

## **IIHS Effects of Red Light Camera Enforcement on Fatal Crashes**

### **Abstract Highlights**

- From the 99 US cities with more than 200,000 residents in 2008:
  - 14 cities were identified that had red light camera enforcement during 2004-08 but not during 1992-96, and
  - 48 cities were identified that did not use red light cameras during either period
- After controlling for population density and land area, the fatal **red light running crash rates** during 2004-08 in the 14 cities with cameras were estimated to be **24 percent lower** than the rates that would have been expected without cameras.
- Based on a 24 percent reduction in fatal **red light running crashes**, there would have been 74 fewer fatal red light running crashes in those 14 cities or, given the average number of fatalities per red light running crash, **approximately 83 lives saved**.
- Red light cameras reduce citywide fatal red light running crash rates and, to a lesser but still significant extent, the rate of all fatal crashes at signalized intersections.
- If red light cameras had been in place from 2004-08 in all 99 U.S. cities with populations greater than 200,000, a **total of 815 deaths could have been avoided**.
- Red light running killed 676 people and injured an estimated 113,000 in 2009. 64% of the deceased were people other than the red light running drivers – occupants of other vehicles, passengers, bicyclists, pedestrians.
- Cities wishing to reduce fatal crashes at signalized intersections should consider red light camera enforcement.
- Enforcing red light laws is important, but many communities do not have the resources for police to patrol intersections as often as would be needed to ticket most motorists who run red lights. Traditional police enforcement also poses special difficulties for police, who in most cases must follow a violating vehicle through a red light to stop it. **This can endanger motorists and pedestrians as well as officers.**
- The significant reduction in all types of fatal crashes at signalized intersections indicates that **cameras have a generalized effect on motorists' behaviors at intersections that extends beyond running red lights.**