Replace Standard STOP Sign with Flashing LED STOP sign



Flashing LED STOP signs help to increase visibility, reduce accidents, and improve compliance with STOP sign rules.

Implementation Strategy

How and Where to Apply

- Flashing LED STOP signs are best applied at intersections with high crash rates, low driver compliance, or where STOP signs are frequently missed due to visibility or driver distraction.
- They are especially effective at rural or unsignalized intersections and locations where traditional STOP signs have proven insufficient in reducing crash occurrences.
- These signs use embedded LED lights that flash to draw driver attention, particularly in low-light, adverse weather, or nighttime conditions.

Use in a Safe System Approach

Flashing LED STOP signs support the SSA by improving road design (Safe Roads) and enhancing driver awareness and decision-making (Safe Road Users) at critical intersections. This increases sign visibility, encourages better compliance.

Key Stakeholders

State DOTs, Traffic Safety Engineers

Proactive Implementation

LED STOP signs should be proactively installed at intersections with prior crash histories or observed issues with driver compliance. They are particularly suited for locations flagged during network screening as having potential for safety improvement. Installation during routine sign upgrades can keep implementation costs low while maximizing visibility and impact.

Countermeasure Overview

Objective: Improve driver awareness of intersections as viewed from the intersection approach

Strategy: Install flashing beacons at stop-controlled intersections

Targeted Solution



- Reduced visibility
- Driver inattention
- Non-Compliance



- Angle
- Rear-end
- Turning



Not specified



All

Safety Linkage



Unsignalized Intersection



Safer Infrastructure



Safer Roads

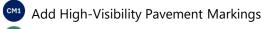
SAFE SYSTEM

ROADWAY DESIGN
TIER 1
TIER 2
TIER 3

Tier 4

LED STOP sign. Source: carmanah.com

Selected Related Countermeasures



Increase intersection sight distance

Improve Intersection Lighting

Cost: \$ (Low)

Service Life: 5 years

Benefit-Cost Ratio: 25:1



LED STOP signs help reduce the frequency of angle crashes¹

¹ CMF ID: 6602

Resources

- Impact of Flashing LED Stop Signs on Crash Reduction and Driver Behavior
- Flashing LED Stop Sign and Optical Speed Bars



