

**761—812.3(307) Warning device standards and their implementation.**

**812.3(1)** A crossing with a final predicted accident rate of .075 or above is a candidate for upgrading. The following are recommended minimum improvements, subject to the considerations set out in the remainder of this rule.

<u>Number Tracks</u>	<u>Current Installation</u>	<u>Proposed Upgrade To</u>
1	Crossbucks	Flashers
1	Flashers	Gate Arms
2 or more	Crossbucks	Gate Arms
2 or more	Flashers	Gate Arms
2 or more	Gate Arms	4 Quadrant Gate Arms or Raised Medians

**812.3(2)** The highway authority (governmental unit(s) having jurisdiction of the highway or street at the crossing) and the railroad shall jointly conduct a field review of a crossing they propose to upgrade.

*a.* Variations of warning devices or warning device circuitry including, but not limited to, prediction circuitry, motion sensor circuitry and cantilever assemblies shall be determined by conditions at the crossing site.

*b.* Site conditions shall determine whether safety improvements to correct these conditions should be made in lieu of the upgrades listed in subrule 812.3(1). Safety improvements are generally recommended if they would be less expensive than the upgrades and would result in a final predicted accident rate lower than .075. Safety improvements to consider include, but are not limited to, luminaires, pavement markings, sight distance improvement, signing modifications, rail signal/traffic signal interconnections, surveillance systems and crossing surface extensions.

**812.3(3)** The highway authority shall consider crossing consolidation or closure in lieu of upgrading the warning devices at a crossing. A grade separation may also be considered, but the decision to construct a separation is based on factors beyond the scope of this chapter.

**812.3(4)** When planning a highway improvement project encompassing or adjacent to a crossing, the highway authority shall consider the effects of the project on the crossing.

**812.3(5)** An agreement between the highway authority and the railroad is required for warning device installations at a new crossing location and warning device upgrades on a detour.