# 4-6-1 Control for Emergency Access Vehicles

May 2011

### **GENERAL**

Reference is made to the MUTCD, Section 4G, and Wisconsin State Statute 346.455

#### **POLICY**

The following conditions describe various forms of traffic control associated with emergency vehicle access as well as general installation, design, and operational criteria.

## Condition 1: Warning Device with No Traffic Control

Prescribed practice is to use the warning sign W11-8, Fire Station Truck, with or without a flashing beacon used to supplement the sign (see <u>TEOpS 4-5-1</u>). Use of this type of warning is intended for use only at locations with restricted sight distances. If used with a flashing beacon, the beacon *should* be activated by a control in the firehouse for a preset period of time for the emergency vehicle to enter the highway.

An alternate method is to use a W11-8 at the emergency vehicle access with a yellow flashing beacon, and also install an advance warning sign, W54-60, Fire Trucks (Emergency Vehicles) Enter when Signal Flashes.

On the state trunk highway system, signing will be furnished, installed, and maintained by the department. The municipality *may* have an option to install a flashing beacon subject to obtaining a permit from the regional office and accepting responsibility for operating and maintaining the beacon in accordance with the permit.

## Condition 2: Emergency Vehicle Hybrid Beacons and Mid-Block Access

Under this condition, the emergency vehicle access is at mid-block and controlled by a hybrid beacon.

## **Application**

Emergency vehicle hybrid beacons **shall not** be installed mid-block on two-lane roadways. In addition to guidance provided in the MUTCD Section <u>4G.04</u>, emergency vehicle hybrid beacons *may* be considered on multilane highways when the following volume criteria is met:

- 1. Traffic volume on the adjacent roadway exceeds 18,000 vehicles per day, or
- 2. Traffic volume on the adjacent roadway exceeds 1,800 vehicles during the peak hour of the day.

In addition to the volume criteria above, a specialized study **shall** be conducted by the agency requesting the beacons to demonstrate the need for control at emergency vehicle access points. Minimally, k=the study will consider adjacent roadway geometry (to include sight distance criteria), traffic volumes and characteristics, relative emergency vehicle exposure, and related vehicular conflicts (to include crash history). The study *should* also include a traffic capacity analysis to evaluate the effects of such an installation on the adjacent roadway. Such an installation *may* be denied if the study determines that a substantial, negative impact will be created by the installation of an emergency vehicle hybrid beacon.

### **Design and Operation**

All design and operation requirements for an emergency vehicle hybrid beacon can be found in MUTCD Section 4G.04.

### Maintenance and Funding

Since emergency vehicle hybrid beacons are installed to serve a defined community, it is reasonable to assign maintenance responsibilities to the community being served. However, for installations outside connecting highway limits, communities *may not* have resources available to manage such systems. As such, this function will likely need to be fulfilled by WisDOT. In that case, an agreement with the community *may* be developed that will establish a means to reimburse WisDOT for any time and materials spent maintaining these installations. This agreement *may* address costs to install traffic control hybrid beacons as well.

## Other Traffic Control Methods for Emergency Vehicle Access

Devices used to control traffic on the STH system, including connecting highways, at locations of emergency vehicle access are subject to Wisconsin State Statute 346.455, the WisMUTCD, and this policy. Forms of traffic

control outside of these standards are not permitted. Examples of this include using red flashing beacons with signs indicating "WHEN FLASHING – STOP FOR FIRE TRUCKS" or similar messages.

### **SUPPORT**

Regardless of the reason traffic control devices are installed, they need to convey a purposeful, clear, and consistent message to motorists.

In addition to providing these types of devices on the STH system to promote safety, drivers of emergency vehicles *should* be properly trained regarding the proper operation of emergency vehicle hybrid beacons, and the concept that use of emergency vehicle hybrid beacons does not remove the responsibility of the vehicle operator from determining whether or not it is safe to enter the highway.

The local municipality **shall** be responsible for such training programs.