

VALUE ANALYSIS OF AUTO FUEL FED
FIRE RELATED FATALITIES

DEPOSITION
EXHIBIT

#1 - Ivey
2/1/00

Accident statistical studies indicate a range of 650-1,000 fatalities per year in accidents with fuel fed fires where the bodies were burnt. There has been no real determination of the percent of these people which were killed by the violence of the accidents rather than by fire. The condition of the bodies almost precludes making this determination.

Based on this statistic and making several assumptions, it is possible to do a value analysis of automotive fire related fatalities as they relate to General Motors.

The following assumptions can be made:

1. In G.M. automobiles there are a maximum of 500 fatalities per year in accidents with fuel fed fires where the bodies were burnt.
2. Each fatality has a value of \$200,000.
3. There are approximately 41,000,000 G.M. automobiles currently operating on U.S. highways.

Analyzing these figures indicates that fatalities related to accidents with fuel fed fires are costing General Motors \$2.40 per automobile in current operation.

$$\frac{500 \text{ fatalities} \times \$200,000/\text{fatality}}{41,000,000 \text{ automobiles}} = \$2.40/\text{automobile}$$

This cost will be with us until a way of preventing all crash related fuel fed fires is developed.

If we assume that all crash related fuel fed fires can be prevented commencing with a specific model year another type analysis can be made.

Along with the assumptions numbered above the following assumptions are necessary:

1. G.M. builds approximately 5,000,000 automobiles per year.
2. Approximately 11% of the automobiles on the road are of the current model year at the end of that model year.

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This analysis indicates that for G.M. it would be worth approximately \$2.20 per new model auto to prevent a fuel fed fire in all accidents.

$$500 \text{ fatalities} \times 11\% \text{ new model autos} = 55 \text{ fatalities in new model autos}$$

$$\frac{55 \text{ fatalities} \times \$200,000/\text{fatality}}{2,000,000 \text{ new model autos}} = \$2.20/\text{new model auto}$$

This analysis must be tempered with two thoughts. First, it is really impossible to put a value on human life. This analysis tried to do so in an objective manner but a human fatality is really beyond value, subjectively. Secondly, it is impossible to design an automobile where fuel fed fires can be prevented in all accidents unless the automobile has a non-flammable fuel.

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