CIA TEAM SAFETY

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Proven Safety Countermeasures

FHWA's Proven Safety Countermeasures initiative (PSCi) is a collection of countermeasures and strategies effective in reducing roadway fatalities and serious injuries on our Nation's highways. Transportation agencies are strongly encouraged to consider widespread implementation of PSCs to accelerate the achievement of local, State, and National safety goals.

SPEED MANAGEMENT







ROADWAY DEPARTURE



Wider Edge Lines



Enhanced Delineation for Horizontal Curves



<u>Longitudinal Rumble</u> <u>Strips and Stripes</u>



<u>SafetyEdgeSM</u>



Roadside Design Improvements at Curves



Median Barriers

INTERSECTIONS



Backplates with Reflective Borders



Corridor Access Management



<u>Left- and Right-Turn</u> <u>Lanes at Two-Way</u> <u>Stop-Controlled</u> <u>Intersections</u>



Reduced Left-Turn Conflict Intersections



Roundabouts



Systemic Application of Multiple Low Cost Countermeasures at Stop-Controlled Intersections



Yellow Change Intervals

PEDESTRIAN/BICYCLIST



Crosswalk Visibility Enhancements



<u>Bicycle Lanes</u>



Rectangular Rapid Flashing Beacons



<u>Leading Pedestrian</u> Interval



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacons



Road Diets (Roadway Reconfiguration)



<u>Walkways</u>

CROSSCUTTING



Pavement Friction Management







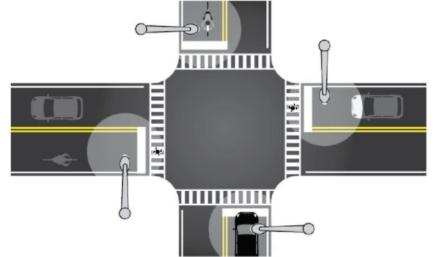
Road Safety Audits



Lighting

The number of fatal crashes occurring in daylight is about the same as those that occur in darkness. However, the nighttime fatality rate is three times the daytime rate because only 25 percent of vehicle miles traveled (VMT) occur at night. At nighttime, vehicles traveling at higher speeds may not have the ability to stop once a hazard or change in the road ahead becomes visible by the headlights. Therefore, lighting can be applied continuously along segments and at spot locations such as intersections and pedestrian crossings in order to reduce the chances of a crash.

Adequate lighting (i.e., at or above minimum acceptable standards) is based on research recommending horizontal and vertical illuminance levels to provide safety benefits to all users of the roadway environment. Adequate lighting can also provide benefits in terms of personal security for pedestrians, wheelchair and other mobility device users, bicyclists, and transit users as they travel along and across roadways.





Safety Benefits:

Lighting can reduce crashes up to:

42%

for nighttime injury pedestrian crashes at intersections. ¹

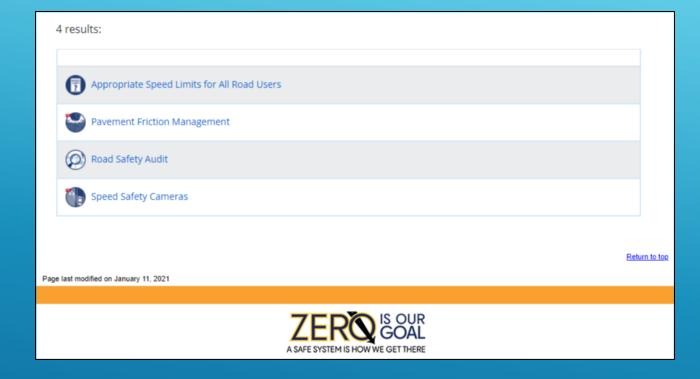
33-38%

for nighttime crashes at rural and urban intersections. 1

28%

for nighttime injury crashes on rural and urban highways. 1

Proven Safety Countermeasures « Proven Safety Countermeasures Home Proven Safety Countermeasures Filter Tool All 28 PSCs are listed at the bottom of the page in alphabetical order. Answer one or more of the following questions to obtain a tailored listing of potential PSCs for the location of interest. Users may select multiple answers for each question. After checking the desired box(es), click "Apply Filters," then the list of PSCs will update at the bottom of the page to match the query. Click "Clear Form" to remove all filters and return to the default display of all 28 PSCs. Select a countermeasure name to learn more including a description, safety effectiveness, context, application, cost, and considerations for implementation. What type of area is the roadway located? What is the functional classification of the roadway? □ Urban ✓ Freeway Suburban Highway □ Rural ☐ Arterial ☐ Collector Local Which focus area is being addressed? What is vehicular volume in Average Annual Daily Traffic (AADT) along the major roadway? □ Roadway Departure ☐ Low (<2,000) ✓ Intersection ☐ Pedestrian ✓ Medium (2,000-15,000) Bicyclist ☐ High (>15,000) □ Speed Management What problem is being addressed? What specific crash types are being targeted at the ☐ Inadequate Visibility, Conspicuity, or Sight Distance location? ☐ Angle ■ Excessive Vehicular Conflicts □ Congestion ☐ Left-Turn Excessive Speeds Right-Turn ☐ Non-Compliance (yielding right-of-way) Rear End ■ No Separation of Users □ Pedestrian/Bicyclist ☐ Vulnerable Users not Considered ☐ Head On ☐ Run-Off-Road/Single Vehicle ☐ Driver Inattention (distracted/drowsy) ☐ Driver Impairment (alcohol/drugs) ☐ Sideswipe, same direction ☐ Sideswipe, opposite direction □ Wet ■ Nighttime ☐ Speed-related Rollover ☐ Fixed-Object Clear Form Apply Filters











QUESTIONS?