

Checklist of Previously Attempted Red Light Running Countermeasures
 (check any countermeasures previously attempted or those already in place)

Countermeasure Attempted:	Explanation:	N/A
Improve Signal Visibility		
<input type="checkbox"/> Placement and number of signal heads	_____	<input type="checkbox"/>
<input type="checkbox"/> Size of signal display	_____	<input type="checkbox"/>
<input type="checkbox"/> Line of sight	_____	<input type="checkbox"/>
Increase Likelihood of Stopping		
<input type="checkbox"/> SIGNAL AHEAD signs	_____	<input type="checkbox"/>
<input type="checkbox"/> Advanced-warning flashers	_____	<input type="checkbox"/>
<input type="checkbox"/> Rumble strips	_____	<input type="checkbox"/>
<input type="checkbox"/> Left-turn signal sign	_____	<input type="checkbox"/>
<input type="checkbox"/> Pavement surface condition	_____	<input type="checkbox"/>
<input type="checkbox"/> Pavement markings	_____	<input type="checkbox"/>
<input type="checkbox"/> Loop detector placement	_____	<input type="checkbox"/>
Eliminate Need to Stop		
<input type="checkbox"/> Unwarranted signals	_____	<input type="checkbox"/>
<input type="checkbox"/> Roundabout intersection design	_____	<input type="checkbox"/>
<input type="checkbox"/> Flash mode	_____	<input type="checkbox"/>
Improve Signal Conspicuity		
<input type="checkbox"/> Redundancy	_____	<input type="checkbox"/>
<input type="checkbox"/> LEDs signal lenses	_____	<input type="checkbox"/>
<input type="checkbox"/> Back-plates	_____	<input type="checkbox"/>
Address Intentional Violations		
<input type="checkbox"/> Signal optimization	_____	<input type="checkbox"/>
<input type="checkbox"/> Signal-cycle length	_____	<input type="checkbox"/>
<input type="checkbox"/> Yellow-change interval	_____	<input type="checkbox"/>
<input type="checkbox"/> All-Red clearance interval	_____	<input type="checkbox"/>
<input type="checkbox"/> Dilemma-zone protection	_____	<input type="checkbox"/>

Clearance formulas

Yellow Clearance: $Y = t + v / (2a \pm 64.4g)$	All-Red Clearance Interval: $R = (W + L) / V$
<i>Where:</i>	<i>Where:</i>
<i>Y = yellow interval</i>	<i>R=length of red clearance interval to nearest 0.1 second</i>
<i>g = grade of approach over the braking distance in percent/100</i>	<i>W = width of intersection measured from near side stop line to either far edge of conflicting traffic lane or to farthest conflicting pedestrian crosswalk</i>
<i>Note: If flat use 0 (subtract for negative grade, add for positive)</i>	
<i>v = 85th percentile approach speed, in feet/second (ft/sec = 1.47 x mph)</i>	<i>L = length of vehicle (20 ft typical)</i>
<i>a = deceleration rate, set at 10 feet/second²</i>	<i>V = speed of vehicle through intersection in ft/sec</i>
<i>t = reaction time, set at 1.0 second</i>	