



Intelligent Transportation Systems
U.S. Department of Transportation



**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



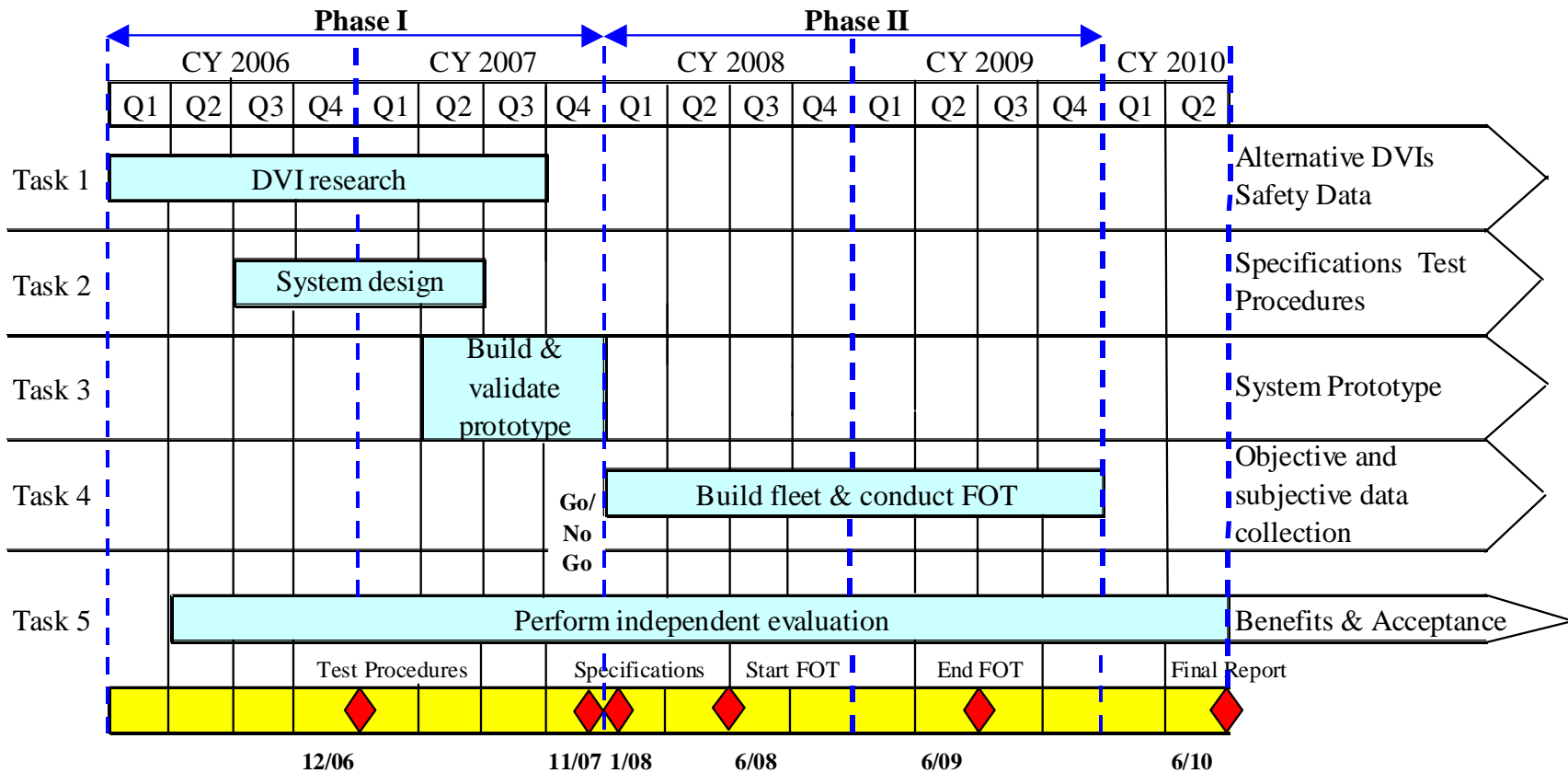
Program Team

- **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



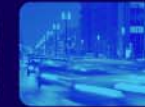
Status

- **Project Status**

- Agreement to be signed with CAMP in May 2006
- Independent Evaluation Agreement with Volpe 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