Program Title:
Cooperative Intersection Collision Avoidance System (CICAS-V)
to Avoid Violations at Stop Signs & Signals

Program Manager: Louis V. Lombardo

SAE Government/Industry Meeting
May 8, 2006
Washington, DC
Program Purpose

• Overall Goal:
  Cooperative infrastructure/vehicle safety systems that prevent traffic control violations to reduce crashes, injuries, and deaths

• Objectives:
  – Facilitate introduction and commercialization of effective intersection traffic control violation prevention systems
  – Establish a partnership between the U.S. DOT and the automotive industry involving a wide range of stakeholders
Program Purpose

Program

- R, D, T, & E of In-vehicle Driver Warning System

- DSRC radios at intersections and in-vehicles will communicate information on signal presence, state, and intersection map

- Onboard equipment will use intersection and vehicle information to provide drivers with timely warnings of potential traffic control violations
**Intersection Collision Problem Definition**

- **5,172** Fatal Intersection Crashes at Signals & Signs:
  - 44% (2,270) at Traffic Signals
  - 56% (2,902) at Stop Signs

- **Estimated 424,000** Injury Intersection Crashes:
  - 59% (250,000) at Traffic Signals
  - 41% (174,000) at Stop Signs

- **Estimated 583,000** PDO Intersection Crashes:
  - 57% (335,000) at Traffic Signals
  - 43% (248,000) at Stop Signs

*Estimated 300,000 Traffic Signals plus 3 Million Stop Signs in U.S.*

*Source: Traffic Safety Facts, 2004, p. 50*
Program Team

• CICAS - V FOT Partners:
  – Government: NHTSA, FHWA, ITS JPO, Volpe Center RITA
  – Private:
    1. CAMP (GM, Ford, DaimlerChrysler, Toyota, Honda)
    2. Virginia Tech

• CICAS State & Other Partners:
  1. California DOT with California Path
  2. Michigan DOT with UMTRI
  3. Minnesota DOT with University of Minnesota
  4. Virginia DOT
  5. Traffic Controller Industry
CICAS-V Roadmap

Duration of Initiative: CY06 – CY10
Status

• Project Status
  – Agreement to be signed with CAMP in May 2006

• 2006 Milestones
  – Test Plan
  – Requirements documents
  – Problem Determination Data Analyses (NHTSA)
One Intersection Picture
Red Light Running Crash About to Happen
Intersection Crash Happening

intersectioncrash.mpg