<u>TITLE</u>: Uninsured Motorist (SB 850) Study: Estimate of the Rate and Analysis of the Effects of Economic Covariate Factors and the Intervention of SB 850 on the Rate of Uninsured Motorists in California from 1978 to 1988, #2

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NTIS NUMBER: None

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## PROJECT OBTECTIVE:

To estimate the rate of uninsured motorists in California (first report) and to determine if the rate of uninsured motorists covaried with economic factors from 1978 to 1988 and if the intervention of SB 850 had an effect on the rate (second report).

## SUMMARY:

For the first report, the rate of uninsured motorists was estimated in the following three ways:

- 4. Ratio of total personal passenger vehicles (PPV) uninsured to fee-paid PPV, adjusted for drivers per vehicle.
- 5. Ratio of (PPV years requiring financial responsibility [FR] coverage PPV years having FR coverage) to PPV years requiring FR coverage.
- 6. CHP uninsured motorist violations adjusted for court dismissals.

The rate of uninsured motorists was estimated to vary between 20% and 29% from 1978 to 1988. The estimate for the most recent year evaluated was "about 25%."

For the second report, the rate of uninsured motorists, calculated from 1978 to 1988 using estimation method 2, was the dependent variable. The economic factors used as covariates were:

- 6. California median household income in constant dollars.
- 7. California percentage of families below the poverty level.
- 8. California percentage of families below 150% of the poverty level.
- 9. California consumer price index.
- 10. California unemployment rate.

Stepwise and hierarchical regression procedures were used. Only California median household income, in constant dollars, varied significantly (F = 5.68, P = 0.041) with the rate of uninsured motorists. Median household income varied inversely with the rate of uninsured motorists, with an adjusted  $r^2 = 0.319$ . The overall hierarchical regression equation had an adjusted  $R^2 = 0.62$ , indicating that the five economic and one intervention predictor variables accounted for 62% of the variance in the rate of uninsured motorists.

The intervention effect of SB 850, evaluated for one year post-reimplementation (1988), was not significant. This finding was considered very preliminary, due to the short post-implementation period for which data were available. It was planned that the intervention effect of SB 850 would be reevaluated when data for 1989 and 1990 became available.

## IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:

The findings of this study were adopted by the Department. No implementation was required.

## SUPPLEMENTARY INFORMATION:

A report to the Legislature on the rate of uninsured motorists, using data through 1990, was in preparation at the time of writing.