VALUE ANALYSIS OF AUTO FUEL FED
FIRE RELATED FATALITIES

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 violent 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 automobile 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 by
accepting 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.
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.

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\frac{500 \text{ fatalities} \times 11\% \text{ of model autos}}{\text{55 fatalities in new model autos}}
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\[
\frac{55 \text{ fatalities} \times \$200,000/\text{fatality}}{5,000,000 \text{ new model autos}} = \$2.20/\text{new model auto}
\]

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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