Red-Light Running
There are at least 3 million intersections in the United States.

At least 300,000 are signalized.
There were 8,657 intersection fatalities in 2007.

- **Signalized Intersection**: 65%
- **Unsignalized Intersection**: 31%
- **Unknown**: 4%

**Intersection Fatalities**

**Fatality Location**
What is Red Light Running?

• **Permissive yellow rule:**
  - Driver can legally enter intersection during entire yellow interval
  - **Violation** occurs if driver enters intersection after onset of red

• **Restrictive yellow rule:**
  - Driver can neither enter nor be in intersection on red
  - **Violation** occurs if driver has not cleared intersection after onset of red
Red-Light Running

Intersection Definition
Safety Facts About Red-Light Running

Fatal Red-Light Running Crashes

Safety Facts About Red-Light Running

Red-Light Running Crashes

Source: Establishing a Uniform Definition of Red-Light Running Crashes, ITE Journal, March 2006
Safety Facts About Red-Light Running

- Red-light running crashes are more likely than other crashes to cause injury
- On urban roads, fatal RLR crashes are more likely than other fatal crashes
- Fatal RLR crashes are somewhat more likely to occur during the day

Source: Prevalence and Characteristics of Red Light Running Crashes in the United States, Accident Analysis and Prevention, 1999
Types of Crashes

- Right angle
- Rear end
- Left turn
4% of Americans reported running red lights

- 1% run them “often”
- 3% run them “sometimes”

97% of drivers feel that other drivers running red lights are a major safety threat

1 in 3 people claim they personally know someone injured or killed in a red light running crash
Types of Red-Light Runners

Unintentional

Intentional

Engineering Countermeasures

Enforcement Countermeasures
Effective Programs

Red-Light Running
The First Step

The first step to addressing red-light running is to conduct a thorough field review.
Intersection Safety Resources

- NCHRP Report 500 Volume 12
- Guide sheets
- Safety Strategies brochure
- Signalized Intersections: Informational Guide
- Red Light Camera Systems: Operational Guidelines
- Making Intersections Safer: A Toolbox...
- Field Guide for Inspecting Signalized Intersections...
Engineering Countermeasures

- Improve signal visibility
- Improve line of sight
- Improve signal conspicuity
- Increase likelihood of stopping
- Improve signal timing
- Eliminate the need to stop
Follow up countermeasures with observation

Number of red light runners can be surrogate for improved safety

If unsuccessful, look towards enforcement countermeasures
Enforcement Countermeasures

- Increased enforcement
- Enforcement assistance lights
- Automated enforcement
Do you know the law?

1. When you approach a red light stop before the stop line if one exists, otherwise as close to it as you.
2. Do not "stop" into the intersection while waiting.
3. When making a right turn on red you must:
   a. Come to a full stop.
   b. Yield to all pedestrians and traffic with a green light.
4. You must come to a full stop and yield to any visibly signaling pedestrians with a walking signal or crosswalk sign. Be ready to allow the crossing traffic to pass.
5. If a traffic signal is inoperable treat the intersection like a four-way stop.

Stop Red Light Running Week
Statewide Enforcement Wave
August 4 – 11, 2007

Safe Roads for a Safer Future
Investment in roadway safety saves lives
For More Information

• FHWA Office of Safety

• Institute of Transportation Engineers

• American Association of State Highway and Transportation Officials

• Insurance Institute for Highway Safety

• Red Means Stop Coalition