Roadway Geometry Examples



1/4/2005

TRB 2005 Annual Meeting

Situation Awareness Examples



GENERIC HUMAN/MACHINE CONTROL SYSTEM MODEL



SIMPLE CROSSOVER MODEL MEASUREMENT



1/4/2005

TRB 2005 Annual Meeting

CAR FOLLOWING BEHAVIOR



Measures of Driver Control Behavior



Driver/Vehicle System Performance Measures



THE FUTURE FOR SIMULATOR ASSESSMENT AND TRAINING

Improved PC Hardware:
Main Processing
Graphics Processing
Visual and Aural Displays
Lower Cost
Improved Scenarios (Critical Hazards)
Baseline and Validation Studies

SIGNAL LIGHT DECISIONS



SIGNAL LIGHT DECISION MAKING MODEL



Driver/Vehicle System Performance Measures



SIGNAL LIGHT RISK TAKING



PENALTY EFFECT ON RISK TAKING



1/4/2005

DECISION MODEL RESPONSE



CAR FOLLOWING MODEL



1/4/2005

TRB 2005 Annual Meeting

CAR FOLLOWING STUDY



CAR FOLLOWING DATA TIME HISTORIES



CAR FOLLOWING FFT ANALYSIS



1/4/2005

TRB 2005 Annual Meeting

DECISION MAKING MODEL

