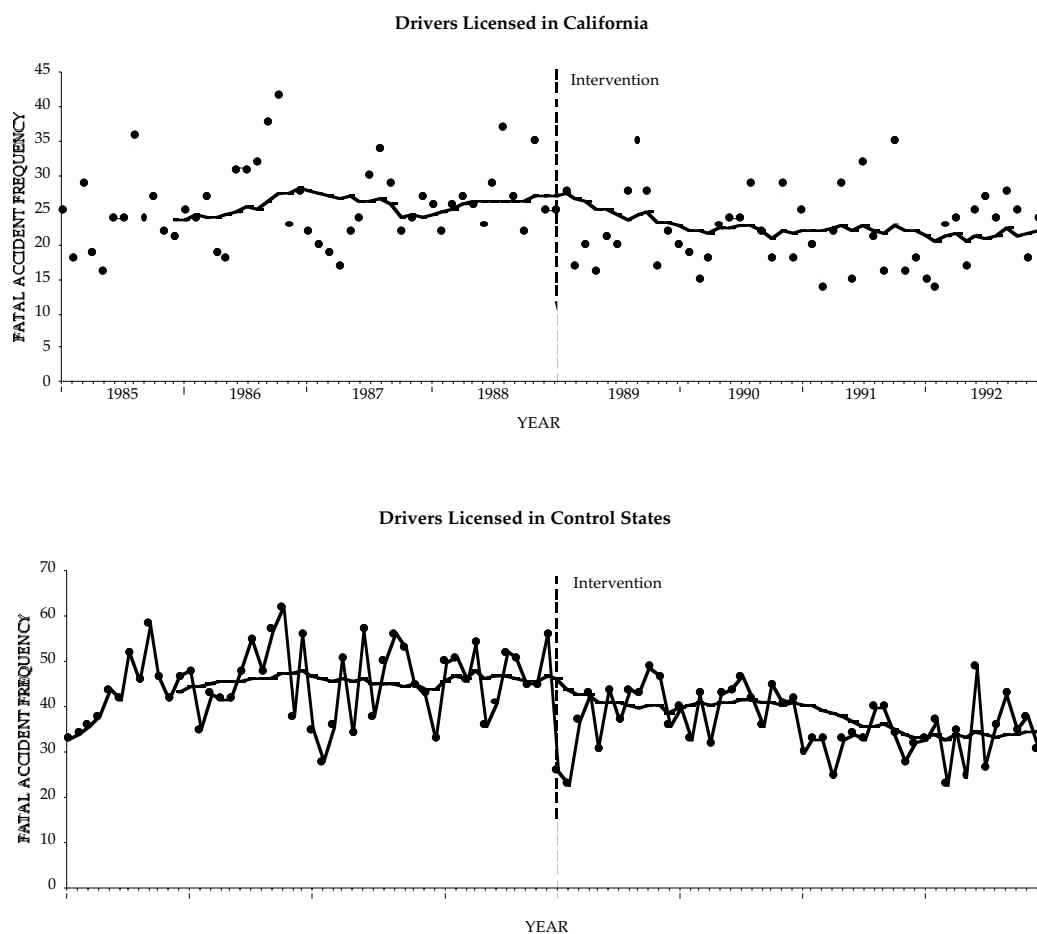
Plots of nationwide fatal accidents involving heavy vehicles operated by drivers licensed in California and in combined control states are shown in Figure 1. The implementation of the CDL program is represented by the vertical dashed line. To help the reader see the general behavior of each series over time, a solid line representing the 12-month moving average is fitted through the data points in each plot. The average monthly accident frequencies for California and the four control states were 24 and 41, respectively.

The covariate time series are shown in Figure 2, each with a vertical dashed line representing the intervention. None of the series appear to change substantially at the point of intervention.

The time series model statistics for the three intervention hypotheses are presented in Table 1. The number in the column labeled "model" indicates one of three steps in the model building process. The first step or model includes the control and intervention

variables. Personal income and unemployment rate were considered for inclusion in the second step, and diesel fuel gallonage and employment in trucking and warehousing were considered for entry in the third step. (The latter two covariates were to be added last because of the possibility that they were contaminated with CDL program effects.)

None of the covariates were included in the models because they were not significantly cross-correlated with the dependent variable, or with the model residuals after entering the control and intervention variables. In addition, the empirical results indicated that the nonseasonal and seasonal autocorrelated variance in the dependent variable was successfully explained by the control series. Therefore, it was not necessary to difference the dependent variable or control series, or to include the week-day variable or any autoregressive or moving average parameters in the model.



Note. Data were obtained from National Highway Traffic Safety Administration's Fatal Accident Reporting System. Control states were Georgia, Pennsylvania, South Carolina, and Virginia.

Figure 1. Monthly fatal accidents nationwide involving heavy vehicles operated by drivers licensed in California and control states for January 1985 through December 1992.

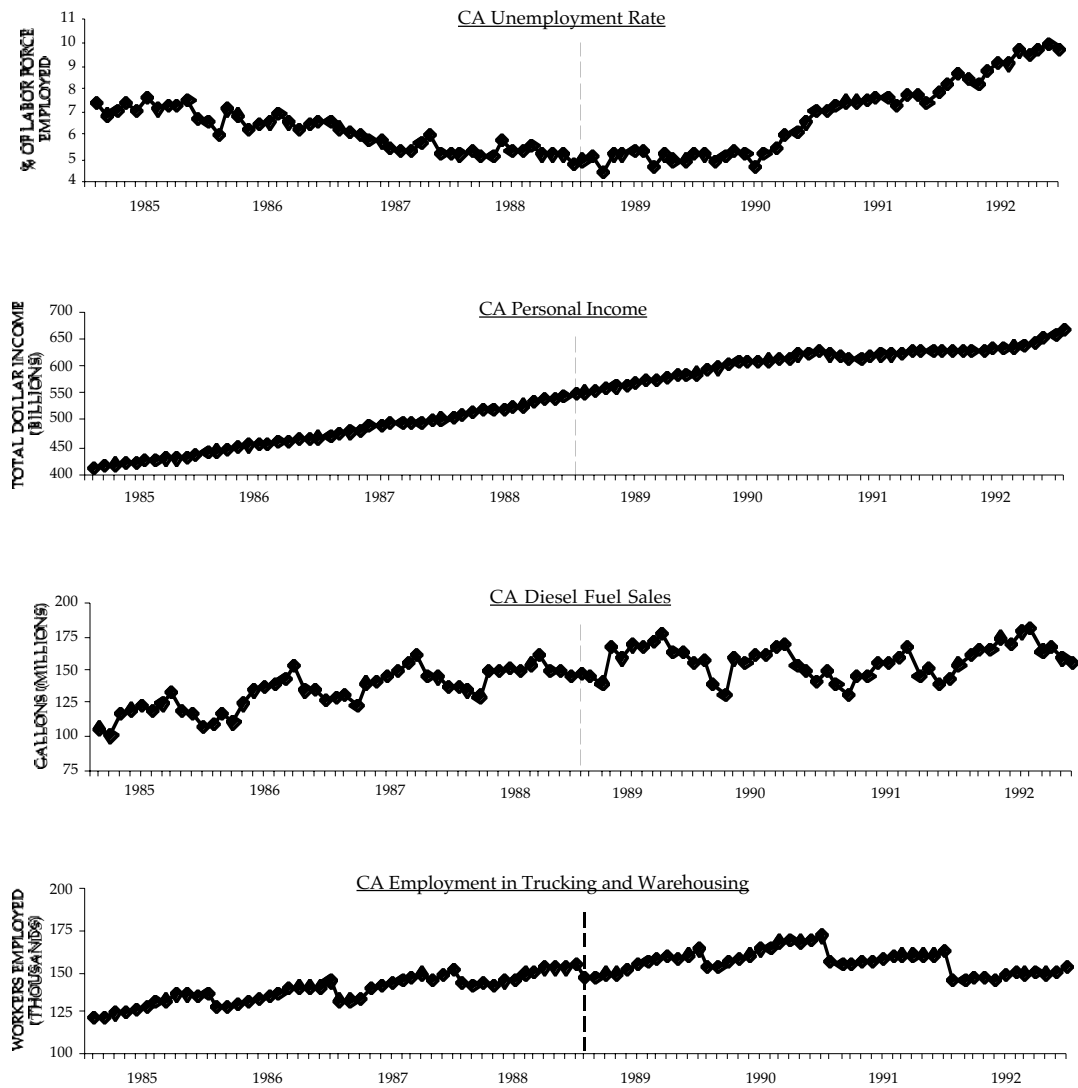


Figure 2. Monthly California Unemployment rate, personal income, diesel fuel sales, and employment in trucking and warehousing for January 1985 through December 1992.

Table 1
 Nationwide Fatal Accident Time Series Model Statistics for
 Abrupt/Permanent, Gradual/Permanent, and Abrupt/Temporary Intervention Effects
 (Accidents Involving Drivers Licensed in California)

Intervention effect	Model	Variable	Parameter	Order	Estimate	<i>t</i> (two-tailed)	<i>df</i>	<i>RMS</i>
Abrupt/permanent	1	control	β	0	0.55	29.62	94	35.90
		intervention	ω	0	2.05	1.87		
Gradual/permanent	1	control	β	0	0.55	29.47	93	36.23
		intervention	ω	0	2.62	0.52		
		intervention	δ	1	-0.26	-0.11		
Abrupt/temporary	1	control	β	0	0.57	38.43	93	35.56
		intervention	ω	0	12.70	2.17		
		intervention	δ	1	0.41	1.20		

Note. To remove nonstationarity in the covariates, it was necessary to difference unemployment rate and personal income each at lag 1, and diesel fuel sales and employment in trucking and warehousing each at lags 1 and 12. Accident data were obtained from California Highway Patrol's Statewide Integrated Traffic Reporting System and Department of Motor Vehicles' Driver License Masterfile.

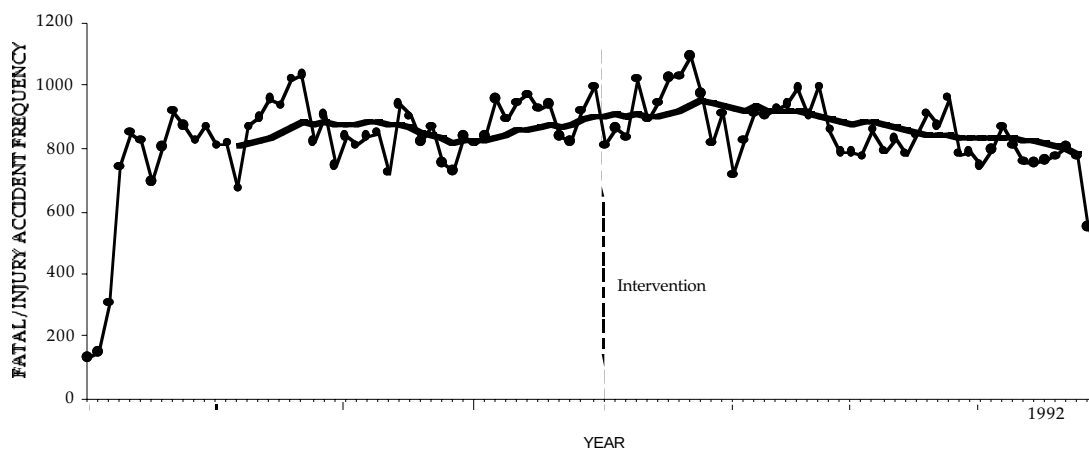
The null hypothesis was accepted for all of the intervention effects tested, since one or both of the ω and δ parameter estimates were nonsignificant ($p < .05$) in each model. Of the three models, the abrupt/permanent model was judged to be the most parsimonious one. It also provided the best "fit" or prediction of the dependent variable, as indicated by its having the lowest residual mean square error (*RME*). *RME* reflects how well a model predicts or explains the actual dependent variable series—the larger the value, the greater the error of prediction. The ω estimate in this model, although nonsignificant ($t = 1.87, p = .06$), represented an increase of 2.05 fatal accidents per month.

Separate follow-up univariate intervention analyses were also conducted on the control and dependent variable series in order to verify that the control series functioned as intended. As mentioned earlier, the primary purpose of the control variable was to adjust the dependent variable for any changes occurring in the former series that presumably would also have influenced the dependent variable. Ultimately, the adjustment was meant to remove bias from the analysis so that the estimated intervention effect would mirror only the impact of the CDL program. The results of the univariate analyses indicated that both series exhibited a statistically significant abrupt/permanent reduction in series level at the point of intervention. For the California series, the reduction was 3.58 accidents per month ($t = 3.08, p < .001$), or 13.9% of the series' 25.79 monthly average before intervention. The control series, on the other hand, dropped by 8.84 accidents per month ($t = -6.37, p < .001$), or 19.5% of its 45.40 monthly preintervention average. If it can be assumed that the dependent and control series would have changed by the same amount had the CDL program not been implemented, then the univariate intervention effects taken together suggest that the program may have actually increased accidents (i.e., it prevented 5.6 percentage points

of the 19.5% reduction in accidents that otherwise would have occurred). This result is consistent with the finding of an increase in accidents associated with program implementation in the multivariate model. (The comparison of results for the two modelling approaches is based solely on the magnitudes of the effects; it is again emphasized that the intervention effect in the multivariate model was not statistically significant.)

Did the Program Increase or Decrease the Number of Fatal/Injury Accidents in California Involving Heavy Vehicles Operated by California-Licensed Drivers?

Figure 3 shows a plot of California fatal/injury accidents involving heavy vehicles operated by drivers licensed in California. The implementation of the CDL program is represented by the vertical dashed line. As mentioned earlier, the first 4 and last 2 months of this series were not included in the analysis. A best-estimate accident frequency was used for May 1986 due to a reporting artifact in the DL masterfile for that month. The 12-month moving average for the corrected series is represented by the solid line drawn through the data. The average monthly accident frequency for this series was 864 accidents per month.



Note. Only accidents occurring during May 1985 through October 1992 were analyzed because of a data purge affecting the first 4 months of 1985 and a failure to update the master file the last 2 months of 1992. The accident frequency shown for May 1986 was statistically generated because the actual value reflected a reporting error. Data were obtained from California Highway Patrol's Statewide Integrated Traffic Reporting System and Department of Motor Vehicles' Driver License Masterfile.

Figure 3. Monthly fatal/injury accidents in California involving heavy vehicles operated by drivers licensed in California for January 1985 through December 1992.

Table 2 presents the results of this analysis. Diesel fuel sales and employment in trucking and warehousing were the only covariates to enter the abrupt/permanent and gradual/permanent effect models, and only the former covariate entered the abrupt/temporary effect model. Since unemployment and personal income were not

significant predictors, results are not shown for step 2. The pattern of cross-correlations between the covariates and the dependent variable indicated the need to shift these two covariates backward in time in the model. This backward shifting is represented by the negative numbers in the "order" column for these variables. The week-day variable was a significant predictor in all of the models.

Table 2

California Fatal/Injury Accident Time Series Model Statistics for
Abrupt/Permanent, Gradual/Permanent, and Abrupt/Temporary Intervention Effects
(Accidents Involving Drivers Licensed in California)

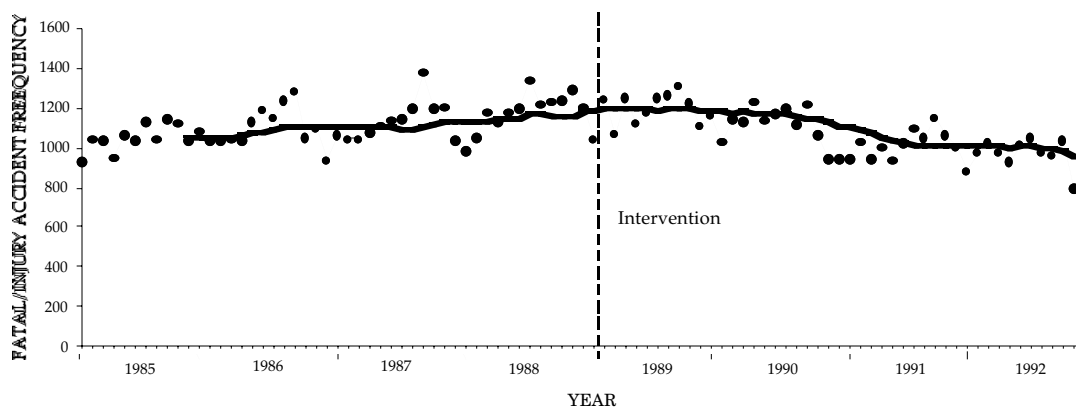
Intervention effect	Model	Variable	Parameter	Order	Estimate	t (two-tailed)	df	RMS
Abrupt/permanent	1	moving average	θ	1	0.65	8.26	73	4,768
		moving average	θ	12	0.85	23.61		
		week day	β	0	18.84	1.77		
		intervention	ω	0	68.16	1.29		
	3	moving average	θ	1	0.66	7.05	58	3,726
		moving average	θ	12	0.89	18.02		
		week day	β	0	25.84	2.60		
		intervention	ω	0	49.04	1.01		
		diesel	β	-2	-.38E-2	3.64		
		trucking employment	β	-9	-8.28	-2.31		
Gradual/permanent	1	moving average	θ	1	0.61	7.31	71	4,326
		moving average	θ	4	0.19	2.05		
		moving average	θ	12	0.85	23.74		
		week day	β	0	19.49	1.80		
		intervention	ω	0	135.6	2.42		
		intervention	δ	1	-0.83	-7.40		
	3	moving average	θ	1	0.53	4.80	56	3,397
		moving average	θ	4	0.40	3.27		
		moving average	θ	12	0.87	17.51		
		week day	β	0	28.74	2.70		
		intervention	ω	0	66.93	1.99		
		intervention	δ	1	-0.94	-19.37		
Abrupt/temporary	1	diesel	β	-2	0.29E-2	3.06	70	4,065
		trucking employment	β	-9	-8.03	-2.40		
		moving average	θ	1	0.57	6.65		
		moving average	θ	4	0.25	2.77		
		moving average	θ	12	0.86	23.88		
		week day	β	0	25.30	2.39		
	3	intervention	ω	0	179.2	3.18	57	3,403
		intervention	δ	1	-0.15	-0.51		
		moving average	θ	1	0.47	3.95		
		moving average	θ	4	0.46	3.81		
		moving average	θ	12	0.84	16.15		
		week day	β	0	37.74	3.64		
Abrupt/temporary	1	intervention	ω	0	196.1	3.95	57	3,403
		intervention	δ	1	-0.73E-1	-0.29		
		diesel	β	-2	0.27E-2	3.02		

Note. To remove nonstationarity in covariates, it was necessary to difference unemployment rate and personal income each at lag 1, and diesel fuel sales and employment in trucking and warehousing each at lags 1 and 12. The dependent variable series was differenced at lags 1 and 12. The order values of -2 for diesel fuel sales and -9 for employment in trucking and warehousing indicate backward shifting of these series by 2 and 9 months, respectively. Accident data were obtained from California Highway Patrol's Statewide Integrated Traffic Reporting System.

(That none of the covariates were predictive of fatal accidents but two were predictive here may be due to the fact that the fatal accident series consisted of accidents occurring nationwide while the fatal/injury series included only accidents occurring in California. It would be expected that changes in employment levels in the California trucking and warehousing industry, for example, would affect accidents occurring in California but not necessarily those occurring outside the state.)

The abrupt/permanent and abrupt/temporary effect hypotheses were rejected because one or both of the intervention parameter estimates were nonsignificant. In addition, the gradual/permanent effect model was not considered acceptable because the large negative δ was representative of a highly unstable, oscillating effect that could not be reasonably argued to have been caused by the CDL program. (According to McDowall et al. [1980], a value of δ that is either negative or greater than unity indicates that the time series system is unstable.)

Figure 4 shows a plot of monthly fatal/injury accidents in California involving heavy vehicles operated by drivers licensed in any state, which was the dependent variable in the supplemental analysis of SWITRS accidents mentioned above. Once again, the vertical dashed line represents the intervention and the solid line through the data points represents the 12-month moving average. The mean of this series was 1,094 accidents per month.



Note. Data were obtained from California Highway Patrol's Statewide integrated Traffic Reporting System.

Figure 4. Monthly fatal/injury accidents in California involving heavy vehicles operated by drivers licensed in any state for January 1985 through December 1992.

Table 3

California Fatal/Injury Accident Time Series Model Statistics for
Abrupt/Permanent, Gradual/Permanent, and Abrupt/Temporary Intervention Effects
(Accidents Involving Drivers Licensed in Any State)

Intervention effect	Model	Variable	Parameter	Order	Estimate	<i>t</i> (two-tailed)	<i>df</i>	<i>RMS</i>
Abrupt/permanent	1	moving average	θ	1	0.64	7.76	79	4,121
		moving average	θ	12	0.85	23.64		
		week day	β	0	39.87	3.66		
		intervention	ω	0	4.35	0.08		
	3	moving average	θ	1	0.56	4.75	65	4,062
		moving average	θ	12	0.81	16.80		
		week day	β	0	44.67	4.08		
		intervention	ω	0	15.95	0.29		
		trucking employment	β	1	9.90	2.60		
Gradual/permanent	1	moving average	θ	1	0.59	7.21	78	3,557
		moving average	θ	12	0.84	24.34		
		week day	β	0	36.76	3.71		
		intervention	ω	0	120.1	3.18		
		intervention	δ	1	-0.94	-32.79		
	3	moving average	θ	1	0.34	3.00	60	2,515
		moving average	θ	12	0.85	20.99		
		autoregressive	ϕ	2	-0.39	-3.67		
		week day	β	0	41.84	5.44		
		intervention	ω	0	130.8	5.92		
		intervention	δ	1	-0.94	-67.30		
		trucking employment	β	1	5.35	3.18		
		trucking employment	β	2	3.47	2.21		
Abrupt/temporary	1	moving average	θ	1	0.58	7.16	78	3,435
		moving average	θ	12	0.84	24.60		
		week day	β	0	35.56	3.66		
		intervention	ω	0	76.05	3.47		
		intervention	δ	1	-0.93	-30.84		
	3	moving average	θ	1	0.34	2.94	60	2,453
		moving average	θ	12	0.85	20.84		
		autoregressive	ϕ	2	-0.37	-3.47		
		week day	β	0	40.88	5.37		
		intervention	ω	0	72.06	5.97		
		intervention	δ	1	-0.94	-60.14		
		trucking employment	β	1	5.45	3.27		
		trucking employment	β	2	3.14	2.02		

Note. To remove nonstationarity in covariates, it was necessary to difference unemployment rate and personal income each at lag 1, and diesel fuel sales and employment in trucking and warehousing each at lags 1 and 12. The dependent variable series was differenced at lags 1 and 12. The order values of 1 and 2 for employment in trucking and warehousing indicates forward shifting of this series by 1 and 2 months, respectively. Accident data were obtained from California Highway Patrol's Statewide Integrated Traffic Reporting System.

The time series model statistics for the supplemental analysis are presented in Table 3. Employment in trucking and warehousing was the only covariate that met the criteria for inclusion in the model. This covariate was lagged forward in time by 1 month in the abrupt/permanent effect model, and by 1 and 2 months in the other two effect models. Forward shifting of the covariate is indicated by the positive numbers in the column labeled "order" for this variable. The fact that behavior in the covariate was followed (rather than preceded) by similar behavior in the dependent variable suggests that the dependent variable was not causally linked to the covariate. Nevertheless, it was decided a priori that covariates would be shifted forward in time if this relationship was indicated by the cross-correlations since it was possible that some other unknown factor

related to the covariate, but preceding it in time, may have impacted the accident series. (Readers wishing to exclude these forward-shifted covariates are referred to results in step 1.) The coefficient for the week-day variable was significant in all of the models.

The null hypothesis was accepted for the abrupt/permanent intervention effect, since the ω parameter was nonsignificant in all modeling steps. The ω and δ parameters were both significant in the gradual/permanent and abrupt/temporary models; however, these models were rejected because the δ values were negative.

DISCUSSION/CONCLUSIONS

The results of the time series analyses provide no evidence that the CDL program reduced fatal or fatal/injury accidents. While the sudden/permanent effect model provided the best prediction of fatal accidents, the intervention parameter in that model was not statistically significant and the direction of the estimated effect reflected a (nonsignificant) increase in accidents. For the primary and supplementary analyses of fatal/injury accidents, the intervention effects were either not statistically significant or the models were rejected due to high negative δ values.

Due to the quasi-experimental nature of the intervention time series analyses employed in this study, there is always the possibility that the absence or existence of a significant intervention effect could have been due to the influence of uncontrolled variables. Perhaps the most potentially problematic shortcoming of the design is the possibility that the control series and/or covariates may not have successfully controlled for the influence of extraneous factors (e.g., changes in travel patterns, mileage, or weather) that may have affected the dependent variable. Such uncontrolled sources of variance could potentially have biased the results. It should also be noted that intervention time series analysis seldom has enough power to detect small effects on accidents resulting from the implementation of traffic safety programs because such effects are easily overwhelmed by noise and unexplained variability due to other variance sources.

Another weakness in the study design was that the primary analyses were subject to the possibility of bias caused by an unknown number of commercial drivers holding multiple licenses or possibly changing licensure state to avoid the CDL program. The supplementary analyses, conducted on fatal/injury accidents involving commercial drivers from any state, was not expected to be biased by either factor. The fact that the primary and supplemental analyses of fatal/injury accidents yielded consistent results (nonsignificant effects) suggests that any bias in the primary analyses caused by the two factors was small.

Bias could also have entered into the analysis of fatal accidents if the control series had itself been affected by the CDL program. If the control variable had been contaminated with program effects, adjusting the dependent variable for behavior in the control series would have removed part or all of the program effect from the intervention effect estimated in the model. For example, if some of the 19.5% reduction in the control series identified in the univariate analysis of that variable was caused by the

CDL program, the estimated program effect in the multivariate model would have been greatly biased against finding a positive program effect.

Mention should also be made of the finding of a significant reduction in the dependent variable for fatal accidents at the time of intervention (as found in the follow-up univariate analysis conducted on that series), when at the same time there was no significant postintervention reduction in the dependent variable for fatal/injury accidents (as found in the analyses of SWITRS accidents). One possible explanation for this inconsistency is that fatal accidents and injury accidents may have reacted differently to historical factors and CDL programmatic influences. Although possible, this explanation is not intuitively compelling in and of itself. A more plausible explanation is that the vehicle criteria used in selecting accidents for the dependent variables were substantially different. It was necessary to use different vehicle criteria for the two analyses because vehicles were coded differently on FARS and SWITRS accident records. The vehicle coding in FARS records allowed for a much more precise identification of heavy vehicles (e.g., those with GVWR of more than 26,000 pounds) than did the coding in SWITRS records. The more general vehicle criteria used in SWITRS records resulted in an unknown number of accidents involving smaller trucks, not requiring a CDL license for operation, to be included in the SWITRS dependent variable. Evidence for this inclusion of non-CDL accidents in the SWITRS series is provided by the fact that California fatal accidents selected from FARS accounted for only 61% of California fatal accidents selected from SWITRS. Since FARS fatal accidents were a purer reflection of the driving behavior of CDL licensees, the CDL program would be expected to have had a greater impact on the fatal accident series than it would have had on the fatal/injury accident series.

In summary, the nonsignificant intervention effect estimates in the time series models suggest that the CDL program probably had little or no effect on nationwide fatal accidents or California fatal/injury accidents. The analysis of FARS fatal accidents would be expected to yield a more accurate estimate of the CDL program effect than would the analysis of SWITRS fatal/injury accidents because the dependent variable in the former analysis was a purer representation of accidents involving CDL drivers. The analysis of fatal accidents could also be considered superior from the standpoint that the analysis of fatal/injury accidents did not include a control series and was more likely to be biased by drivers holding multiple licenses.

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APPENDIX

Senate Bill No. 2594

CHAPTER 1509

An act to amend Sections 260, 1803, 1804, 12502, 12511, 12515, and 14900 of, to amend and repeal Section 12804 of, to add Sections 12801, 12804.9, and 40300.2 to, and to add Chapter 7 (commencing with Section 15200) to Division 6 of, the Vehicle Code, relating to vehicles, and making an appropriation therefor.

[approved by Governor September 28, 1988, Filed with
Secretary of State September 29, 1988.]

LEGISLATIVE COUNSEL'S DIGEST

SB 2594, Deddeh.. Vehicles: commercial drivers.

(1) Existing law requires an applicant for an original driver's license to be tested by the Department of Motor Vehicles on the laws governing vehicle operation, and to be given an actual driving test to determine the applicant's skill in operating the vehicle. For that purpose, existing law classifies motor vehicles as class 1, 2, 3, or 4, as specified. Under certain conditions, the applicant's employer may certify the applicant's qualifications for certain classes of vehicles. Existing law also allows all tests to be waived for a renewal applicant with a good record.

This bill would impose a new licensing system which would require tests to be given to applicants for a commercial driver's license, as defined, and would base the distinctions between class A, B, or C licenses on the gross vehicle weight rating of the vehicle being operated and on the type of vehicle being operated. Employers of commercial drivers who administer driving tests under agreement with the department would be required to pay a fee established by the department. The new licensing system would be implemented during the period from January 1, 1989, through December 31, 1992, as determined by the department. The bill would require the department to study the costs of administering the commercial driver's license system in the bill and to report its findings and recommendations to the Legislature, as specified, on or before March 1, 1989.

(2) Existing law does not require commercial drivers to report violations to the department.

This bill, under the new licensing system, would require commercial drivers to report any conviction involving the safe operation of a motor vehicle to the department within 30 days of conviction if the conviction is in any other state, and to report any conviction involving the safe operation of a motor vehicle to his or her employer within 30 days of the conviction. The bill would also require the driver to notify his or her employer of any license suspension, revocation, cancellation, or disqualification by the end of the same business day on which the action is taken and to report any out-of-service order, as specified, within specified times.

(3) Existing law does not require commercial drivers to furnish prospective employers with prior employment information.

This bill, under the new licensing system, would require drivers to furnish prospective employers with driving records covering their previous commercial driving and specified employment history for the 10 years preceding the date of application.

(4) Existing law requires courts to notify the department of specified convictions within 10 days.

This bill would require courts to include information noting whether or not the violation occurred in a commercial vehicle, as defined, thereby imposing a state-mandated local program.

(5) Existing law establishes a negligent operator point count criteria for various traffic offenses, and allows drivers of commercial vehicles a higher point count than other drivers because of the increased number of miles they may drive.

This bill, under the new licensing system, would increase license sanctions by providing that on or after January 1, 1992, a commercial driver shall be disqualified for 60 days for receiving 2 serious traffic violations, as defined, within 3 years, and disqualified for a period of 120 days if convicted of 3 of those offenses within 3 years, and the 2nd or 3rd convictions occur on or after January 1, 1992.

(6) Existing law generally requires the revocation of the driver's license of any person convicted of any felony in the commission of which a motor vehicle is used, and requires a 6-month restriction as the minimum penalty for a 1st misdemeanor conviction of driving under the influence of alcohol or drugs, if the violation occurred in a vehicle requiring a class 1 or class 2 driver's license or a hazardous material driver's certificate. Existing law does not provide for the disqualification of a commercial licensee for a conviction of a 1st offense of leaving the scene of an accident.

This bill, under the new licensing system, would establish a one-year suspension of the privilege to operate a commercial vehicle for the 1st offense of any of those violations, 3 years if the vehicle was transporting hazardous materials, and a lifetime revocation upon conviction for a 2nd offense or if the vehicle was used in the commission of a felony involving a controlled substance, as specified.

(7) Existing law prohibits any person under the age of 21 from driving specified motor vehicles engaged in interstate commerce, or a motor vehicle engaged in the transportation of hazardous materials.

This bill would add commercial motor vehicles, as defined, to that list of prohibited vehicles.

(8) Existing law requires that a driver's license contain specific identifying information.

This bill would specify that the department shall require a commercial license application to contain the driver's social security number and any other number or identifier, as specified.

(9) The bill would expressly require a license or certificate issued prior to implementation of the new licensing system to be valid for the type of vehicle specified under laws applicable at the time it was issued, until the license or certificate expires or is otherwise suspended, revoked, or canceled. The bill would also declare that during the implementation period of the new licensing system, Vehicle Code provisions applicable to class 1, 2, 3, or 4 licenses shall apply to persons holding class A, B, C, or M licenses under the new licensing system, as specified.

(10) This bill would incorporate additional changes in Section 1804 of the Vehicle Code, proposed by AB 3681, to be operative only if AB 3681 and this bill are both chaptered and become effective January 1, 1989, and this bill is chaptered last.

(11) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates which do not exceed \$500,000 statewide and other procedures for claims whose statewide costs exceed \$500,000.

Violations of the Vehicle Code are, generally, crimes. This bill would impose a state-mandated local program by creating and changing the definition of crimes and by imposing duties on local agencies and school districts that employ commercial drivers.

This bill would provide that for certain costs no reimbursement is required by this act for specified reasons.

(12) The bill would appropriate \$5,407,000 to the department from the Motor Vehicle Account in the State Transportation Fund to pay the costs of implementation.

Appropriation: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 260 of the Vehicle Code is amended to read:

(A) (a) A "commercial vehicle" is a vehicle of a type required to be registered under this code used or maintained for the transportation of persons for hire, compensation, or profit or designed, used, or maintained primarily for the transportation of property.

(b) Passenger vehicles which are not used for the transportation of persons for hire, compensation, or profit and housecars are not commercial vehicles. This subdivision shall not apply to Chapter 4 (commencing with Section 6700) of Division 3.

(c) Any van pool vehicle is not a commercial vehicle.

(d) The definition of a commercial vehicle in this section does not apply to Chapter 7 (commencing with Section 15200) of Division 6.

SEC. 2. Section 1803 of the Vehicle Code is amended to read:

1803. (a) Every clerk of a court, or judge if there is no clerk, in which a person was convicted of any violation of this code, of any offense involving use or possession of controlled substances under Division 10 (commencing with Section 11000) of the Health and Safety Code, and of any felony offense when a commercial motor vehicle, as defined in subdivision (b) of Section 15210, was involved in or incidental to the commission of the offense, and of any violation of any other statute relating to the safe operation of vehicles, shall prepare within 10 days after conviction and immediately forward to the department at its office at Sacramento an abstract of the record of the court covering the case in which the person was so convicted. If sentencing is not pronounced in conjunction with the

conviction, the abstract shall be forwarded to the department within 10 days after sentencing and the abstract shall be certified by the person so required to prepare it to be true and correct.

For the purposes of this section, a forfeiture of bail shall be equivalent to a conviction.

(b) The following violations are not required to be reported under subdivision (a) of this section:

- (1) Division 3.5 (commencing with Section 9840).
- (2) Section 21113, with respect to parking violations.
- (3) Chapter 9 (commencing with Section 22500) of Division 11.
- (4) Division 12 (commencing with Section 24000), except Sections 24002, 24004, 24250, 24409, 24604, 24800, 25103, 26707, 27151, 27315, 27360, 27800, and 27801 and Chapter 3 (commencing with Section 26301).
- (5) Division 15 (commencing with Section 35000), except Chapter 5 (commencing with Section 35550).

(6) Violations for which a person was cited as a pedestrian or while operating a bicycle.

(7) Division 16.5 (commencing with Section 38000).

(8) Sections 23221, 23223, 23225, and 23226.

(c) If the court impounds a license or orders a person to limit his or her driving pursuant to paragraph (2) of subdivision (a) of Section 23161, subdivision (b) of Section 23166, subdivision (b) of Section 23186, or subdivision (c) of Section 40508, the court shall notify the department concerning the impoundment or limitation on an abstract prepared pursuant to subdivision (a) of this section or on a separate abstract, which shall be prepared within 10 days after the impoundment or limitation was ordered and immediately forwarded to the department at its office in Sacramento.

(d) If the court determines that a prior judgment of conviction of a violation of Section 23152 or 23153 is valid or is invalid on constitutional grounds pursuant to Section 41403, the clerk of the court, or judge if there is not clerk, in which the determination is made shall prepare an abstract of that determination and forward it to the department in the same manner as an abstract of record pursuant to subdivision (a).

(e) Within 10 days of an order terminating or revoking probation under Section 23167, 23187, or 23207, the clerk of the court, or the judge if there is not clerk, in which the order terminating or revoking probation was entered, shall prepare and immediately forward to the department at its office in Sacramento an abstract of the record of the court order terminating or revoking probation and any other order of the court to the department required by law.

SEC. 3. Section 1804 of the Vehicle Code, as amended by Section 2 of Chapter 1345 of the Statutes of 1985, is amended to read:

1804. The abstract shall be made upon a form furnished or approved by the department and shall contain all necessary information to identify the defendant, the date and nature of the offense, the license plate number of the vehicle involved in the offense, whether the vehicle was transporting a load required to be transported by a driver certified pursuant to Section 12804.1, whether the operator of the vehicle is required to be certified pursuant to Section 12804.3, the date of hearing, and the judgment. The abstract shall also indicate whether the vehicle involved in the offense is a commercial motor vehicle, as defined in subdivision (b) of Section 15210.

SEC. 3.3 Section 1804 of the Vehicle Code, as amended by Section 2 of Chapter 1345 of the Statutes of 1985, is amended to read:

1804. (a) The abstract shall be made upon a form furnished or approved by the department and shall contain all necessary information to identify the

defendant, the date and nature of the offense, the license plate number of the vehicle involved in the offense, whether the vehicle was transporting a load required to be transported by a driver certified pursuant to Section 12804.1, whether the operator of the vehicle is required to be certified pursuant to Section 12804.3, the date of hearing, and the judgment. The abstract shall also indicate whether the vehicle involved in the offense is a commercial motor vehicle, as defined in subdivision (b) of Section 15210.

(b) As to any abstract for which the original arrest and final conviction was for a violation of Section 23101 or 23102, as those sections read before January 1, 1982, or Section 23152 or 23153, the abstract shall contain a statement indicating the percentage of alcohol, by weight, in the person's blood whenever that percentage was determined by a chemical test. The information regarding the chemical test shall be compiled if it is available to the clerk of the court. All information required to be compiled pursuant to this subdivision shall be kept confidential in the records of the department pursuant to Section 1808.3. The department may use the information for research and statistical purposes and for determining the eligibility of any person to operate a motor vehicle on the highways of this state. The information shall not be released to any other public or private agency, except for research and statistical summary purposes and, for those purposes, the name and address of the person and any other identifying information shall not be disclosed.

(c) The legislature finds and declares that blood-alcohol percentages have valuable research potential in providing statistical summary information on impaired drivers but that a specific blood-alcohol percentage is only an item of evidence for purposes of criminal and licensing sanctions imposed by law. The Legislature recognizes that the accuracy of the determination of a specific blood-alcohol percentage is not the critical determination in a conviction for driving under the influence of an alcoholic beverage if the blood-alcohol percentage exceeds the statutory amount.

SEC. 3.5 Section 12502 of the Vehicle Code is amended to read:

12502. (a) A nonresident over the age of 18 years having in his or her immediate possession a valid driver's license issued by a foreign jurisdiction of which he or she is a resident, may operate a motor vehicle in this state without obtaining a license under this code except as provided in Section 12505.

(b) Any person entitled to the exemption contained in subdivision (a), while operating within this state, a commercial vehicle, as defined in subdivision (b) of Section 15210, or a vehicle otherwise requiring a class 1 or 2 driver's license, shall have in his or her possession a current medical certificate of a type described in subdivision (c) of Section 12804, which has been issued within two years of the date of operation of that vehicle.

SEC. 4. Section 12511 of the Vehicle Code is amended to read:

12511. No person shall have in his or her possession or otherwise under his or her control more than one driver's license.

SEC. 5 Section 12515 of the Vehicle Code is amended to read:

12515. (a) No person under the age of 18 years shall be employed for compensation by another for the purpose of driving a motor vehicle on the highways.

(b) No person under the age of 21 years shall be employed for compensation by another to drive, and no person under the age of 21 years may drive a motor vehicle, as defined in Section 34500 or subdivision (b) of Section 15210, that is engaged in interstate commerce, or any motor vehicle that is engaged in the interstate or intrastate transportation of hazardous material, as defined in Section 353.

Section 12801 is added to the Vehicle Code, to read:

12801. Notwithstanding any other provision of law, the department shall require every application for a commercial driver's license, as defined in subdivision (a) of Section 15210, to contain the applicant's social security number and any other number or identifier determined to be appropriate by the department.

SEC. 7. Section 12804 of the Vehicle Code is amended to read:

12804. (a) (1) The examination shall include a test of the following:

(A) The applicant's knowledge and understanding of the provisions of this code governing the operation of vehicles upon the highways.

(B) The applicant's ability to read and understand simple English used in highway traffic and directional signs.

(C) The applicant's understanding of traffic signs and signals, including the bikeway signs, markers, and traffic control devices established by the Department of Transportation.

The applicant shall be required to give an actual demonstration of his or her ability to exercise ordinary and reasonable control in operating a motor vehicle by driving it under the supervision of an examining officer. The applicant shall submit to an examination appropriate to the type of motor vehicle or combination of vehicles he or she desires a license to drive, except that the department may waive the driving test part of the examination of any applicant who holds a valid license issued by another state, territory, or possession of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

The examination shall also include a test of the hearing and eyesight of the applicant, and of other matters that may be necessary to determine the applicant's mental and physical fitness to operate a motor vehicle upon the highways, and whether any ground exists for refusal of a license under this code.

(2) The examination for a class 1 or class 2 license under subdivision (b) shall also include a report of a medical examination of the applicant given not more than two years prior to the date of the application by a physician licensed to practice medicine. The report shall be on a form approved by the department, the Federal Highway Administration, or the Federal Aviation Administration. In establishing the requirements, consideration may be given to the standards presently required of motor carrier drivers by the Federal Highway Administration.

(3) Any physical defect of the applicant, which, in the opinion of the department, is compensated for to ensure safe driving ability, shall not prevent the issuance of a license to the applicant.

(b) In accordance with the following classifications, any applicant for a driver's license shall be required to submit to an examination appropriate to the type of motor vehicle or combination of vehicles the applicant desires a license to drive:

(1) Class 1. Any combination of vehicles, including the operation of all vehicles under class 2 and class 3.

(2) Class 2. Any bus, any single vehicle with three or more axles, any bus or single vehicle with three or more axles towing another vehicle weighing less than 6,000 pounds gross, and all vehicles covered under class 3.

(3) Class 3. Any of the following:

(A) Any truck tractor or truck tractor and semitrailer combination, as specified in subdivision (h) of Section 36101, when operated in accordance with subdivision (h) of Section 36101.

(B) Any three-axle housecar.

(C) Any three-axle vehicle weighing less than 6,000 pounds gross, any two-axle vehicle, any three-axle housecar or vehicle towing another vehicle

weighing less than 6,000 pounds gross, including when a tow dolly is used between the towing vehicle and a towed motor vehicle.

(D) Any two-axle vehicle weighing 4,000 pounds or more unladen when towing a trailer coach not exceeding 9,000 pounds gross, or towing a trailer or semitrailer not exceeding 9,000 pounds gross, designed and used exclusively for hauling livestock, or towing a trailer not exceeding 9,000 pounds gross used to transport agricultural products from a farm to a processing or handling point, or towing a trailer transporting a boat not exceeding 9,000 pounds gross, when the hauling of livestock or agricultural products or the towing of boats is not for compensation.

(E) Any schoolbus, school pupil activity bus, youth bus, or farm labor vehicle specified in paragraph (1) of subdivision (d).

Class 3 does not include any bus which is not described in subparagraph (E), nor any two9-wheel motorcycle or any two-wheel motor-driven cycle.

(4) Class 4. Any two-wheel motorcycle, any two-wheel motor-driven cycle, or any motorized bicycle. Authority to operate vehicles included in a class 4 license may be granted by endorsement on a class 1, 2, or 3 license upon completion of appropriate examination.

(c) Class 1 and class 2 driver's licenses shall be valid for operating class 1 or class 2 vehicles only when a medical certificate approved by the department, the Federal Highway Administration, or the Federal Aviation Administration, which has been issued within two years of the date of the operation of that vehicle, is within the licensee's immediate possession, otherwise the license shall be valid only for operating class 3 vehicles and class 4 vehicles if so endorsed.

(d) (1) A class 3 license shall be valid for operating any schoolbus, school pupil activity bus, youth bus, or farm labor vehicle when a special driver's certificate to permit the operation of those vehicles is also in the immediate possession of the licensee. A class 3 license shall also be valid for operating any of those vehicles, with no passengers aboard, while receiving behind-the-wheel driver training from a person having in his or her immediate possession a special driver's certificate to permit the operation of the vehicle.

(2) A special driver certificate for the operation of a schoolbus, school pupil activity bus, youth bus, farm labor vehicle, or vehicle requiring operator certification pursuant to Section 12804.1 shall not be valid unless the driver has in his or her immediate possession, a medical certificate issued within the past two years.

(e) The department may accept a certificate of driving experience that is issued by an employer of the applicant, in lieu of a driving test, on class 1 or 2 applications, if the applicant has first qualified for a class 3 license and has met the other examination requirements for the license for which he or she is applying. The certificate may be submitted as evidence of the applicant's experience or training in the operation of the types of equipment covered by the license for which he or she is applying.

(f) The department may accept a certificate of competence in lieu of driving test on class 4 applications, when the certificate is issued by a law enforcement agency for its officers who operate class 4 vehicles in their duties, if the applicant has met the other examination requirements for the license for which he or she is applying.

(g) Notwithstanding subdivision (b), any person holding a valid California driver's license of any class may operate a motorized bicycle without taking any special examination for the operation of a motorized bicycle, and without having a class 4 endorsement on that license.

(h) Drivers of vanpool vehicles, may operate with class 3 license, but shall possess evidence of a medical examination required for a class 2 license when operating vanpool vehicles. In order to be eligible to drive the vanpool vehicle, the driver shall keep in the vanpool vehicle a statement, signed under penalty of perjury, that he or she has not been convicted of reckless driving, drunk driving, or a hit and run offense in the last five years.

(i) This section shall remain in effect only until January 1, 1993, and as of that date is repealed, unless a later enacted statute which is enacted on or before January 1, 1993, deletes or extends that date.

SEC. 7.5 Section 12804.9 is added to the Vehicle Code, to read:

12804.9 (a) (1) the examination shall include a test of the following:

(A) The applicant's knowledge and understanding of the provisions of this code governing the operation of vehicles upon the highways.

(B) The applicant's ability to read and understand simple English used in highway traffic and directional signs.

(C) The applicant's understanding of traffic signs and signals, including the bikeway signs, markers, and traffic control devices established by the Department of Transportation.

The applicant shall be required to give an actual demonstration of his or her ability to exercise ordinary and reasonable control in operating a motor vehicle by driving it under the supervision of an examining officer. The applicant shall submit to an examination appropriate to the type of motor vehicle or combination of vehicles he or she desires a license to drive, except that the department may waive the driving test part of the examination of any applicant who holds a valid license issued by another state, territory, or possession of the United States, the District of Columbia, or the Commonwealth of Puerto Rico.

The examination shall also include a test of the hearing and eyesight of the applicant, and of other matters that may be necessary to determine the applicant's mental and physical fitness to operate a motor vehicle upon the highways, and whether any ground exists for refusal of a license under this code.

(2) The examination for a class A or class B license under subdivision (b) shall also include a report of a medical examination of the applicant given not more than two years prior to the date of the application by a physician licensed to practice medicine. The report shall be on a form approved by the department, the Federal Highway Administration, or the Federal Aviation Administration. In establishing the requirements, consideration may be given to the standards presently required of motor carrier drivers by the Federal Highway Administration.

(3) Any physical defect of the applicant, which, in the opinion of the department, is compensated for to ensure safe driving ability, shall not prevent the issuance of a license to the applicant.

(b) Beginning on January 1, 1989, in accordance with the following classifications, any applicant for a driver's license shall be required to submit to an examination appropriate to the type of motor vehicle or combination of vehicles the applicant desires a license to drive:

(1) Class A. Any combination of vehicles, including the operation of all vehicles under class B and class C.

(2) Class B. Any bus, any single vehicle with three or more axles or a gross vehicle weight rating of 26,001 or more pounds, any bus or single vehicle with three or more axles or a gross vehicle weight rating of 26,001 or more pounds towing another vehicle weighing less than 6,000 pounds gross, and all vehicles covered under class C.

(3) Class C. Any of the following:

(A) Any truck tractor weighing less than 26,001 pounds gross vehicle weight or truck tractor towing a semitrailer weighing less than 10,000 pounds gross vehicle weight, as specified in subdivision (h) of Section 36101, when operated in accordance with subdivision (h) of Section 36101.

(B) Any two-axle or three-axle housecar.

(C) Any three-axle vehicle weighing less than 6,000 pounds gross, any two-axle vehicle weighing less than 26,001 pounds gross vehicle weight, any three-axle housecar or vehicle towing another vehicle weighing less than 6,000 pounds gross, including when a tow dolly is used between the towing vehicle and a towed motor vehicle.

(D) Any two-axle vehicle weighing 4,000 pounds or more unladen when towing a trailer coach not exceeding 9,000 pounds gross, or towing a trailer or semitrailer not exceeding 9,000 pounds gross, designed and used exclusively for hauling livestock, or towing a trailer not exceeding 9,000 pounds gross used to transport agricultural products from a farm to a processing or handling point, or towing a trailer transporting a boat not exceeding 9,000 pounds gross, when the hauling of livestock or agricultural products or the towing of boats is not for compensation.

(E) Any schoolbus, school pupil activity bus, youth bus, or farm labor vehicle specified in paragraph (1) of subdivision (d).

Class C does not include any bus which is not described in subparagraph (E), nor any motorcycle or any two-wheel motor-driven cycle.

(4) Class M. Any two-wheel motorcycle, any two-wheel motor-driven cycle, or any motorized bicycle. Authority to operate vehicles included in a class M license may be granted by endorsement on a class A, B, or C license upon completion of appropriate examination.

© No driver's license or special drive certificate shall be valid for operating any commercial motor vehicle, as defined in subdivision (b) of Section 15210, any other motor vehicle defined in paragraph (1) or (2) of subdivision (b), or any other vehicle requiring a driver to hold any special driver certificate, except a special construction equipment certificate or any commercial driver license endorsement under Section 15275, unless a medical certificate approved by the department, the Federal Highway Administration, or the Federal Aviation Administration, which has been issued within two years of the date of the operation of that vehicle, is within the licensee's immediate possession, and a copy of the medical examination report from which the certificate was issued is on file with the department. Otherwise the license shall be valid only for operating class C vehicles which are not commercial vehicles, as defined in subdivision (b) of Section 15210.

(d) A license or driver certificate issued prior to the enactment of Chapter 7 (commencing with Section 15200) shall be valid to operate the class or type of vehicles specified under the law in existence prior to the enactment until the license or certificate expires or is otherwise suspended, revoked, or canceled.

(e) The department may accept a certificate of driving experience that is issued by an employer of the applicant, in lieu of a driving test, on class A or B applications, if the applicant has first qualified for a class C license and has met the other examination requirements for the license for which he or she is applying. The certificate may be submitted as evidence of the applicant's experience or training in the operation of the types of equipment covered by the license for which he or she is applying.

(f) The department may accept a certificate of competence in lieu of a driving test on class M applications, when the certificate is issued by a law enforcement agency for its officers who operate class M vehicles in their duties, if the

applicant has met the other examination requirements for the license for which he or she is applying.

(g) Notwithstanding subdivision (b), any person holding a valid California driver's license of any class may operate a motorized bicycle without taking any special examination for the operation of a motorized bicycle, and without having a class M endorsement on that license.

(h) Drivers of vanpool vehicles, may operate with class C licenses, but shall possess evidence of a medical examination required for a class B license when operating vanpool vehicles. In order to be eligible to drive the vanpool vehicle, the driver shall keep in the vanpool vehicle a statement, signed under penalty of perjury, that he or she has not been convicted of reckless driving, drunk driving, or a hit and run offense in the last five years.

(i) During the implementation of this section, from January 1, 1989, through December 31, 1992, provisions of this code pertaining to persons holding class 1, 2, 3, or 4 licenses pursuant to Section 12804, shall apply to persons holding class A, B, C, or M licenses pursuant to this section, to the extent that class A, B, C, or M vehicles under this section fall within the definition of class 1, 2, 3, or 4 vehicles under Section 12804.

SEC. 8. Section 14900 of the Vehicle Code is amended to read:

14900. (a) Except as otherwise provided in Section 15255, upon application for an original driver's license, or for the renewal of a driver's license or for a license to operate a different class of vehicle, there shall be paid the department a fee of ten dollars (\$10). The payment of the fee entitles the person paying the fee to make application for a driver's license and to three examinations within a period of 12 months or during the period of an instruction permit issued from the application as provided in Section 12509.

The term "driver's license", as used in this section, includes all licenses of every kind issued under Division 6 (commencing with Section 12500).

(b) Any person who, by reason of physical disabilities, is unable to move about as a pedestrian is exempt from the fee provided in this section, but only in the event the license issued to that person restricts that person to the operation of a self-propelled wheelchair or invalid tricycle.

SEC 9. Chapter 7 (commencing with Section 15200) is added to Division 6 of the Vehicle Code, to read:

CHAPTER 7. COMMERCIAL MOTOR VEHICLE SAFETY PROGRAM

Article 1. Intent

It is the intent of the Legislature, in enacting this chapter, to adopt those standards required of drivers by the Federal Highway Administration of the Department of Transportation, as set forth in the Commercial Motor Vehicle Safety Act of 1986 (Title XII of P.L. 99-570) and to reduce or prevent commercial motor vehicle accidents, fatalities, and injuries by permitting drivers to hold only one license, disqualifying drivers for certain criminal offenses and serious traffic violations, and strengthening licensing and testing standards. This act is a remedial law and shall be liberally construed to promote the public health, safety and welfare. To the extent that this chapter conflicts with general driver licensing provision, this chapter shall prevail. Where this chapter is silent, the general driver licensing provisions shall apply. It is the further intent of the Legislature that this program be fee supported, and that the department fully recoup its costs within four years of the program's enactment.

Article 2. Definitions

15210. Notwithstanding any other provision of this code, as used in this chapter:

(a) "Commercial driver's license" means a driver's license issued by a state or other jurisdiction, in accordance with the standards contained in Part 383 of Title 49 of the Code of Federal Regulations, which authorizes the licenseholder to operate a class or type of commercial motor vehicle.

(b) "Commercial motor vehicle" means a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if any of the following apply to the vehicle:

(1) Has a gross combination weight rating of 26,001 or more pounds inclusive of a towed unit with a gross vehicle weight rating of more than 10,000 pounds.

(2) Has a gross vehicle weight rating of 26,001 or more pounds.

(3) Is designed to transport 16 or more passengers, including the driver.

(4) Is used in the transportation of hazardous materials.

(c) "Controlled substance" has the same meaning as defined by the federal Controlled Substances Act (21 U.S.C. Sec. 802).

(d) "Disqualification" means a prohibition against driving a commercial motor vehicle.

(e) "Employer" means any person, including the United States, a state, or political subdivision of a state, who owns or leases a commercial motor vehicle or assigns drivers to operate such a vehicle. A person who employs himself or herself as a commercial vehicle driver is considered to be both an employer and a driver for purposes of this chapter.

(f) "Felony" means an offense under state or federal law that is punishable by death or imprisonment for a term exceeding one year.

(g) "Gross combination weight rating" means the value specified by the manufacturer as the maximum loaded weight of a combination or articulated vehicle. In the absence of a value specified by the manufacturer, gross vehicle weight rating will be determined by adding the gross vehicle weight rating of the power unit and the total weight of the towed units and any load thereon.

(h) "Gross vehicle weight rating" means the value specified by the manufacturer as the maximum loaded weight of a single vehicle, as defined in Section 390.

(i) "Serious traffic violation" includes either of the following"

(1) Excessive speeding, as defined pursuant to the federal Commercial Motor Vehicle Safety Act (P.L. 99-570).

(2) Reckless driving, as defined pursuant to the federal Commercial Motor Vehicle Safety Act (P.L. 99-570).

(3) A violation of any state or local law involving the safe operation of a motor vehicle, arising in connection with a fatal traffic accident.

(4) Any other similar violation of a state or local law involving the safe operation of a motor vehicle, as defined pursuant to the Commercial Motor Vehicle Safety Act (Title XII of P.L. 99-570).

In absence of a federal definition, existing definitions under this code shall apply.

(j) "State" means a state of the United States or the District of Columbia.

(k) "Tank vehicle" means any commercial motor vehicle that is designed to transport any liquid or gaseous material within a tank that is permanently or temporarily attached to the vehicle or the chassis, including, but not limited to, cargo tanks and portable tanks, as defined in Part 171 of Title 49 of the Code of Federal Regulations. This definition does not include portable tanks having a rated capacity under 1,000 gallons.

Article 3. Driver Notification Requirements

15200. Any driver of a commercial motor vehicle who has a driver's license issued by the department, and who is convicted of any offense involving the safe operation of a motor vehicle in any other state, shall notify the department, in the manner provided by the department, of the conviction within 30 days of the date of conviction.

15222. Any driver of a commercial motor vehicle, who has a driver's license issued by the department, and who is convicted of any offense involving the safe operation of a motor vehicle, shall notify his or her employer of the conviction, within 30 days of the date of conviction.

15224. Any driver who has a driver's license or privilege suspended, revoked, or canceled by any state for any period, or who is disqualified from driving a commercial motor vehicle for any period, shall notify his or her employer of the suspension, revocation, cancellation, or disqualification, before the end of the business day following the action.

15226. Any driver who is issued an out-of-service order under the federal Motor Carrier Safety Regulations of the United States Department of Transportation (49 C.R.R. 392.5) shall report the issuance to his or her employer within 24 hours.

15228. The driver shall also report the issuance of an out-of-service order described in Section 15226 to the department in the manner provided by the department within 30 days unless the driver requests a review of the order by the United States Department of Transportation. If so, the driver shall report the order to the department within 30 days of an affirmation of the order.

15230. Each person who applies for employment as a driver of a commercial motor vehicle shall provide the employer, at the time of the application, with the following information for the 10 years preceding the date of application:

- (a) A list of the names and addresses of the applicant's previous employers for which the applicant was a driver of a commercial motor vehicle.
- (b) The dates the applicant was employed by each employer.
- (c) The reason for leaving that employment.

The applicant shall certify that all information furnished is true and complete. An employer may require an applicant to provide additional information.

Article 4. Employer Responsibilities

15240. No employer shall knowingly allow, permit, or authorize a driver to drive a commercial motor vehicle under either of the following conditions:

- (a) The driver has a driver's license or privilege suspended, revoked, or canceled by any state or has been disqualified from operating a commercial motor vehicle.
- (b) The driver has more than one driver's license.

15242. An employer who employs himself or herself as a commercial motor vehicle driver shall comply with both the requirement of this chapter pertaining to employers and the requirements of this chapter pertaining to employees.

Article 5. Commercial Driver's License

15250. (a) No person shall operate a commercial motor vehicle unless that person has in his or her immediate possession a valid commercial driver's license of the appropriate class.

(b) No person may be issued a commercial driver's license until he or she has passed a written and driving test for the operation of a commercial motor vehicle

which complies with the minimum federal standards established by the federal Commercial Motor Vehicle Safety Act of 1986 (P.L. 99-570) and Part 383 of Title 49 of the Code of Federal Regulations, and has satisfied all other requirements of that act as well as any other requirements imposed by this code.

(c) The tests shall be prescribed and conducted by or under the direction of the department. The department may allow an employer to administer the driving test part of the examination required under this section if the following conditions are met:

(1) The tests given by the third party are the same as those which would otherwise be given by the department.

(2) The third party has an agreement with the department with at least the following provisions:

(A) Authorization for the Federal Highway Administration, or its representative, and the department, or its representative, to conduct random examinations, inspections, and audits without prior notice.

(B) Permission for the department, or its representative, to conduct onsite inspections at least annually.

(C) A requirement that all third-party examiners meet the same qualification and training standards as the department's examiners, to the extent necessary to conduct the driving skill tests in compliance with the requirements of Part 383 of Title 49 of the Code of Federal Regulations.

(D) Authority for the department to take prompt and appropriate remedial action against the third-party testers if the third-party fails to comply with the standards for the commercial driver license testing program, or with any other term of the third-party contract.

(E) Authorization for the department to charge the employer a fee, as determined by the department, which is sufficient to defray the actual costs incurred by the department for administering and evaluating the employer testing program, and for carrying out any other activities deemed necessary by the department to assure sufficient training for the drivers participating in the program.

(d) Commercial driver license applicants who take and pass driving tests administered by a third party shall provide the department with evidence satisfactory to the department that the applicant has successfully passed the driving tests administered by the third party.

(e) Implementation dates for the issuance of a commercial driver's license pursuant to this chapter may be established by the department as it determines is necessary to accomplish an orderly commercial driver license program.

15255. The department shall study the adequacy of the existing fee structure for the issuance of drivers' licenses in relation to the costs of issuing commercial drivers' licenses and license endorsements as provided in this act. The department shall report to the Legislature, on or before March 1, 1989, its findings and recommendations on changes in the fees necessary to generate sufficient revenues to finance the drivers' license activities provided in this act.

15260. (a) Any applicant for a commercial driver's license who does not successfully complete the air-brake component of the knowledge test, or who does not successfully complete the driving skill test in a vehicle or combination of vehicles equipped with air brakes, shall, if otherwise qualified, receive a commercial driver's license that restricts the licenseholder from operating a commercial motor vehicle equipped with air brakes.

(b) To remove the restriction described in subdivision (a) from a commercial driver's license, the driver is required to make a new application for a commercial driver's license, and, in addition to any other requirements specified in this code, to successfully complete the air-brake component of the knowledge

test prescribed by the department, and to pass the driver-skill test in a vehicle or combination of vehicles equipped with air brakes.

(c) For the purposes of the driving-skill test and the restriction described in this section, air brakes shall include any braking system operating fully or partially on the air-brake principle.

15263. (a) any applicant for a commercial driver's license who successfully completes the driving-skill test in a vehicle or combination of vehicles equipped with an automatic transmission, shall, if otherwise qualified, receive a commercial driver's license that restricts the licenseholder from operating a commercial motor vehicle or combination of vehicles equipped with a manual transmission.

To remove the restriction described in subdivision (a) from a commercial driver's license, the driver is required to make a new application for a commercial driver's license, and, in addition to any other requirements specified in this code, successfully complete the driving-skill test in a vehicle or combination of vehicles equipped with a manual transmission.

Article 6. Endorsements

15275. (a) No person may operate a commercial motor vehicle described in this chapter unless that person has in his or her possession a valid commercial driver's license for the appropriate class, and an endorsement issued by the department to permit the operation of the vehicle.

(b) An endorsement to drive vehicles specified in this article shall be issued only to applicants qualified by examinations prescribed by the department and that meet the minimum standards established in Part 383 of Title 49 of the Code of Federal Regulations.

(c) The department may deny, suspend, revoke, or cancel an endorsement to drive vehicles specified in this article when the applicant does not meet the qualifications for the issuance or retention of the endorsement.

15278. A driver is required to obtain an endorsement issued by the department to operate any commercial motor vehicle which is any of the following:

- (a) A double trailer.
- (b) A passenger vehicle.
- (c) A tank vehicle.
- (d) A vehicle carrying hazardous materials.

Article 7. Sanctions

15300. (a) No driver of a commercial motor vehicle may operate a commercial motor vehicle for a period of one year if the driver is convicted of a first violation of any of the following

(1) Driving a commercial motor vehicle while under the influence of alcohol or a controlled substance.

(2) Leaving the scene of an accident involving a commercial motor vehicle operated by the driver.

(3) Using a commercial motor vehicle in the commission of any felony

(b) If any of the above violations occurred while transporting a hazardous material, the period specified in subdivision (a) shall be three years.

15302. No driver of a commercial motor vehicle may operate a commercial motor vehicle for the rest of his or her life if convicted of more than one violation of any of the following:

(a) Driving a commercial motor vehicle while under the influence of alcohol or a controlled substance.

(b) Leaving the scene of an accident involving a commercial motor vehicle operated by the driver.

(c) Using a commercial motor vehicle in the commission of more than one felony arising out of separate occasions of arrest or citation.

(d) Any combination of the above violations.

15304. No driver may operate a commercial motor vehicle for the rest of his or her life who uses a commercial motor vehicle in the commission of a felony Involving manufacturing, distributing, or dispensing a controlled substance, or possession with intent to manufacture, distribute, or dispense a controlled substance.

15306. No driver may operate a commercial motor vehicle for a period of 60 days if the person is convicted, on or after January 1, 1992, of a serious traffic violation involving a commercial motor vehicle and the offense occurred within three years of a separate offense of a serious traffic violation, which resulted in a conviction.

15308. No driver may operate a commercial motor vehicle for a period of 120 days if the person is convicted, on or after January 1, 1992, of a serious traffic violation involving a commercial motor vehicle and the offense occurred within three years of two or more separate offense of serious traffic violations, which resulted in convictions.

15315. (a) the department shall not issue a commercial driver's license to a person during a period in which the person is prohibited from operating a commercial motor vehicle, or the person's driving privilege is suspended, revoked, or canceled.

(b) No commercial driver's license may be issued to a person who has a commercial driver's license issued by any other state unless the person first surrenders the commercial driver's license issued by the other state, which license shall be returned to the issuing state.

15319. The department may execute or make agreements, arrangements, or declarations to carry out this chapter.

SEC. 10. Section 40300.2 is added to the Vehicle Code, to read:

40300.2. Whenever a person is arrested for a violation of this code, or a violation of any other statute required to be reported under Section 1803, the written complaint, notice to appear in court, or other notice of violation, shall indicate whether the vehicle involved in the offense is a commercial motor vehicle, as defined in subdivision (b) of Section 15210.

SEC. 11. Section 3.3 of this bill incorporates amendments to Section 1804 of the Vehicle Code, as amended by section 2 of Chapter 1345 of the Statutes of 1985, proposed by both this bill and AB 3681. It shall only become operative if (1) both bills are enacted and become effective January 1, 1989, (2) both bills amended Section 1804 of the Vehicle Code, as amended by Section 2 of Chapter 1345 of the Statutes of 1985, and (3) this bill is enacted after AB 3681, in which case Section 3 of this bill shall not become operative.

SEC. 12. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for those costs which may be incurred by a local agency or school district because this act creates a new crime or infraction, changes the definition of a crime or infraction, changes the penalty for a crime or infraction, or eliminates a crime or infraction, and because this act implements a federal law or regulation and involves only "costs mandated by the federal government," as defined by Section 17513 of the Government Code.

SEC. 13. The sum of five million four hundred seven thousand dollars (\$5,407,000), is hereby appropriated to the Department of Motor Vehicles from the Motor Vehicle Account in the State Transportation Fund for the purposes of implementing this act.