Evaluating the Potential Safety Impact of Advanced Crash Avoidance Technologies

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• Determine the potential safety impact of selected new and emerging technologies

• This information may be used to inform consumers about:
  – What advanced safety features vehicles have that help them avoid a crash, reduce their severity when it occurs and protect the occupant?
  – In what situations do these systems work?
  – How effective are they in meeting the objectives?

• Role of NHTSA in facilitating deployment
  – Ensuring that there are suitable specifications for safety technologies
  – Developing test procedures to discriminate full system performance
  – Estimating safety benefits
  – Using consumer information for facilitating deployment
  – Addressing human/machine interface issues
Background

- European Commission Intelligent Car Initiative
- Industry/supplier meetings over the last 2 years
- Public statements by NHTSA Regarding Advanced Technologies
- Program plan
- Request for information & expression of interest - July 2005
Emerging Technologies

- Electronic Stability Control
- Adaptive Cruise Control
- Night Vision Systems
- Curve Speed Warning
- Lane Departure Warning
- Alcohol Monitoring
- Brake Assist Systems
- Pre-crash sensing
ACAT Program

- Cooperative Agreements
- Allow for Multiple Awards If Funding Permits
- Seek 50/50 Cost Share
- Allows the Applicant to Specify the Countermeasures
- Include Crash Mitigation Technologies
- Limit to Light Vehicles
- Protect Applicant’s Proprietary Data and Information

*BUT* the Resulting Methodologies, Test Procedures, and Test Data Must Be Available for Public Release
Task 1 - Safety Impact Methodology

Task 2 - Safety Area to be Addressed and Advanced Technology

Task 3 - Develop Objective Tests for Predicting Safety Benefits

Task 4 - Conduct Objective Tests

Task 5 - Develop Safety Benefits Utilizing the Safety Impact Methodology