Louisiana Department of Transportation and Development
Previously Attempted Red Light Running Countermeasures Checklist

Countermeasure Attempted:	Explanation:	N/A

Improve Signal Visibility

☐ Placement and number of signal heads _____ ☐

☐ Size of signal display _____ ☐

☐ Line of sight _____

Increase Likelihood of Stopping

☐ SIGNAL AHEAD signs _____ ☐

☐ Advanced warning Flashers _____ ☐

☐ Rumble strips _____ ☐

☐ Left turn signal sign _____ ☐

☐ Pavement surface condition _____ ☐

☐ Pavement markings _____ ☐

☐ Loop detector placement _____ ☐

Eliminate Need to Stop

☐ Unwarranted signals _____ ☐

☐ Roundabout intersection design _____ ☐

☐ Flash mode _____ ☐

Improve Signal Conspicuity

☐ Redundancy _____ ☐

☐ LEDs signal lenses _____ ☐

☐ Back plates _____ ☐

Address Intentional Violations

☐ Signal optimization _____ ☐

☐ Signal cycle length _____ ☐

☐ Yellow change interval _____ ☐

☐ All Red clearance interval _____ ☐

☐ Dilemma zone protection _____ ☐

Clearance Formulas:

Based on Traffic Engineering Handbook
Yellow Clearance   All Red Clearance
$CP = t + [V/(2a + 64.6g)] + [(W + L) / V]$
where:
CP = non-dilemma change period (Change + Clearance interval) (in sec)
t = perception—reaction time in seconds (nominally 1 sec)
V = approach speed in ft/sec
g = percent grade (positive for upgrade, negative for downgrade)
a = deceleration rate, typically 10ft/sec^2
W = distance from trailing edge of stop bar to far side of intersection extension of curb lines of cross street (in feet)
L = length of vehicle in feet (typical 20 ft)

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