

The methods for estimating the number of “Registered Air Bag Equipped Vehicles”, and the “Fatalities Per Million Vehicle Years” have been modified to more accurately reflect the air bag exposure rates for drivers and passengers.

A new estimate for “Registered Air Bag Equipped Vehicles” was found by using R.L. Polk vehicle registration data. The new figures have been modified to consider the attrition rates<sup>1</sup> of vehicles on the road by model year, and the amount of time each vehicle was on the road during its first year. The current year’s estimate for the modified “Registered Air Bag Equipped Vehicles” is estimated to be the same as the previous year’s “Registered Air Bag Equipped Vehicles”. These numbers will be updated with the new R.L. Polk vehicle registration data the following year.

The quantity “Fatalities Per Million Vehicle Years” for a specific vehicle model year was previously calculated by dividing the count of occupants fatally injured by a deploying air bag for a given vehicle model year, by the product of the amount of newly registered air bag equipped vehicles of the given year and the number of years the vehicles of that year have been on the road. In the past when calculating the number of years vehicles of a given model year have been on the road, with the exception of the current MY, each vehicle was counted as being on the road for a full year. A new method of estimating the time each vehicle was on the road during its first year has been developed in which an even distribution of vehicle registrations is assumed throughout the year. Analysis of this distribution shows that a more accurate estimate of the time each vehicle was on the road in its first production year is one half of a year<sup>2</sup>.

The quantity “Fatalities Per Million Vehicle Years” for a normalized 12-month period was previously calculated by dividing the count of occupants fatally injured by a deploying air bag for each 12-month production period by the total number of registered vehicles with air bags during that same interval. Each 12-month production period was aligned with the vehicle production year, September 1 through August 31. A change similar to the one made for the vehicle model year exposure estimate was made for the quantity “Fatalities Per Million Vehicle Years” for a normalized 12-month period. The new method divides the count of occupants fatally injured by a deploying air bag for each 12-month period by the sum of the total number of registered vehicles with air bags of the previous model years<sup>3</sup> and one half the registered vehicles of the vehicle model year that corresponds to the production period of the crash.

<sup>1</sup>The attrition rate of a vehicle is dependent on the amount of time a vehicle has been on the road. Different estimated attrition rates were initially calculated for automobiles and light trucks. Estimated attrition rates were used from “Updated Vehicle Survivability and Travel Mileage Schedules”, November 1995, Visibility and Controls Division, Safety Performance Standards, U.S. Department of Transportation, National Highway Traffic Safety Administration.

<sup>2</sup>The estimate for the amount time a vehicle of a given model year has been on the road during the current vehicle model year is multiplied by a correction factor that is based on the month the data is generated.

<sup>3</sup> The term “the previous model years” refers to the vehicle model years before the vehicle model year of the production period of the crash.