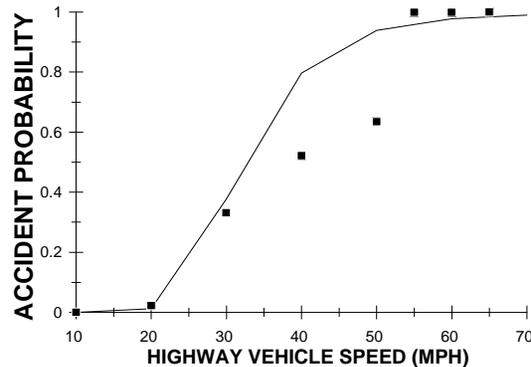


Motorist Decision Making Model



— predicted ■ observed

Project Description:

- Accidents at grade crossings often involve faulty decision-making by motorists.
- Current model, based on Signal Detection Theory, used data from 1986
- Useful in regulatory analyses (horn ban, reflectorization, etc.), but needs to be updated
- Assess model's predictive value based on regulatory actions and changes in grade crossing system
- Revised model issued in user-friendly form

Railroad Impact:

Understanding why motorists drive into the side of trains or directly in front of trains is a very important element in reducing grade crossing accidents. Decision-making models can help predict what types of changes in grade crossings or trains are likely to provide the best return on investment and can suggest new strategies for interventions.

Schedule:

- **FY08-09** – Select data from accident database for model update: with regard to regulatory actions, changes in system, etc.
- **FY09-10** – Revise model, develop software that will allow easier use of the model by novice users

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