

**To:** CRCOG Transportation Committee

From: Roger Krahn, Principal Transportation Engineer

**Date:** October 16, 2020

**Subject:** New CTDOT Safety Projects for Local Roads

CTDOT is developing new safety project programs for local roads. These programs are included in the Connecticut Highway Safety Improvement Program (HSIP) Implementation Plan for Federal Fiscal Year 2021, as approved by FHWA on 9/30/2020. This Plan was an FHWA requirement because CT did not meet its safety performance targets. During 2017 to 2019 over 50% of CT fatalities and serious injuries were on local roads. The HSIP can be found at this link:

https://portal.ct.gov/-/media/DOT/documents/dtrafficdesign/CT-HSIP-implementation-plan.pdf

These safety programs being offered to towns, for local road projects, will be voluntary. There will be <u>no cost to towns</u>, however towns will be <u>required to own and maintain all traffic control equipment installed</u>. CTDOT anticipates sending out letters describing the program, to all first elected officials (and a copy to the Town's Local Traffic Authority) by the end of the year. The projects will include:

## A. HORIZONTAL CURVE SIGNS

This program will help towns gain compliance with MUTCD for curve warning signs. The deadline for compliance has passed. CTDOT advises that Towns should be aware of this for tort liability reasons.

## **B. CENTERLINE RUMBLE STRIPS**

Centerline rumble strips will be considered for installation on local roads with speeds of 35 MPH or greater, ADT greater than 2,000, and other criteria on the following CTDOT website link: <a href="https://portal.ct.gov/-/media/DOT/documents/dtrafficdesign/Safety/CenterlineRumbleStripspdf.pdf">https://portal.ct.gov/-/media/DOT/documents/dtrafficdesign/Safety/CenterlineRumbleStripspdf.pdf</a>

# C. TRAFFIC SIGNALS

- Add retroreflective backplates and pedestrian improvements (only if the existing signal equipment has <u>not</u> reached the end of its useful life)
- Remove outdated flashing operations if no longer appropriate (may need to add vehicle detection to mainline to avoid creating a dilemma zone issue)
- Retime clearance intervals (red, yellow, peds. for compliance with current MUTCD guidance)

  Install new Rectangular Rapid Flashing Beacons at high risk locations with existing marked crosswalks and heavy pedestrian activity on both sides of the road. Look for the refences to countermeasure type "C" in the attached CTDOT "Pedestrian Safety Countermeasure Guidance at Marked Uncontrolled Crosswalks". If it doesn't meet the criteria in the chart, CTDOT will NOT install it as part of these safety projects.

# D. ROAD DIET STUDIES

Perform feasibility studies on roadways with 4 or more lanes.

# Pedestrian Safety Countermeasure Guidance at Marked Uncontrolled Crosswalks

The Table below should be used after an engineering study has been performed and determined that a marked uncontrolled crosswalk is appropriate.

Countermeasures shown in the chart are not mandated or required, and should be based on engineering judgment.

Town: # of Lanes/Crosswalk Length: ADT: Presence of Lighting: Median Presence:

Location: Ped. Generator Nearby: Posted Speed: # of Pedestrians/Hour: Sightline:

	Roadway Average Daily Traffic (ADT) and Posted Speed Limit*								
	1,500 < ADT < 9,000			9,000 < ADT < 15,000			ADT ≥ 15,000		
# of Lanes	≤ 30 MPH	35 MPH	≥ 40 MPH	≤ 30 MPH	35 MPH	≥ 40 MPH	≤ 30 MPH	35 MPH	≥ 40 MPH
2	Α	Α	C/D	Α	Α	C/D	Α	Α	D
3 (w/ raised median)**	Α	Α	C/D	Α	C/D	C/D	Α	C/D	D
3 (w/o median)	Α	Α	D	Α	C/D	D	Α	D	D
4+ (w/ raised median)**	Α	Α	D	Α	C/D	D	C/D	D	D
4+ (w/o median)	A/B	В	B/D	В	B/C/D	B/D	B/C/D	B/D	B/D

### Countermeasures (include A at a minimum):

- A High-Visibility Crosswalk with markings, signage (consider including overhead lighting)
- **B** Pedestrian Refuge Island
- C <u>Rectangular Rapid Flashing Beacon</u> (RRFB) Minimum crossing volume of 20 pedestrians/hour recommended; or 10 pedestrians/hour if there are a high number of vulnerable users, or if the reduced volume is met for three consecutive hours
- D Pedestrian Hybrid Beacon (PHB; previously HAWK) Refer to MUTCD Figures 4F-1 and 4F-2 for minimum criteria conditions

### Additional countermeasures (less commonly used):

**Curb Extensions** 

Road Diet – Consider this countermeasure for all roadways with four or more lanes without a raised median; typically, Road Diets are considered for roadways with current and future ADT equal to or less than about 20,000 vehicles per day

In-Street Pedestrian Crossing Sign – Towns may request this countermeasure on State roads under encroachment permit

Raised Crosswalk - Not used on State roads but can be installed by municipalities on local roads

Crossing treatments are generally not installed at locations where the ADT is lower than 1,500 vehicles per day. Exceptions may be made at school and trail crossing locations where the peak hour vehicle traffic exceeds 10% of the ADT; school crossings are defined as locations where 10 or more student pedestrians are crossing per hour.

For questions or guidance about using this form, please contact TrafficSafety.DOT@CT.gov.

For questions regarding installation of countermeasures on State roads, please contact DOT.TrafficEngineering@CT.gov.

This Table was created using the Federal Highway Administration's Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.

<sup>\*</sup>if available, 85th percentile speed should be used instead of the posted speed

<sup>\*\*</sup>assumes raised median is at least 4' wide and 6' long to adequately serve as a refuge area for pedestrians