

Manage railroad vision corners for safety

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CLEAR VIEWS of an oncoming train are a first line of safety for motorists approaching rural railroad crossings. By law, local governments are responsible for their share of keeping vision corners at crossings cleared of brush and trees.

To guard against serious liability resulting from a crash or a fatality, that responsibility reasonably extends to monitoring compliance by **all** parties to make sure drivers can see well enough to make safe decisions, especially at crossings with no signals.

Grade Crossing Safety Engineer Mark Morrison, WisDOT Railroad Engineering and Safety Unit, says local officials should be proactive in working with both railroad companies and owners or residents of private land adjacent to a crossing.

The risk of liability generally outweighs fear of fines that range from \$25 to \$150 per violation for defying or ignoring the law. For this reason, many local governments have ordinances that govern vision triangles at highway intersections **and** high-way-railroad intersections.



A vision corner at ground level. Clear cutting ensures adequate time for traffic to stop safely.

“The ultimate goal is to prevent crashes at crossings, to use the law as a practical guide,” says Morrison. “Local officials are in a good position to act if they spot a vision problem by working directly with the railroad or private owners to get it corrected.”

Morrison notes local officials can appeal to the Office of the Commission of Railroads (OCR) if the railroad ignores a direct request to clear overgrowth along its right-of-way at a crossing. He

says a good tactic for dealing with reluctant private landowners is to get written permission from them for clearing brush and trimming trees on adjacent property at the same time local crews work on the highway right-of-way.

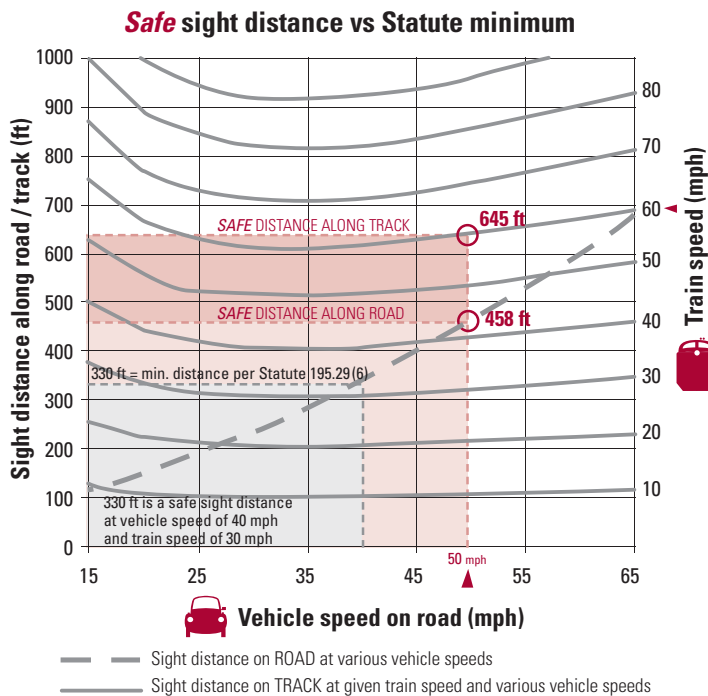
Statute 195.29(6) governs maintenance of trees and brush at crossings by all three landowner groups. The law requires keeping road and track right-of-ways clear of brush and trees for 330 feet or more. Determine the area of the vision triangle by measuring the required distance from the crossing along both the road and track. Then connect the two remote points to form the triangle. Private holdings that fall within this area must meet the same requirements to preserve adequate open views at crossings.

The law does not require the highway authority to exceed the 330-foot rule unless an OCR order specifies a greater distance. Nonetheless, Morrison recommends local officials err on the side of safety, especially where high speeds are the rule on roadway and railroad track. Using train and vehicle speed in his calculation, Morrison gives the example

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This simplified rendering of a sight distance graph from WisDOT's Railroad Crossing Report shows how train and vehicle speed factor into the calculation for a vision triangle.



of a train traveling at 60 mph approaching a roadway crossing where the posted speed is 50 mph. The estimated vision triangle to provide a safe stopping distance is 458 feet down the highway and 645 feet down the railroad, well beyond the legal minimum. Highway approach grades also factor into the equation.

If there is no order on file with OCR denoting the vision triangle for a crossing, local officials can make their own calculations using a graph found in the *WisDOT Railroad Crossing Report Form DT1589*, similar to the one depicted on the previous page.

Charting vision corner dimensions this way helps illustrate the extent of clearing necessary to give

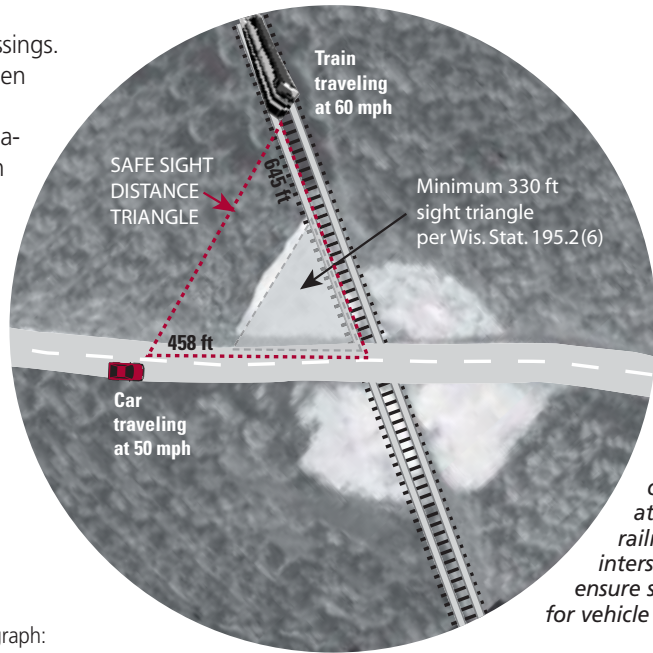
motorists a safe view at crossings.

How far is far enough when trimming and cutting back? Morrison says railroad companies generally cut vegetation inside their jurisdiction down to the ground without exception. Local governments and private owners often take less radical steps, but should clear-cut to ensure open sight lines if necessary. ■

Resources

Wisconsin Statute 195.29(6): www.legis.state.wi.us/statutes/Stat0195.pdf

WisDOT web page with link to Railroad Crossing Report form DT1589 with the sight distance graph: www.dot.wisconsin.gov/forms/



Vision triangles connect at highway-railroad intersections to ensure safe views for vehicle traffic.

Work Zone Word Puzzle

Test your flagger safety IQ with this work zone puzzle. Check Calendar listings on page 12 for details on *Work Zone and Flagger Safety* TIC workshops planned at five locations in January.

Answers on page 11.

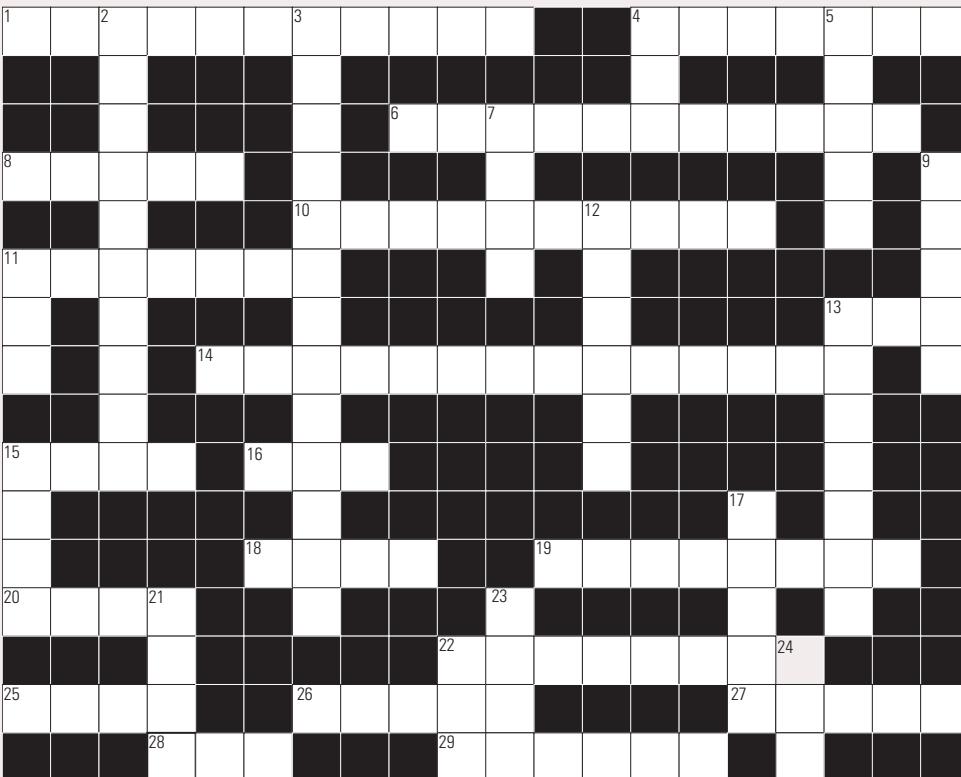
ACROSS

- 1 A flagger should be able to clearly see the back of the _____.
- 4 One way to indicate "all clear" is to lift your _____.
- 6 Always treat motorists _____.
- 8 Work zone guidelines are published in the _____.
- 10 For safety always have an _____.
- 11 Don't ever turn your back on _____.
- 13 Flag color used in emergencies.
- 14 The primary traffic control device for flaggers.
- 15 Never turn this part of your anatomy to oncoming traffic.

- 16 Transportation Information Center, briefly.
- 18 A flagger must wear an approved _____.
- 19 Flaggers should stand in a safe position on the _____.
- 20 _____ the public well-informed.
- 22 Barricade stripes should slope _____ toward path of travel.
- 25 Don't stand over the crest of a _____.
- 26 Hand signals need to be _____.
- 27 Flags, paddles and flares are flagger _____.
- 28 Rate of travel, briefly.
- 29 Color used to mark centerline.

DOWN

- 2 When in doubt whose turn it is, you should stop _____.
- 3 At night, traffic control devices must be _____.
- 4 Not a flagger tool.
- 5 When flagging, avoid screeching _____.
- 7 These trucks are on the highway 24/7.
- 9 Flaggers should not stand in the _____.
- 11 Most common number of flaggers to control traffic.
- 12 Don't stand in a group of _____ when flagging.
- 13 When suspending operation even for a short time, signs should be _____.
- 15 If you have questions, consult your flagger hand _____.
- 17 When flagging, it is important to stay _____.
- 21 When giving hand signals, expose your _____.
- 22 Don't _____ dream on the job.
- 23 Muscles at the end of a flagging shift.
- 24 Important highway agency.



Thanks to the Connecticut Transportation Institutes' Technology Transfer newsletter for the word-puzzle idea.