

# TRAFFIC AND SAFETY INFORMATIONAL SERIES

## FREQUENTLY ASKED QUESTION #2

### HOW MANY BULLET HOLES DOES IT TAKE TO KILL A SIGN? (SIGN VANDALISM)

Sign vandalism is a serious problem in Iowa. In fact, it is believed that one in ten signs is vandalized each year, with signs installed along roadways with low traffic volumes accounting for about 80 percent of the signs vandalized. Overall, the annual cost of sign vandalism in the United States is about \$414,300,000. A number of steps have been taken to reduce the amount of sign vandalism, but no single action has worked completely.

Signs are important: they regulate the actions of drivers, warn drivers of hazards, and inform drivers of important locations. Signs are placed and/or designed to fulfill a need, command attention and respect, convey a clear and legible message, and provide drivers with enough time to respond appropriately. A sign damaged by vandalism cannot perform any of these functions effectively; a damaged sign may not command attention and respect or convey a clear and legible message. In short, sign vandalism can have serious consequences.

#### TYPES OF SIGN VANDALISM

There are many kinds of sign vandalism. While some people believe that shooting signs (see Figure 1) is the most common type of vandalism, a study by the Iowa Department of Transportation found that only about 11 percent of vandalized signs are shot by a gun. Broken/knocked down signs and stolen signs are the first and second most common types of vandalism, respectively, and gun-damaged signs are the third. Other kinds of vandalism include painting or marring the face of a sign, pulling out a sign, and bending a sign. All of these can produce serious safety problems and should be mitigated as soon as possible.



**FIGURE 1 Sign vandalized by gun.**

#### FACTORS FOR REPLACING OR FIXING VANDALIZED SIGNS

Vandalized signs provide a poor impression of the surrounding community. Moreover, studies have shown that neglecting to replace or fix vandalized signs can lead to more severe vandalism. Vandalized signs should therefore be repaired or replaced as soon as possible.

## **REPLACEMENT OF VANDALIZED SIGNS**

A vandalized sign may no longer be effective and can deprive motorists of critical information, which could result in a collision. Critical signs include regulatory signs such as stop signs, yield signs, speed limit signs, and “Do Not Enter” signs. A missing or illegible warning sign, which is designed to caution motorists of potential danger, may also lead to a collision. Warning signs include signs that alert motorists to approaching intersections, curves, turns, and stop signs or signals. Guide signs that direct motorists to points of interest are also important because they produce a less confusing driving environment and allow the driver’s attention to be directed toward the roadway.

Regardless of sign type, a sign technician must determine whether the sign should be replaced or repaired immediately based on field judgement. Aside from the need to continue providing critical information to drivers, other considerations for replacement may include repair costs and the remaining service life of the sign face. Regardless of the decision made, a vandalized sign that provides critical regulatory or warning information should not be taken down without a replacement sign put in its place.

## **COUNTERMEASURES FOR SIGN VANDALISM**

For a description of techniques to combat sign vandalism, consult the *Manual on Countermeasures for Sign Vandalism* (U.S. Department of Transportation, Federal Highway Administration).