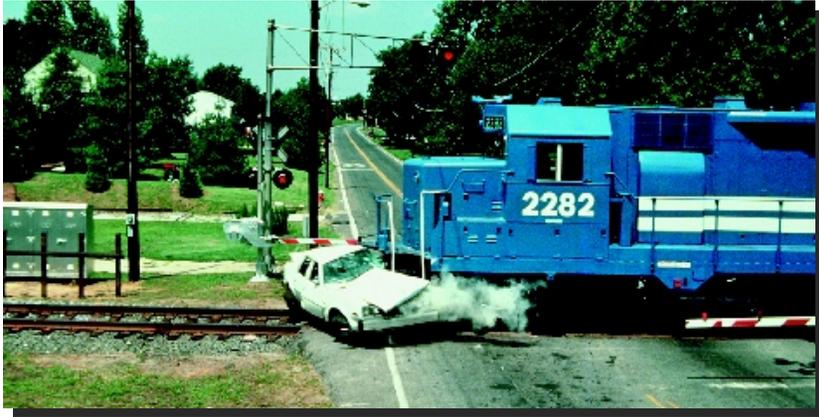


Causal Analysis of Grade Crossing Accidents



Project Description:

Currently, our accident reporting systems tell us “what” happened, but we do not know “why” the accident occurred. Emphasis will be placed on identifying human factors (e.g., crossing characteristics that promote poor motorist decision-making) and system issues (e.g., ambiguities in jurisdiction that impede the correction of problems) that contribute to accidents. This project’s primary goal is to identify areas for future research. It will use Moray’s Sociotechnical model and Reason’s analytic framework to guide the work.

Railroad Impact:

Grade crossing accidents account for the second highest number of fatalities in the rail road industry. This project will identify new approaches that may lead to further reductions in accidents and help to identify systemic issues that have been previously overlooked.

Schedule:

- **FY07-08** – Literature review, analysis of accident statistics
- **FY08-12** – Analysis of accident statistics, obtain and analyze data from FWHA naturalistic driving study. Develop comprehensive picture of grade crossing accident causation to include all levels of the sociotechnical model and Reason’s framework

FRA Task Monitor: Tom Raslear, RDV32