

CURB EXTENSIONS

🔍 Description

Curb extensions or “bulb-outs” decreases the roadway width at intersections by expanding out the curbs. This increases safety by reducing the time and distance pedestrians have to cross, removing obstructions from around the crosswalk which increases visibility, and decreases turning speeds.

🚧 Safety Focus Areas



Pedestrians



Intersections



Visibility

🎯 Ideal Application

- Lower speed roads



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



PEDESTRIAN HYBRID BEACONS

Description

Pedestrian Hybrid Beacons or HAWK signals are pedestrian-specific traffic signals. The lights remain inactive until a pedestrian presses a button. The lights then flash red requiring traffic to stop, and after the pedestrians cross, the lights revert to their inactive mode.

Safety Focus Areas



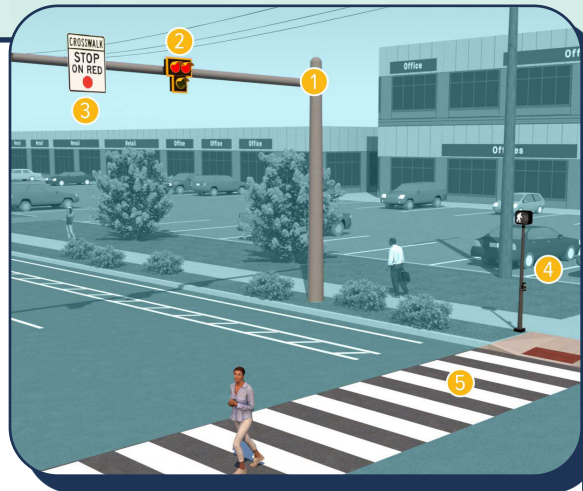
Pedestrians



Visibility

Ideal Application

- Large arterials
- High speed roads



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



RECTANGULAR RAPID FLASHING BEACONS

🔍 Description

Rectangular Rapid Flashing Beacons or RRFBs are pedestrian activated visual devices. Upon activation from a pedestrian pressing a button, the lights flash yellow directing oncoming traffic to yield to crossing pedestrian.

🚧 Safety Focus Areas



Pedestrians



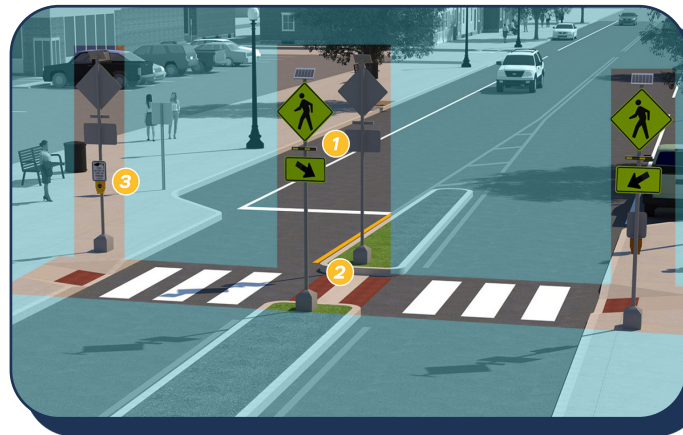
Bicyclists



Visibility

🎯 Ideal Application

- Unsignalized marked crosswalks
- Neighborhood roads
- Minor arterials



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



PEDESTRIAN MEDIAN REFUGE

🔍 Description

A pedestrian median refuge is a space built into a median to allow pedestrians and bicyclists to wait when crossing the road. This allows pedestrians to focus on one direction of traffic at a time and wait for a safe gap before completing the second phase of their crossing.

🚧 Safety Focus Areas



Pedestrians



Intersections

🎯 Ideal Application

- Mid-block crossings
- Medium to large arterials



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



RAISED PEDESTRIAN CROSSWALKS

Description

A raised pedestrian crosswalks are crosswalks which are elevated above the normal roadway surface which requires traffic to slow down before traveling over. A mix between a crosswalk and a speed hump.

Safety Focus Areas



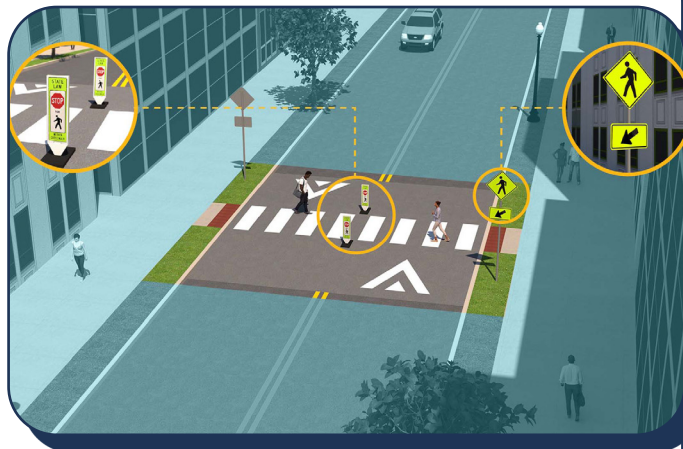
Pedestrians



Bicyclists

Ideal Application

- Midblock crossings
- Neighborhood roads



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



AUTOMATED SPEED ENFORCEMENT/SPEED CAMERAS

Description

Cameras which ticket vehicles going over the posted speed limit.

Safety Focus Areas



Speeding

Ideal Application

- Busy roads
- Roads near sensitive locations (e.g., schools, hospitals, senior centers, etc.)



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



ROADWAY LIGHTING

🔍 Description

Adding or upgrading streetlights to ensure adequate and uniform lighting along a road.

⚠️ Safety Focus Areas



Lighting



Bicyclists



Pedestrians

🎯 Ideal Application

- Along long roadway stretches
- Midblock Crossings



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



MEDIAN FENCING

🔍 Description

In locations where pedestrian crossings are dangerous, a non-traversable median fence can be installed to prevent mid-block crossing and jaywalking, directing pedestrians towards safe, designated crossings.

⚠️ Safety Focus Areas



Pedestrians



Intersections



Impairment

🎯 Ideal Application

- Large arterials with high foot traffic



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



HIGH FRICTION SURFACE TREATMENTS

🔍 Description

HFST is a pavement treatment which increases tire grip and skid resistance, significantly reducing crashes, injuries, and fatalities caused by friction demand issues, especially in wet conditions or locations with high vehicle speeds or difficult roadway geometry.

⚠️ Safety Focus Areas



Roadway corridor



Roadway departure

🎯 Ideal Application

- Intersections along busy roadways
- Tight curves along roadways



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



CORNER RADIUS REDUCTION

Description

Corner radius reductions tighten the curve of a corner, forcing traffic to slow when turning due to the sharper turn angle.

Safety Focus Areas



Pedestrians



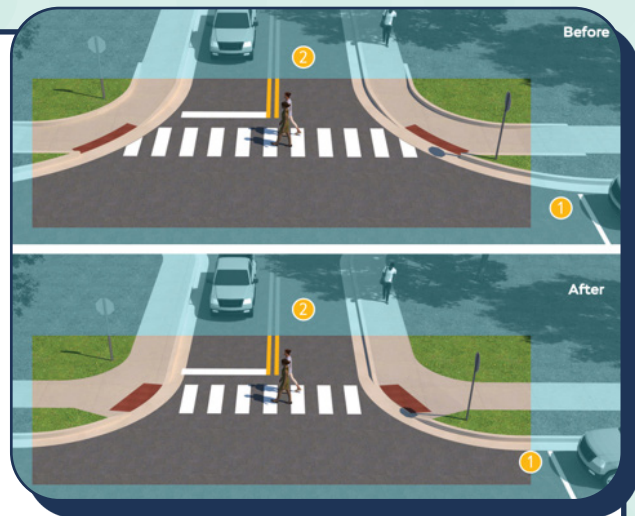
Bicyclists



Intersections

Ideal Application

- Lower speed roadways
- Signalized and unsignalized intersections



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



DAYLIGHTING

Description

Daylighting is the removal of street parking within close distances to intersections to increase drivers' lines of sight.

Safety Focus Areas



Pedestrians



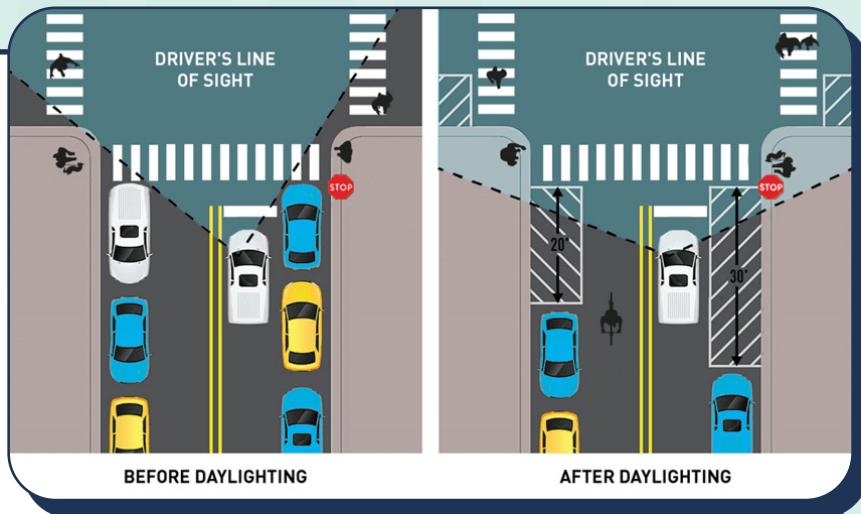
Intersections



Visibility

Ideal Application

- Streets with on-street parking



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME



DEDICATED TURN LANES

🔍 Description

Dedicated turn lanes are separate turn lanes for the exclusive use of turning vehicles. This allows turning vehicles to decelerate prior to turning without blocking through traffic.

🚧 Safety Focus Areas



Intersections

🎯 Ideal Application

- Major arterials
- Intersections with high turning volumes and collisions



CRASH REDUCTION

Left-Turns

Low Medium High

Right-Turns

Low Medium High

AVERAGE COST

Low Medium High

IMPLEMENTATION TIME

Low Medium High

RETROFLECTIVE BACKPLATES

🔍 Description

Retroflective backplates are backings put on traffic signals to increase their visibility, especially at night.

🚧 Safety Focus Areas



Intersections



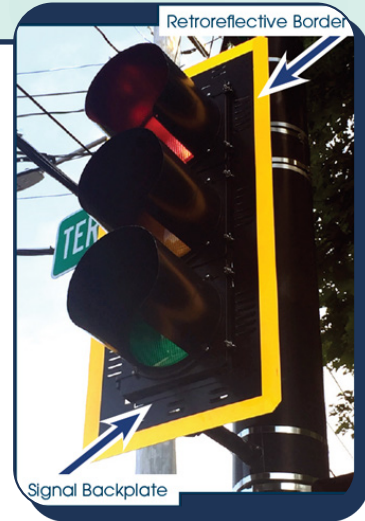
Lighting



Visibility

🎯 Ideal Application

- Signalized intersections



CRASH REDUCTION



AVERAGE COST



IMPLEMENTATION TIME

