Where the steel hits the road

The Federal Railroad Administration works to make at-grade crossings smarter and safer

Intelligent Grade Crossings will warn motorists and trains that approach is imminent. FOX

Train crews and motorists may have the ability to “see” one another earlier than ever thanks to “Intelligent Grade Crossings” currently under development through the Federal Railroad Administration’s Research and Development Office. Since the dawn of railroading, one of the most common threats to the safe passage of trains has been grade crossing collisions or blockage of the right-of-way by other means — either someone trying to beat a train, a vehicle becomes disabled on or near tracks, or careless drivers run into or near tracks and then suddenly turn 90 degrees — either someone trying to beat a train, a vehicle becomes disabled on or near tracks, or careless drivers run into or near tracks and then suddenly turn 90 degrees.

According to Sam Alibrahim, chief of signal train control and communication for FRA’s Office of Research and Development, the technology that makes Intelligent Grade Crossings viable is part of a larger federal Department of Transportation project called IntelliDrive, which will warn motorists of dangerous road conditions, congestion, or accidents via in-vehicle audio and visual prompts. IntelliDrive and derivative programs like Intelligent Grade Crossings are all part of the Department of Transportation’s Intelligent Transportation Systems Program, or ITS, and communications technologies to create more-efficient and user-friendly highway, rail, and transit systems.

“Obviously we don’t want to give a false warning for a car that’s not going to cross the track [but] the car with the appropriate trajectory toward the track will be issued the warning of the train,” Alibrahim says.

“Train crews and motorists may have the ability to ‘see’ one another earlier than ever thanks to ‘Intelligent Grade Crossings’ currently under development through the Federal Railroad Administration’s Research and Development Office.”

“Quite often, streets are parallel to the track on the display, but we want to have a geo-fence around the crossing for the approaching car.”

“Obviously we don’t want to give a false warning for a car that’s not going to cross the track [but] the car with the appropriate trajectory toward the track will be issued the warning of the train,” Alibrahim says.

“We can develop the technology and perfect it, but we cannot force anybody to use it,” he says. “We have a lot of outreach programs through training and conferenc es to show these products to state and local authorities, but it’s up to their interest how fast and where it will be deployed.”

Celebrate the locomotives that defined the final, glorious decades of the steam era with this special collector’s edition, Fantastic 4-8-4 Locomotives. Learn about the various designs and how railroads in the U.S., Canada, and Mexico used them. See rare, dramatic photos of those giants at work. Recall the excursion careers of more than a dozen 4-8-4’s.

This special edition includes:

• A survey of 4-8-4 designs on all 36 railroads that owned the type
• Not just Northerns: The stories behind the 4-8-4’s many names
• UP 844, SP 4449, Santa Fe 3751, C&O 614, Milwaukee 261, and other fantrip stars
• First-hand accounts from the cab
• 4-8-4 photo gallery
• And much more!

Reserve your copy today!
Order online at www.ClassicTrainsMag.com/OS11 or call 800-539-6014.

This special issue includes:

• A survey of 4-8-4 designs on all 36 railroads that owned the type
• Not just Northerns: The stories behind the 4-8-4’s many names
• UP 844, SP 4449, Santa Fe 3751, C&O 614, Milwaukee 261, and other fantrip stars
• First-hand accounts from the cab
• 4-8-4 photo gallery
• And much more!

Reserve your copy today!
Order online at www.ClassicTrainsMag.com/OS11 or call 800-539-6014. Free shipping on orders over $50.