

NTSB MOST WANTED LIST

CRITICAL CHANGES NEEDED TO REDUCE TRANSPORTATION ACCIDENTS AND SAVE LIVES

2014

IMPLEMENT POSITIVE TRAIN CONTROL SYSTEMS

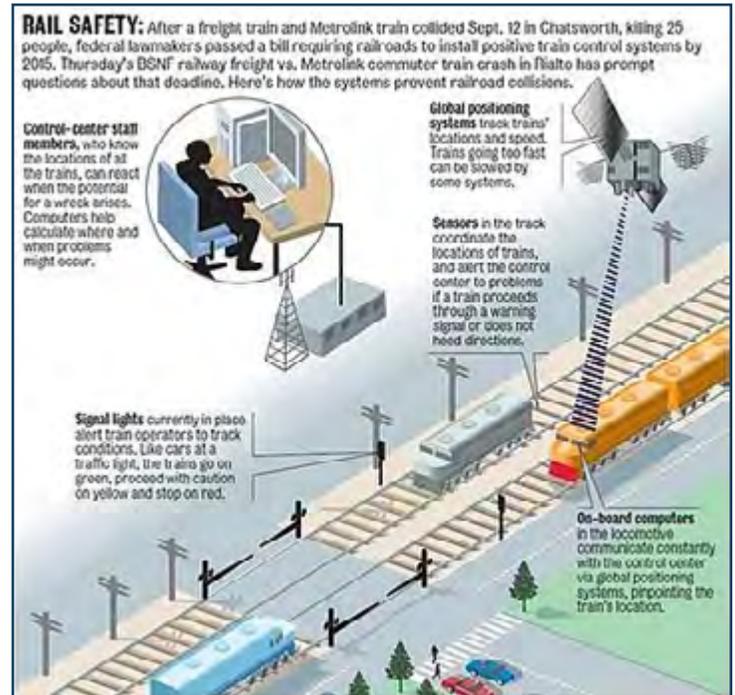
What is the Problem?

On August 20, 1969, two Penn Central commuter trains collided head-on near Darien, Connecticut, killing four and injuring 43. That tragedy 45 years ago began the NTSB's call for development and implementation of positive train control (PTC) systems.

Despite great technological advancement and examples of working PTC systems, progress on PTC implementation has been slow. The second most deadly U.S. train accident since the Darien collision occurred in September 2008, when a Metrolink commuter train and a Union Pacific freight train collided in Chatsworth, California, resulting in 25 deaths and 102 injuries. The NTSB determined that the prohibited use of a portable electronic device – specifically text messaging – distracted the engineer from his duties. PTC would have prevented this crash.

In the 5 years since the Chatsworth crash, the NTSB has investigated several other railroad accidents that involved human error, including the following:

- In September 2010 near Two Harbors, Minnesota, human error and fatigue contributed to the collision of two freight trains, injuring five crew members.
- In May 2011 in Mineral Springs, North Carolina, human error contributed to the rear-end collision of two freight trains, killing two crew-members and injuring two more.
- In May 2011 in Hoboken, New Jersey, human error contributed to the collision of a train with the bumping post at the end of the track.
- In January 2012 near Westville, Indiana, inattentiveness contributed to the collision of three trains, injuring two crew-members.
- In June 2012 near Goodwell, Oklahoma, human inattentiveness contributed to the collision of two freight trains, killing three crew members.



This graphic demonstrates how Positive Train Control works.

Source: <http://www.gps4us.com/news/post/New-high-speed-train-requires-safer-GPS-enabled-railroad-control-system-20111227.aspx>

What can be done?

PTC systems work by monitoring the location and movement of trains, then slowing or stopping a train that is not being operated in accordance with signal systems and/or operating rules. This safety redundancy prevents train-to-train collisions and overspeed derailments, as well as the associated injuries and fatalities to passengers, railway workers, and others. PTC systems are not a dream; they are in use on the Northeast Corridor in the Northeast United States and on the Michigan Line between Chicago, Illinois, and Detroit, Michigan.

In the aftermath of the deadly 2008 Chatsworth collision, Congress passed the Rail Safety Improvement Act of 2008 (RSIA), requiring all trains providing passenger service and freight trains operating on lines carrying toxic- and poisonous-by-inhalation hazardous materials to implement PTC by the end of 2015. The industry will

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What can be done? *con't...*

have had 7 years to implement PTC by this deadline. On May 14, 2012, the Federal Railroad Administration issued a final rule that exempted about 10,000 miles of track from the PTC mandate, and several railroads and transit authorities continue to express concerns about meeting the 2015 deadline. This is a step in the wrong direction; for PTC to reach its greatest safety potential, it must be widely implemented.

What is the NTSB doing?

In 1970, the NTSB first addressed the need to require a form of automatic train control. Since then, the NTSB has issued almost 50 PTC-related safety recommendations and has included PTC on its Most Wanted List every year from its inception in 1990 until enactment of the RSIA. Unfortunately, despite some progress in the four decades since that original recommendation, train collisions still occur. Just since 2004, the NTSB has completed investigations of 25 train accidents that took 65 lives; injured over 1,100; and caused millions of dollars in damages—all of which could have been prevented or mitigated by PTC. These continuing crashes led the NTSB to return PTC to its MWL last year and to keep it on the list for another year.

In February 2013, the NTSB held a forum called "Positive Train Control: Is it on Track?" in order to bring together a wide range of experts to examine the technological, regulatory, and operational status of PTC. Many challenges hindering the full implementation of PTC were discussed, including cost, standardization of technologies, and availability of radio spectrum.

Despite these challenges, the NTSB believes it is crucial that progress toward the congressionally-mandated goal of widely-implemented PTC must continue. Railroads that have made the difficult decisions and invested millions of dollars to implement PTC should not be penalized for their leadership. Railroads that will not meet the deadline to implement PTC should be accountable. Lives depend on it.

**Critical changes
needed to reduce
transportation
accidents
and save lives**



National
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Safety Board

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation - railroad, highway, marine and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents. In addition, the NTSB carries out special studies concerning transportation safety and coordinates the resources of the Federal Government and other organizations to provide assistance to victims and their family members impacted by major transportation disasters.

