



**REMARKS OF VICKY MOORE**  
**BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES,**  
**TRANSPORTATION AND INFRASTRUCTURE COMMITTEE,**  
**RAILROAD SUBCOMMITTEE**  
**July 21, 2005**

Thank you, Chairman LaTourette, Ranking Member Brown, and other distinguished sub-committee members. I appreciate the opportunity to testify on issues pertaining to grade-crossing safety. Along with my husband, Dennis, I am a trustee of The Angels On Track Foundation, an Ohio-based, non-profit entity devoted to grade-crossing safety. Our foundation was formed after our two sons were involved in a catastrophic grade-crossing accident in 1995. Our youngest son, Ryan, and two others were killed. The approach to the crossing was steep and overgrown vegetation restricted the view of approaching trains. The crossing was not protected with gates; it only had crossbuck signs. I come before you not as a grieving mother but as a representative of the thousands of families that have lost loved ones in grade-crossing accidents, and who collectively have no representation or national voice.

Over the past decade, The Foundation has funded gate installations in Ohio because gates have proven to be the safest type of protection device. Furthermore, we have conducted extensive research on safety matters, created an educational subsidiary called Crossing To Safety; have advanced our message that “bad crossings kill good drivers” and have learned about the process that administers grade-crossing safety. Today, I share some of our findings with you in the hope that change will be forthcoming.

1. We have learned that following grade-crossing accidents, it is automatically assumed that all motorists are at fault. Behind this unsupported

assumption is the “failure to yield” misnomer. Since railroads have the right of way at crossings, it is accepted that all accidents are caused by motorists failing to yield. The important question should be “WHY do motorists fail to yield to approaching trains?” Maybe they couldn’t see and/or hear the train through no fault of their own. After all, courts have found that railroads and/or deficient crossings have contributed to accidents. Furthermore, many accidents occur in rural areas without eyewitnesses. Why should we rely solely on railroads to identify causes of accidents that they themselves are involved in? We believe that FRA, Operation Lifesaver, and the railroad industry should expunge their “victim-to-blame” mantra that is based on railroad accident reports citing “failure to yield”. This misleading message is not only unsupported, it immediately pronounces blame and gives self-anointed good drivers a false sense of security in approaching dangerous grade crossings.

(ATTACHMENT #1)

2. We have learned that many unprotected crossings contain motorist sight obstructions along tracks on railroad rights-of-way – and I’m not talking about private land -- that do not meet requirements of the FRA as stated in its Railroad-Highway Grade Crossing Handbook; national standards of AASHTO, or in Ohio, State law. A few States have laws in this area, but they are inconsistent. It is illogical that national sight-distance standards addressing public safety are not provided for in the Code of Federal Regulations or as an FRA rule, while vegetation affecting railroad safety is. We urge DOT to become pro-active in ensuring that this happens.

A recent NTSB safety study of passive grade crossings (SAFETY STUDY, Safety At Passive Grade Crossings PB98-917005, NTSB/SS-98/03) found 57% of the 62 cases studied had “limited sight distance”. The majority of grade crossing accidents happen at passive crossings – which handle less traffic than do gated crossings- and that a number of passive crossings have deficient crossing conditions such as limited sight distance.

Federal legislation exists relating to sight obstructions at railroad crossings but is extremely limited in that it only addresses vegetation on railroad property or the adjacent roadbed that: 1) affects track carrying structures; 2) obstructs visibility of railroad signs/signals; 3) interferes with railroad employees performing duties; 4) prevents proper functioning of signal and communication lines; and 5) prevents railroad employees from visually inspecting moving equipment. While federal law addresses vegetation on railroad property, it does not address vegetation and sight obstructions that limit the ability of motorists to see oncoming trains and does not include required sight-distance standards as recommended by the Association of American State Highway and Transportation

Officials (AASHTO). In addition, sight obstructions other than vegetation that limit motorists from seeing down the tracks, are not addressed.

The Code of Federal Regulations states that railroads are to inspect their tracks "...twice weekly with at least one calendar day interval between inspections, if the track carries passenger trains or more than 10 million gross tons of traffic during the preceding calendar year." While the Code does not mention vegetation, railroad train crews could also be looking for vegetation that obscures the view of the motoring public at all grade crossings and also endangers train crews as well. After all, railroad crews pass through and inspect crossings on a daily basis.

(ATTACHMENT #2)

3. We have learned that railroads are overly influential in matters of grade-crossing safety. They have authored affidavits for public officials in judicial proceedings; reportedly have close ties with the FRA; and have dominated Operation Lifesaver at the State level, and on its national Board of Directors. Partnerships are formed out of common interests and, for-profit companies such as railroads and public regulatory agencies have natural conflicts of interest. Ironically, in regard to Operation Lifesaver, our foundation was denied a seat on the Board of Directors because we were labeled "advocates," while Operation Lifesaver's Board is comprised of lobbyists, railroad personnel, and special interests. Yes, we are advocates, but for no other reason than that of public safety. We believe that the federal government should withhold its funding of Operation Lifesaver until it opens its Board to include organizations such as ours, and modifies its domination by the railroad industry.

(ATTACHMENT #3)

4. We have learned that there is economic waste of valuable taxpayer dollars in the system. Railroads are awarded sole-source contracts to install gates and their expenditures are rarely audited. Excessive costs for installation of gates prohibit states and local communities from funding protection at crossings, and thus lives are lost. Based on our review of railroad invoices, we suspect that the installation of crossing gates is a railroad profit center. We believe installations should be done on a cost – not profit – basis, and that audits should be a requirement to receive federal funds.

Crossing improvements installed in Ohio, provide examples of elevated costs. In 1997, the estimated cost for installation of gates and lights amounted to \$117,053. Less than 10 years later, estimates range anywhere from \$176,000 to over \$290,000 for the same technology, equipment, engineering, and labor costs. This

increase is not only greater than the rate of inflation; it includes unexplained “additives”.

(ATTACHMENT # 4)

5. And finally, we learned that the FRA and others have mistakenly taken credit for the downward trend in accident rates over the past 30 years, when, in fact the major factors were: (1) 25,000 new crossing-gate installations; (2) the closure of over 100,000 crossings, and (3) downsizing and restructuring of the railroad industry. Unfortunately, the accident rate increased in 2004 and dangerous unprotected crossings are plentiful throughout the country. FRA, railroads and Operation Lifesaver should be held to a higher level of accountability than the cover of a declining accident rate.

(ATTACHMENT #5)

In conclusion, we believe people’s lives will continue to be needlessly lost unless an effective, truthful and transparent system is implemented addressing grade crossing safety. We encourage our nation’s railroads; DOT, FRA, OLI and others to become strong advocates for public safety by changing some of their current practices.

Again, thank you for the opportunity to appear before you today. I am here with my husband, Dennis, and Dr. Harvey Levine, our Director of Crossing To Safety. I will be pleased to answer questions.



**Additional comments by Vicky Moore**

The Angels on Track Foundation, after Railroad Subcommittee Hearings on July 21, 2005

**STOP SIGNS:**

The Foundation views the recent NTSB recommendation for installing STOP signs at crossings as a dangerous Bandaid approach to railroad crossing safety. Numerous transportation and government studies have proven STOP signs are the most dangerous signage at crossings. The FRA's 2003 Interim Annual Report posted statistics based on warning devices and found STOP signs resulted in 5.01 collisions per 100,000 average daily traffic miles versus 0.51 collisions for crossings equipped with gates. Casualties are 5-11 times more likely at railroad crossings with stop signs than crossings equipped with automated gates.

Past research on the use of STOP signs at passive (non-gated) crossings by the FHA determined STOP signs can actually make a crossing more dangerous. Federal highway rules state stop signs are only allowed at crossings where the STOP sign doesn't affect the safety of the crossing. This statement demonstrates knowledge by safety engineers that STOP signs can reduce safety at grade crossings. The vast majority of collisions occur because drivers are unaware of a trains' presence.

FHA/AASHTO sight recommendations (USDOT/FHA, Railroad Highway Grade Crossings Handbook, Second Edition, FHWA-TS-86-215, pg.133) are based on highway distances for a moving vehicle, not one that is stopped at the crossing. Stopped vehicles require the maximum sight distance requirements at railroad crossings.

The State of Ohio has done extensive research on STOP signs at rail-highway crossings.

The Ohio Manual on Uniform Traffic Control Devices (OMUTCD), Traffic Engineering Manual states "STOP signs at highway-rail grade crossings are generally not effective; driver compliance to these devices is poor; the use of

these devices creates contempt and disrespect for all STOP signs; and that STOP signs at highway-rail grade crossings are often responsible for an increase in rear-end collisions at these crossings.” Ohio’s Department of Transportation has adopted a policy disapproving the installation of STOP signs at highway-rail crossings, except for very unusual or exceptionally hazardous locations.

It is the Foundation’s hope that Congress will move forward with Section 130 funding to eliminate hazards at railroad grade crossings by specifically earmarking funds for the installation of gates at unprotected crossings.

### **WHISTLE BANS:**

The Foundation does not support the use of Whistle Bans in communities with active railroad tracks, especially those with non-gated crossings. When sounded properly according to federal regulations, a train horn or whistle might be the only advance warning a motorist may have of an approaching train at a poorly designed crossing without gates and/or sight obstructions that block a motorists’ view. Even crossings protected with gates have been documented to not activate in a “failsafe” manner; combined with repairs of malfunctioning warning system being handled in an untimely manner. In addition, FRA research has shown implementing a whistle ban will result in a 62 percent average increase in collisions at grade crossings equipped with active warning devices.

### **EVENT RECORDERS:**

Locomotive data and signal event recorders are vital to the determination of railroad operating compliance and accident causes. It has been reported (*NY Times, July 11, 2004 – In Deaths at Rail Crossings, Missing Evidence and Silence*) that railroads have destroyed, mishandled and lost evidence while improperly reporting accidents. It has also been reported that railroads do not keep black-box event recorders in good working order.

Because local law enforcement agencies cannot seize event recorders, they are not given information needed to thoroughly investigate accidents. ALL documents relating to train operations and signal/event data must be preserved. Event recorders document malfunctioning signal equipment which may not be working in a “failsafe” manner, as well as required safety procedures performed by the train crew.

It is our recommendation that all data and signal event recorders be detached (under the supervision of local law enforcement officers) and immediately handed over to local law enforcement agencies for investigation and review, with instructions to mail to the FRA within 24 hours. FRA’s recent rule

requiring stronger “black box” and data collection procedures is a step in the right direction. We encourage the FRA to strictly enforce this new rule, which requires railroads to keep data stored for one year, even if no immediate accident investigation is undertaken.

### **ACCIDENT SCENE INVESTIGATION:**

The sooner evidence is collected the better. Federal rules require railroads to immediately report crossing fatalities to the National Response Center. Reports are then forwarded to the FRA and NTSB where officials decide to investigate. It is imperative to have an independent investigation without railroad influence or prejudice. State police and law enforcement officers should take the lead in all accident investigations. The FRA should implement a rule aimed at preserving the accident scene until local investigators have recorded, photographed and completed a thorough investigation to preserve vital information. The FRA has always assumed its role as a “regulatory” agency of the railroad industry, not one of fact finding for “the accident investigation”. Vital information regarding accidents has at times been classified “confidential” between the FRA and railroads, forcing victims’ families to file numerous Freedom of Information requests or hire attorneys to obtain accident information. In one particular case, information families received regarding the accident had been “blacked” out.

Currently, local authorities rely on railroad police, railroad investigators, in addition to railroad claims agents for accounts of what happened. This is based on the incorrect assumption by local authorities that the FRA is in charge of the accident investigation. At no time is information gathered on behalf of the public or victims involved.

The accident report filed with the FRA is completed by railroads. The railroads’ view of what happened should not be accepted as what caused the collision or who is at fault.

On-train personnel are not trained to report motorist sight obstructions and rarely admit to such obstructions in their reports. The train engineer and/or conductor cannot be relied upon to provide accurate information regarding motorist behavior such as driving around or through downed gates, especially since there is no category to record malfunctioning gates or equipment.

Local authorities such as police, sheriff, and highway patrol officers have all been trained by the railroads and Operation Lifesaver in Grade Crossing Accident Investigation techniques. The primary focus is on driver responsibility. An example is Box No. 41 on the Railroad Accident/Incident Report which states: (DRIVER: #1. Drove around or thru the gate; #2. Stopped and then proceeded;

#3. Did not stop; #4. Stopped on crossing; and #5. Other). In most cases, no one thoroughly investigates the railroads' conduct.

Local authorities should be charged with the primary accident investigation because of their law enforcement background. Railroad companies, track owners, FRA and NTSB are not law enforcement agencies. The FRA should be called upon to comply with federal regulations pertaining to accident reporting, but should do so only in their capacity as a regulatory agency for railroad procedures, track and signal operations. The FRA's role should be viewed solely as "assisting", with all information gathered shared with local law enforcement agencies in their criminal investigation.

It is our recommendation that the FRA collect, retain and supply all information on all signal and track operations to local authorities when called to an accident scene. Copies of all event and data recorders should immediately be turned over to local authorities for review and investigation; in addition to equipment supplied to local law enforcement agencies to read all tapes confiscated. Copies would then be sent to FRA/NTSB for documentation as well.

It should be noted that NTSB carries no enforcement power and their findings cannot be used by victims and their families in a court of law. All the more reason for an independent, unbiased investigation of all railroad grade crossing accidents.



## **LIST OF ATTACHMENTS**

(ATTACHMENT #1 – Discusses the “victim-to-blame” assumption in more detail.)

(ATTACHMENT #2 – Discusses the issue of motorist sight obstructions in more detail.)

(ATTACHMENT #3 – Discusses the issue of railroad influence in more detail.)

(ATTACHMENT # 4 – Discusses the issue of railroad gate installations in more detail.)

(ATTACHMENT #5 – Discusses the issue of “declining accident rate” in more detail. Attached charts are divided into private and public crossings. Figures clearly show a reduction in the number of crossings. While public crossings have benefited from gate installations, private crossings, not regulated by states for upgrades, have not shown a decline in casualties per crossing.)

## Attachment #1, 1 of 2



The Education Component of The American Track Foundation

### **AUTOMATICALLY BLAMING THE VICTIM: A FLAWED PREMISS WITH A HIDDEN RATIONALE**

By: Dr. Harvey A. Levine, Director, Crossing to Safety®

For some time, I have been curious as to why victims of railroad-crossing accidents are virtually always blamed for their ill fortune. For example, it is customary for railroads to state in their monthly reports that the cause of a grade-crossing accident is “failure to yield” on the part of the motorist. This is echoed by first responders to accidents – including police -- who are told by the train’s engineer and conductor that the motorist simply drove in front of the train. The Association of American Railroads believes that, *Public education of grade-crossing dangers and continued elimination of crossings are the most effective way to stop this needless carnage.* Operation Lifesaver avers that, *Highway-rail grade crossing incidents in nearly every case are caused by some type of carelessness on the part of the motorists at the crossing, and that, Driver inattention and impatience are the most common factors contributing to collisions between motor vehicles and trains at highway-rail grade crossings.* And, the Federal Railroad Administration proclaims that, . . . *It is also proper for local authorities, not the Federal Railroad Administration, to investigate the vast majority of crossing collisions, since 94 percent involve motor vehicle driver behaviors as principal factors. We do not enforce safety laws.* Based on the common mantra of insiders, one could easily be led to the conclusion that there is undeniable evidence that the victims overwhelming cause their own demise in railroad crossing collisions. However, there is much evidence to the contrary.

There are at least five reasons why factors other than motorist irresponsibility contribute to railroad-crossing collisions. First, observation reveals that there are thousands of unprotected crossings where motorist sight tolerances do not meet the standards recognized by the United States Department of Transportation, the American Association of State Highway and Transportation Officials, and State law. Second, there have been numerous judicial proceedings where either jury decisions have been made in favor of plaintiffs, or significant settlements have been agreed upon, largely based on evidence of deficiencies at railroad crossings, or improper railroad behavior. Third, a 1998 study by the National Transportation Safety Board revealed that motorist sight obstructions were found in 57% of the cases studied; the cases were 62 post-accident crossings. Fourth,

common sense dictates that many factors could contribute to railroad-crossing accidents, including train engineers failing to sound the alarm, trains speeding, deficient track, malfunctioning signals, motorist sight obstructions, and parked trains at night – that it is folly to universally blame motorists. And fifth, rhetorically speaking, why would billions of dollars of tax-payer money be pumped into improving conditions at railroad crossings if there were no deficiencies that contributed to accidents?

Recognizing that motorists are at fault for some crossing accidents, the question is: Why automatically blame the motorist – even immediately following accidents where it is too early to determine cause? On the surface, the answer can be found in the term “failure to yield.” Since trains always have the right of way at crossings, all accidents can be said to be motorist failure to yield. But such a description is not an accident cause. It is merely a way of restating the fact that the train has the right of way. Therefore, it is downright silly for railroads to always state “failure to yield” as the cause of railroad-crossing accidents, and it is just as inappropriate for others to automatically accept that clause in the same light. Any reasonable person recognizes that the key to accident analysis is finding out why motorists failed to yield – why they may not have heard or seen the approaching train. So beneath the surface there has to be something more to the common mantra of the insiders – some reason that the Federal Railroad Administration cites accident data from the railroads rather than from the National Transportation Safety Board. Based on my analysis of the system charged with providing railroad-crossing safety, I believe the reason to be one of accountability – or lack thereof.

Simply stated, by blaming the victims for virtually all railroad-crossing accidents, insiders have the ability to take credit for positive safety trends and/or events, while avoiding responsibility for negative occurrences. The historic trend of declining crossing accidents has many claimants, but there is no such clamor for among other events, inefficiencies, inadequate data, improper accident reporting, gaps in legislative, missing event recorders, misallocated monies, poor documentation, failed equipment, and deficient crossings. Surely, the accident rate would even have been lower if railroads were pro-active in identifying safety needs at their crossings and helpful in funding ensuing safety improvements – or if the Federal Railroad Administration suggested needed changes in legislation, or was more stringent in its regulation of railroads. Surely, we would know more about the causes of crossing accidents if federal agencies investigated more than a couple of accidents each year, and if they ensured that accidents were reported in a timely and accurate manner. Surely, the system would be more efficient if railroads did not have sole-source contracts to install gates, if railroads did not profit from such installations, and if railroad charges were audited. And surely, motorists would be well served if Operation Lifesaver balanced its message between unsafe crossings and irresponsible motorists.

The truth of the matter is that we don’t know the relative cause of railroad-crossing accidents. Many accidents occur in rural areas with no witnesses. Often, the motorist is deceased. Railroads change the environment almost immediately following accidents and at any rate, there are reasons to question railroad claims. Isn’t it about time that the Federal Railroad Administration and the National Transportation Safety Board accepted

responsibility for knowing why railroad-crossing accidents occur? The answers to why railroad-crossing accidents occur must be found for such answers should go a long way toward more effective and efficient railroad-crossing safety.

## Attachment #1, 2 of 2



*The Education Component of The American Train Foundation*

### **THE HEART OF THE MATTER: THE 94% DELUSION**

By: Dr. Harvey A. Levine, Director, Crossing to Safety®

Several years ago, after being lectured to by an official with the Federal Railroad Administration (FRA), United States Department of Transportation (DOT) that motorists are always at fault for grade-crossing collisions because they fail to yield to approaching trains, I decided to ask a question long on my mind. I offered a scenario as the premise – one that was far from extreme. “If you are driving on a road at a legal speed of 40 miles-per-hour -- with cars both in front of and behind you -- and the road elevates to a two-track, main-line railroad grade crossing -- and overgrown vegetation and trees block your vision up and down the track -- and you are facing a bright sun to the left -- although the only traffic sign in front of the crossing is a crossbuck, would you slow down to a complete stop just before reaching the track, even though the cars in front and behind you are retaining their 40 mile per-hour speed?” Without hesitation the FRA official gave an emphatic, “Of course. Motorists must yield to trains no matter what the conditions.” I then reminded him that it would be impractical and probably dangerous to stop at a rail crossing in the middle of a line of cars legally traveling at 40 miles-per-hour. He was incensed enough to stop eating his lunch. “No wonder we have so many incidents,” he said, “With your kind of thinking, I’ll never be out of a job.” He then went into a mini-tirade about the poor driving habits of motorists. Right then and there I realized that what I had already suspected, was reality. Absolute victim blame for grade-crossing collisions was the underlying philosophy of our nation’s railroad-safety, regulatory agency. FRA had bought into the railroads’ position that motorists were fully to blame for virtually all rail-crossing accidents. I thought that if this thesis was truly the case, then there was little, if any, difference between a collision involving an irresponsible driver circling a depressed automated gate in order to save time, and a responsible motorist carefully advancing through an unprotected crossing where his or her vision was significantly obstructed. Furthermore, I knew that the courts had found railroads to be a fault in a number of grade-crossing collisions, and my inspection of hundreds of grade crossings revealed that many were characterized with serious motorist sight obstructions and deficient conditions. Needless to say, I was troubled. But soon thereafter, another arm of DOT gave me cause for alarm, if not downright anger.

In its June 16, 2004 Audit of the Highway-Rail Grade Crossing Safety Program, DOT's Inspector General (IG) concluded that:

***Motorist Behavior caused most public grade crossing accidents.***

*Risky driver behavior or poor judgment accounted for 31,035 or 94 percent of public grade crossing accidents and 3,556 or 87 percent of fatalities, during the 10-year period. With the exception of 22 train passengers and railroad employees, all of these fatalities were motorists. According to accident reports, motorists failed to stop at grade crossings or drove around activated automated gates.*

As expected, the 94% figure representing victim blame, was pounced on by the railroad industry. Edward R. Hamberger, President of the Association of American Railroads, responded to a critical New York Times/Discovery Channel documentary on grade-crossing safety, by stating that, . . . *a recent report by the Inspector General (IG) of the U.S. Department of Transportation found that 94 percent of grade crossing fatalities are attributable to risky driver behavior.* I wondered. Where did the 94% figure come from? A credible analysis undertaken by the IG or accident reports filled out by railroads? Although the IG report used the words, According to accident reports, it was unclear as to the application and depth of IG analysis. Furthermore, the IG's report headlines representing the 94% figure gave the impression of a conclusion – not an inference dependent on the credibility of railroad-provided data. So I called the IG office to inquire about the source of the 94% figure. The answer was, unfortunately, as expected.

In a nutshell, the 94% victim-to-blame figure came from railroad accident reports filed with FRA. With rare exception, on those forms, railroads identify the cause of grade-crossing collisions in two ways. If the crossing is unprotected, the cause is “motorist failure to yield.” If the crossing has a gate, the cause is “motorist encircling an operational, depressed gate.” In essence, the IG did no analysis of grade-crossing collisions. It simply accepted one-sided railroad reports that at best, are subject to bias and misrepresentation. Furthermore, “failure to yield” is not a cause of grade-crossing collisions. The cause is the reason why motorists fail to yield to approaching trains. And motorists may go around depressed gates because they have malfunctioned and been down for long periods of time, with no train approaching. Finally, FRA hardly ever investigates grade-crossing collisions and has no first-hand knowledge of the relative causes of such accidents.

There are two major problems with the 94% figure. On one level, there is evidence that the figure will be canonized as the truth, when in fact, it is not. Single numbers published in a report by federal agencies can take on a life of their own, especially when there is no quantifiable evidence to refute the number – and especially when they support the position of an industry with strong financial capacity and political influence. On a broader level, it is disturbing that FRA and the railroad industry seem to take similar, unsupported positions in a matter of life and death – and it is doubling disturbing that the IG has joined in the fray. The truth of the matter is that there is no reliable study of the relative causes of grade-crossing collisions. In judicial proceedings, blame has been attributed to motorist behavior, railroad failure to sound the locomotive warning system in a prescribed manner, excessive train speed, motorist sight obstruction in approaching

crossings, defective track conditions, and failure of crossing safety devices such as malfunctioning gates. Even Operation Lifesaver – dedicated to responsible motorist and pedestrian behavior at grade-crossing dangers – has recently stated on its web site, that its . . . *messages do not suggest blame for rail-related incidents. Grade crossing collisions and pedestrian incidents may occur for a variety of reasons.*

In response to a request from Congress, which in turn had been spurred by a series of articles in the New York Times during 2004, the IG is once again investigating the behavior of FRA. The initial part of the investigation is a concentration on the process and validity of railroad accident reports to FRA. This focus presents the IG with an opportunity to correct a major past error – that being, giving the impression that it has concluded that 94% of grade-crossing collisions are due to victim error. All the IG really knew when it published its report in 2004, was that in 94% of the grade-crossing accident reports that railroads had filed with FRA, the industry claimed that victim error was the cause of the collisions. This is far different than the IG concluding anything about the cause of grade-crossing accidents. It is time for FRA and the IG -- both components of DOT -- to correct the misleading figure they have advanced. In the end, it is time for these federal agencies to represent the general public and the cause of efficient and effective grade-crossing safety.

## Attachment #2, 1 of 2



The Education Component of The American Track Foundation

# OVERGROWN VEGETATION AT RAILROAD CROSSINGS

By: Dr. Harvey A. Levine, Director, Crossing to Safety®

Overgrown vegetation that obstructs the ability of motorists to adequately see approaching trains at railroad crossings, has been a contentious and frustrating matter. On one hand, public policy recognizes the need for adequate sight distances at railroad crossings. As stated by the Federal Railroad Administration (FRA) in its Railroad-Highway Grade Crossing Handbook, *The primary requirement for the geometric design of a grade crossing is that it provides adequate sight distance for the motor vehicle operator to make an appropriate decision as to whether to stop or proceed.* Furthermore, Ohio law addresses the removal of obstructive vegetation at railroad crossings, and the adequacy of sight distance is supposed to be a factor that the Public Utilities Commission of Ohio (PUCO) considers in determining the relative dangers of railroad crossings. Still, inadequate sight distance remains a major hazard at railroad crossings, as demonstrated by the findings in litigated railroad-crossing accident cases. Understanding the issues and the needs relating to overgrown vegetation at railroad crossings requires an appreciation as to the limitations of federal and state law on the subject of both vegetation and sight distance.

### Adequate Sight Distance

Sight distance is the distance from points where motorists approach railroad crossings, to the left and right of the track structure at those crossings. (These distances form a triangle and are also referred to as sight triangles). The adequacy of sight distance depends on the speed of the approaching motor vehicles and trains. In its Handbook, FRA provides a table of “required” sight distance for combinations of motor vehicle and train speeds, in 10 mile-per-hour increments up to 70 miles-per-hour for motor vehicles and 90 miles-per-hour for trains. The FRA sight-distance figures are designated as being required for safe crossing, and have long been accepted in transportation circles as the proper standards.

### Federal Law

Federal legislation addresses vegetation in stating that: *Vegetation on railroad property which is on or immediately adjacent to roadbed shall be controlled so that it does not:*



- (a) *Become a hazard to track-carrying structures;*
- (b) *Obstruct visibility of railroad signs and signals along the rights of way, and at highway-rail crossings;*
- (c) *Interfere with railroad employees performing normal track-side duties;*
- (d) *Prevent proper functioning of signal and communication lines; or*
- (e) *Prevent railroad employees from visually inspecting moving equipment from their normal duty stations. (U.S.C. 49213.321)*

What is patently evident about the above federal provisions is that they are limited to railroad property; they do not address overgrown vegetation which obscures the sight of approaching trains; and, they are not accompanied with FRA-required, sight-distance numbers.

### **Ohio Law**

Ohio Law states that a railroad: . . . *shall destroy or remove plants, trees, brush, or other obstructive vegetation upon its right-of-way at each intersection with a public road or highway, for a distance of six hundred feet or a reasonably safe distance from the roadway of such public road or highway as shall be determined by the public utilities commission.* (Revised Code 4955.36). The State has established procedures whereby complaints of excessive weeds and vegetation on railroad property can be made to PUCO. Following a complaint, the applicable railroad can remedy the situation; the complaint can be dismissed or investigated; a hearing can be held; and/or a remedy can be imposed by PUCO. While Ohio law is more explicit than federal law in regard to sight distance (it includes a standard of 600 feet), the FRA-required-for-safety, sight-distance figures FRA are not adopted. Furthermore, although seemingly illogical, there may be claims of preemption in regard to State authority over adequate sight distance in that the federal government addresses, although it does not adopt, sight-distance standards.

### **Vegetation on Private Property**

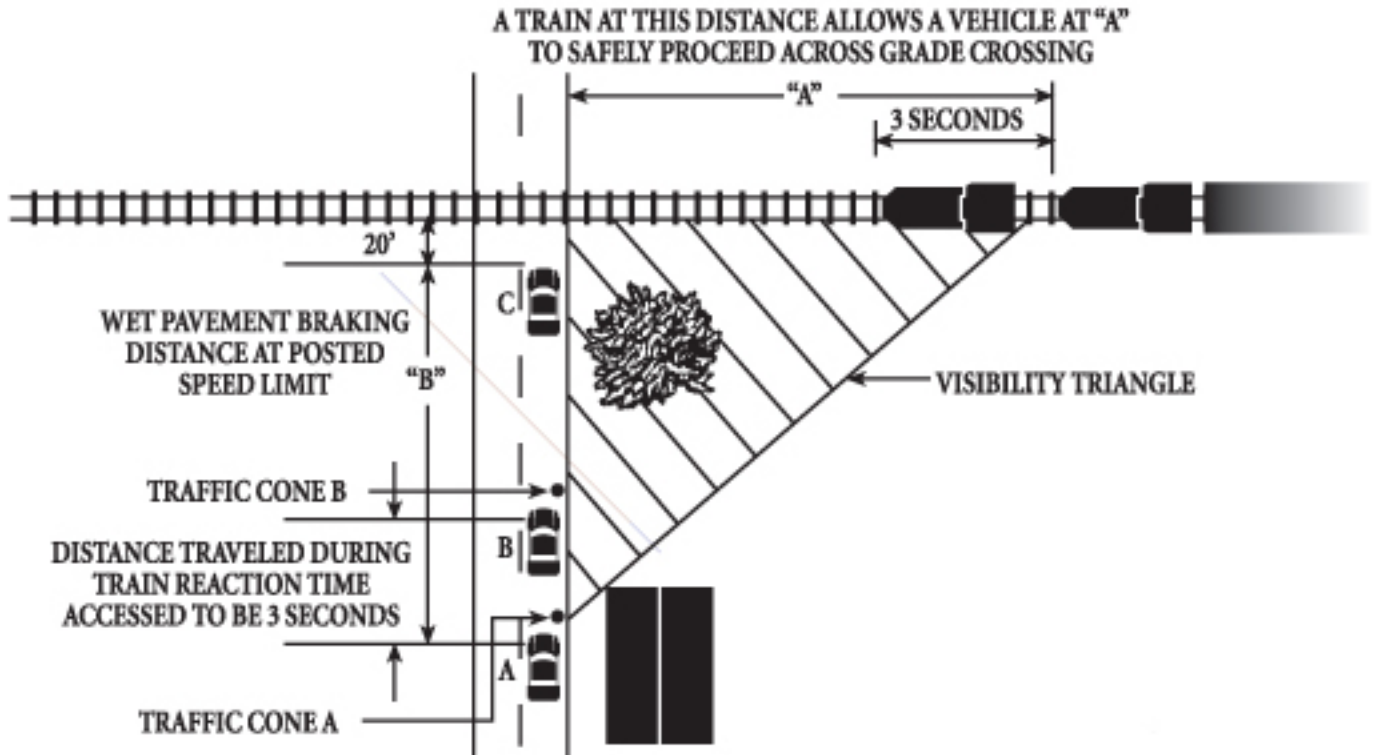
There are no laws that require private property owners to maintain vegetation at levels that permit ample visual views of approaching trains at railroad crossings. In fact, the position that private property owners have no obligation to remedy overgrown vegetation at railroad crossings has been confirmed in the courts. Contrary laws are unlikely to be enacted as they are thought to be in conflict with the rights of private land ownership.

### **The Bottom Line**

Overgrown vegetation at railroad crossings presents a major problem in that current laws are limited as to their ability to prevent overgrown vegetation. Various solutions are possible. First, railroads could voluntarily maintain their rights-of-way to prevent overgrown vegetation at their crossings. Second, tort law could induce railroads to develop pro-active, vegetation-control plans at crossings, through substantial financial judgments against railroads whose overgrown vegetation contributed to an accident. (At least one major railroad has already adopted such a vegetation policy based on the determination that it is economical to do so.) Third, where overgrown vegetation exists on private property, unless an agreement is reached with the applicable private-property owner to maintain vegetation at acceptable levels, automated gates could be installed. Fourth, gates could be installed at all crossings where overgrown vegetation is expected

to be a chronic problem. Fifth, Federal legislation could be amended which would adopt the sight-distance figures recommended by FRA in its Handbook. And finally, Ohio law could be altered to supplant its 600-foot reference, with FRA-recommended sight-distance figures. In regard to these last two solutions, for the government to do less would be akin to recognizing the solution to a problem and doing nothing to implement it.

# Railroad/Highway Grade Crossing Protection Sight Distance Diagram



## Required Design Sight Distances for Combinations of Highway and Train Vehicle Speeds

Train Speed	Highway Speed in MPH							
MPH	0	10	20	30	40	50	60	70
Distance Along Railroad from Crossing in Feet ("A")								
10	240	145	105	100	105	115	125	135
20	480	290	210	200	210	225	245	270
30	720	435	310	300	310	340	370	405
40	960	580	415	395	415	450	490	540
50	1,200	725	520	495	520	565	615	675
60	1,440	870	620	595	620	675	735	810
70	1,680	1,015	725	690	725	790	860	940
80	1,920	1,160	830	790	830	900	980	1,075
90	2,160	1,305	930	890	930	1,010	1,105	1,210
Distance Along Highway from Crossing in Feet ("B")								
	n/a	70	135	225	340	490	660	865

Note: All calculated distances are rounded up to next higher 5-foot increment.

Document Source: USDOT/FHA Railroad Highway Grade Crossing Handbook, Second Edition, FHWA-TS-86-215, pg. 133

Example: If a car and a train were both traveling 40 mph, a motorist stopped 340 feet from the crossing, should have a clear, unobstructed line of sight 415 feet down the tracks.

**Dominant Voice on Rail Safety Echoes the Industry's Message**  
**By WALT BOGDANICH**

Published: November 14, 2004

Judge Jack T. Marionneau said the offer took him by surprise. Two years ago, while presiding over a state lawsuit involving a motorist killed at a Louisiana railroad crossing, Judge Marionneau said he was among several people invited to ride on a train and learn about grade-crossing accidents.

"It was really a bit strange," Judge Marionneau said in court proceedings. "I had never been called by a railroad to go take a ride until I got this case."

The train ride, staged for police officers and judges to demonstrate how drivers dart in front of trains, was part of a publicity campaign developed by a nonprofit rail-safety group called Operation Lifesaver. The group's message - which emphasizes the role of motorists, not the railroads, in causing crossing accidents - echoes the railroad industry's consistent courtroom defense. The invitation, the judge said, "offended me."

Judge Marionneau declined the offer. He also vowed to empanel a grand jury if another such campaign was mounted during the trial.

Nor was he alone in worrying that Operation Lifesaver's message might taint the legal process. Since 2001, two other judges have taken action to stop the group from conducting publicity campaigns around the time of trials.

Operation Lifesaver is the nation's most influential rail-safety group, preaching its gospel of driver responsibility to judges, police officers, elected officials and the news media. No one disputes the value of its message - that motorists should pay attention at rail crossings - or the dedication of many of its volunteers. And its work is widely praised by police and community groups.

But documents show that the organization is tightly bound to the railroad industry, and critics, including many accident victims, say the group's message serves another agenda - to inoculate the railroads against liability in grade-crossing collisions.

Not only was Operation Lifesaver co-founded by a railroad; rail industry officials make up half the organization's national board and provide much of the financing for its state chapters. It also gets millions of dollars from the railroads' federal regulator, which is itself closely intertwined with the industry.

And even as Operation Lifesaver speaks out about changing drivers' behavior, it spends little time on a range of safety matters that are the responsibility of the railroads and is largely silent on the benefits of warning lights and gates, which many experts say are among the most effective of all safety devices.

In the view of its critics, Operation Lifesaver is another way the rail industry seeks to sidestep responsibility in grade-crossing accidents. This summer, The New York Times reported that railroads in some cases had destroyed or failed to keep important evidence in fatal grade-crossing cases and had failed to properly report hundreds of car-train collisions to federal authorities.

#### Blaming the Public?

Leila Osina said she was fired in 1995 as Operation Lifesaver's executive director after she objected to what she considered the group's pro-railroad slant. "The message was to blame the public for all railroad accidents and absolve the railroad from any responsibility," Ms. Osina said in a statement 2000 in connection with a federal court case in Arkansas involving a car-train accident.

Operation Lifesaver's position is that the police and judges should crack down on motorists who do not obey traffic safety laws at crossings, but it offers little criticism of railroads that fail to remove overgrown vegetation at crossings, or fail to fix warning signs and signals, or fail to make sure that trains properly sound their horns and obey the speed limit.

An internal document from before 1995 also shows that speakers were instructed not to use terms like "rough crossing," "dangerous crossing" or "speeding train." Those terms "carry a negative connotation" and detract from the group's safety message, the document states.

Operation Lifesaver says this document is no longer used.

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The current executive director, Gerri L. Hall, says her group is simply an educational organization with no hidden agenda. "Our education program isn't about who's at fault, it's about how a driver can take a role in safety," Ms. Hall said. "We want to empower them to make choices that are good. It isn't about placing blame."

Ms. Hall, who has led Operation Lifesaver since 1995, said that while some local volunteers had made unacceptable statements about the group's work in the past, she had worked to standardize its message. She said the group made safety presentations last year to about 1.3 million people, and she said that federal authorities say it has saved 11,000 lives since 1972. She also said Operation Lifesaver received "substantial" support from nonrailroad sources.

As for the comments made by Judge Marionneau in Louisiana and the court actions to stop Operation Lifesaver from conducting its media campaigns, Ms. Hall said she was unaware of the events that led to them.

Vicky Moore, whose son was killed nine years ago at a rural Ohio crossing where at least six other people have died, says she believes Operation Lifesaver lets railroads off the hook.

"Everybody has a shared responsibility here, not just the driver," she said. "We do not feel that Operation Lifesaver represents the families or victims of this type of tragedy."

Ms. Moore and her husband, Dennis, try to do what Operation Lifesaver does not - with the money from their settlement with Conrail, they run an educational foundation that, among other things, helps finance the installation of lights and gates. They also erect billboards that offer another reason for grade-crossing collisions: "Bad Crossings Kill Good Drivers," one of their signs states.

There is an issue that cuts angry and deep in the heart of rural and small-town America. On average, one person is killed every day at a railroad crossing. And while deaths have fallen sharply from a decade ago, there were 255 through August of this year, a 20 percent increase over the same period in 2003, according to the Federal Railroad Administration.

#### 'A Tremendous Success'

Operation Lifesaver was co-founded by Union Pacific Railroad in Idaho in 1972 and quickly spread to other states through independent chapters. By 1986 there were many state chapters and the national version of Operation Lifesaver was incorporated by the Association of American Railroads, an industry trade association; Amtrak; and the Railway Progress Institute, a rail equipment supply group.

Since Ms. Osina left the national group, its board has expanded to include more members from outside the rail industry. It now has 10 voting members - half of them from the industry.

"We know what a tremendous success Operation Lifesaver Inc. has been," said Allan Rutter last fall before he stepped down as chief of the Federal Railroad Administration, which regulates the industry. The agency backs his words with taxpayer money; it has contributed \$7 million since 1997. Two other agencies, the Federal Highway Administration and the Federal Transit Administration, have collectively kicked in a similar amount.

Even so, the Operation Lifesaver program pays scant attention to unsafe crossings.

According to minutes of a 1992 meeting of Operation Lifesaver's development council, the signal-workers union notified the group that "warning device malfunctions are a factor in driver behavior at railroad crossings" and that the police should be told of this. The minutes show that the recommendation was unanimously rejected. Ms. Hall of Operation Lifesaver said she knew nothing of the meeting because it happened before she arrived.

On the issue of lights and gates, Ms. Osina, the former executive director, said she came to believe that the railroads did not want them.

"The board of directors openly acknowledged an aversion to the installation of lights and gates because of the maintenance cost for those devices," Ms. Osina said in her 2000 court statement.

The government pays for the installation of lights and gates at crossings, but railroads must keep them working properly.

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Their value was underscored in 2001 when the Missouri Supreme Court upheld a verdict against Union Pacific after an accident at a grade crossing that did not have lights and gates. In that case, the court noted, a Union Pacific representative said lights and gates reduced the probability of accidents by as much as 90 percent.

Ms. Hall said Operation Lifesaver did not advocate more lights and gates at crossings because it is "beyond the scope of what Operation Lifesaver is trying to do." By taking a position on the issue, she said, "the next thing that would happen to us is we would spend all of our time in court, I suppose, or be dragged into discussions with Congress about lights and gates and who will pay for them."

Although lights and gates are in place in fewer than half the nation's rail crossings, Operation Lifesaver emphasizes driver attitudes, arguing that impatient motorists often drive around gated crossings.

#### Working With the Police

After a grade-crossing accident, Operation Lifesaver often offers its representatives as experts to be quoted in the local press. The group also tries to educate police officers through a program called Officer on the Train. Police officers, public officials and the news media are invited onboard a train with a camera mounted on the front of the engine. When motorists cross in front of the train, the police officers radio ahead to other officers waiting in cars nearby, who then issue tickets to the drivers. The news media is there to record what happens.

The resulting coverage conveys a message espoused by the railroads. During one such train ride in 1996, for example, a police officer was quoted by a St. Louis newspaper as saying, "People are still running the gates and winning big lawsuits."

Operation Lifesaver also reaches out to the police is on its Web site with 14 "tips for law enforcement officers" who might end up investigating a car-train collision. After tips on how to safely secure an accident scene, the first mention of a possible cause for the accident is No. 7: "Look for evidence of suicide."

An older Operation Lifesaver guide, no longer used, noted that "a significant number of grade crossing 'accidents' are cleverly disguised suicides." The guide further stated that "the lack of physical evidence should not rule out that probability."

Some drivers do commit suicide at grade crossings, though the exact number is not known. But some families of accident victims say railroads unfairly raise the specter of suicide as a way to escape responsibility for crashes.

In addition to police officers, Operation Lifesaver also focuses on judges with its message that reckless drivers are to blame for rail-crossing accidents. One way to reach them was outlined in a document titled "How to Gain the Attention of Judges," which suggested that the group's members "find out which judges are running for election and invite them to an interview to express their opinions."

Asked about the document, Operation Lifesaver said in a statement that a judge created it and distributed it at a national Operation Lifesaver conference in 2000. That judge, the statement said, believed other judges should know "about the importance of enforcing grade-crossing violations by drivers and railroad trespassing violations by pedestrians."

Judge Marioneaux of Louisiana said in October 2002 that Operation Lifesaver had crossed the line when it invited him to participate in Officer on the Train. "It looks like it's a simple invitation without any point," he said in court proceedings, noting that he was not the only judge invited to go along. "But what is the reason to ask a judge to go ride on a train?" The judge did not cite any evidence that the event was designed to influence his views or the jury's, but he said it made him feel uncomfortable nevertheless.

In another rail-crossing case, William R. Wilson Jr., a federal judge in Arkansas, tried in August 2001 to stop Operation Lifesaver from running its publicity campaign during the trial. Judge Wilson said he felt the order was necessary after a two-day regional event in which the news media and police officers were given train rides.

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"I'm sure that a lot of crossing accidents are primarily due, or solely due, to driver disregard, negligence, trying to beat the train or whatever," Judge Wilson said in court proceedings. But he also said some of the educational materials did not "seem balanced," failing to mention that railroads sometimes "don't blow the whistle or sometimes they speed or sometimes crossings are not repaired right or sometimes the railroad lets vegetation grow up."

James Johnson, a former grade-crossing safety coordinator for Southern Pacific Railroad - now part of Union Pacific - testified in 2000 in yet another grade-crossing case that on two occasions he helped arrange Officer on the Train programs to coincide with trials.

Elizabeth S. Hardy, a lawyer who represents accident victims, said that on one occasion she had just picked a jury in a grade-crossing case "and the very next morning" Operation Lifesaver's message was being heard "eight to 10 times a day on television, on the radio."

Ms. Hardy, who late last year obtained a court order to stop the group from running a media blitz during a trial, complained that the railroads used the news media to show how their employees "suffer grievously" because of accidents caused by "stupid" motorists.



A spokeswoman for the Association of American Railroads said it was "patently false" that the industry used Operation Lifesaver to further its own agenda. Ms. Hall, the group's executive director, agreed.

"These are good people, and they are being besmirched by innuendo," Ms. Hall said. "This is a good organization with big hearts." She said plaintiffs' lawyers were behind the criticism of her group because, with the number of rail-crossing deaths declining, "they are losing their base of operation." Operation Lifesaver, she added, wants to look at all factors involved in accidents, including dangerous crossings.

But Ms. Moore, the mother whose son was killed by a train, remains unconvinced. She asked to join Operation Lifesaver's board last year, but the board unanimously rejected her, saying the group did not wish to become involved in "advocacy." Why, she asked in a letter to Operation Lifesaver, is she called an advocate, when railroad officials on the board are not?

Ms. Moore says she never received an answer.

*Jenny Nordberg and Eric Koli contributed reporting for this article.*

## Attachment #4, 1 of 2



*The Education Component of The Angelis 20 Track Foundation*

### **GOVERNMENT-FUNDED GATE INSTALLATIONS: A RAILROAD PROFIT CENTER?**

By: Dr. Harvey A. Levine, Director, Crossing to Safety®

With about \$160 million of federal funds allocated for the installation of upgraded safety devices at railroad grade crossings, and additional monies contributed by state governments, probably about \$180 million of public monies are used to finance gate installations in an average year. State agencies award sole-source contracts to railroads for gate installations, and based on my conversations with various distributors, I believe that railroad charges are rarely scrutinized and/or audited. Thus, one can logically wonder whether the installation of automated gates at grade crossings constitutes a railroad profit center. Based on my analysis of several recent railroad invoices, the answer appears to be in the affirmative.

The figures presented below summarize railroad charges for a gate installation:

1. Materials		
a. Direct	\$91,493	
b. Freight	<u>3,660</u>	\$95,153
2. Labor		
a. Direct	10,129	
b. Indirect		
(1) Fringe benefits (48%)	4,862	
(2) Insurance (60%)	6,077	
(3) Travel, lodging, meals	<u>4,761</u>	25,829
3. Outside Services		
a. Rental equipment	12,077	
b. Hookups, engineering, permits, etc.	<u>4,620</u>	16,697
4. General & Administrative (overhead)		
a. 22.5% of Materials	20,586	
b. 22.5% of Direct Labor	<u>2,279</u>	22,865
5. Fixed Fee (profit)		<u>16,054</u>
	<b>Total</b>	<b>\$176,598</b>

Questions can be raised about the legitimacy of the invoiced expenses in each category identified above, but some broad issues immediately come to the fore, particularly in that the work performed in this instance was subcontracted by the railroad to a so-called “third party.” In the first place, why is there a fixed fee of \$16,054 – interpreted by me as profit – when the work was contracted out, and more importantly, when government monies funded 100 percent of a safety device at a crossing that is half owned by the railroad? Second, why did the railroad charge an overhead (general & administrative) expense of \$22,865 when it didn’t actually experience these costs because of the gate installation? Neither did the subcontractor. In the case of a government subsidy such as full payment of a gate installation, the railroad should be compensated for its “out-of-pocket” costs and nothing more. Stated another way, the only expenses that should be recoverable to the railroad are the ones that would be “avoidable” if the automated gates were not installed. Profit is a reward to investors for risk taking. In the case of gate installations, railroad investors incur no financial risk.

Third, labor fringe charges equating to 48% of direct labor appear to be excessive in view of the historic relationship between railroad labor rates and fringe benefits – and in this particular case, especially in view of the fact that a railroad subcontractor does not have to contribute to railroad retirement (and its relatively high payment) as does a railroad. Fourth, the same question of excessiveness is applicable to the 60% insurance charge. It is hard to believe that \$6,077 is spent for employee liability insurance because of two weeks worth of work in installing an automated gate. Fifth, why is the railroad -- or its subcontractor – renting equipment such as pick-up trucks and backhoes, when such equipment is commonly used for gate installations? Wouldn’t it be far less expensive to own dirt-moving equipment? And the two-week rentals are also highly questionable. Sixth, a review of other railroad charges such as those listed above, reveals that 80 man-hours of time are charged for a variety of railroad employees. Surely, each installation doesn’t take the same amount of time. Also, included in the direct labor charges is time for a bookkeeper and billing clerk. These are overhead expenses that would be incurred even without the gate installation. And seventh, the \$95,153 charges for materials may be excessive in view of the long history of purchased materials and potentially available used items. How much are the markups of the material suppliers? Are competitive bids taken? Are the charges audited? Where are the controls?

Public (tax-payer) funding of gate installations does not preclude railroads from expending their own monies on such ventures. But they do not – that is, unless such expenditures are required for an economic venture such as a merger with, or acquisition of, another railroad. In essence, with few exceptions, railroads allow the government to pay the full cost of installing gates. At a minimum, the appropriate costs in such cases are the railroads’ out-of-pocket (also known as “avoidable”) costs. Railroads do not encounter investment risk in these cases as they invest no capital. Therefore it is folly to allow them a return (profit) to something (investment) that is nowhere to be seen. It is equally folly to allow railroads to recover overhead charges that they also do not experience because of gate installations. And finally, it is folly not to audit railroad charges for gate installations. Billed railroad expenses should be reasonable, legitimate, and economical. Nothing less is in conflict with the public interest.

## Oversight Is Spotty on Rail-Crossing Safety Projects

By WALT BOGDANICH and JENNY NORDBERG

Published: February 18, 2005

When Missouri state auditors set out to learn if railroads were prudently spending government money to install warning signals at grade crossings, they found more than a few problems.

According to audit reports from two years ago, one railroad, Kansas City Southern, had submitted overcharges of nearly 100 percent, or almost \$60,000, on one project. Another, BNSF Railway, also had an overcharge of nearly 100 percent.

And that was not all. BNSF, formerly known as Burlington Northern and Santa Fe, overcharged to a lesser degree on more than a dozen other signal projects, records show.

Missouri officials should not have been surprised. In 2000, Missouri asked BNSF to repay \$670,000 in overcharges on 43 earlier signal projects, all financed mostly by the Federal Highway Administration. Another railroad had similar overcharges, state officials said.

When it comes to catching sizable overcharges in the federally financed lights-and-gates program, Missouri stands out. Other states audit only a few signal projects - or none - even though these construction contracts are almost always awarded to railroads without competitive bids, according to public records and government officials.

The result, rail safety advocates say, is that signals often cost more than they should, which means that fewer of these life-saving warning devices are installed.

Safety experts say warning lights and gates are a major reason why crossing deaths have declined in recent years, though they did jump in 2004. Even so, most of the nation's 150,000 rail crossings on public roads have no lights or gates. In all, nearly 900 people have died at crossings that lack lights or gates since 2000.

Just this week, separate fatal accidents occurred at two crossings with no lights or gates in Tangipahoa Parish in Louisiana; the first, on Sunday, killed one man and three children, while the second crash killed two men yesterday. But while up to 700 crossings in Louisiana need warning lights and gates, said Mark Lambert, a state transportation official, there is not enough federal money to pay for them.

Louisiana has questioned railroad billings, and last year, auditors there found possible overcharges of more than 10 percent, about \$1.1 million, though the actual recovery might drop after settlement discussions.

"If you are spending the public's money, you would rather see a competitive situation," said Steven L. Schooner, co-director of the Government Procurement Law Program at George Washington University Law School.

The Federal Highway Administration agrees, but only up to a point. When building a road, the agency calls competitive bidding "a basic fundamental principle of federal procurement law." But that does not hold for the lights-and-gates program, where federal highway officials have spent \$1.7 billion since 1973 to make grade crossings safer.

"Bidding or no bidding, post-performance auditing, or at least some level of oversight, is necessary to ensure proper stewardship of taxpayer funds," Mr. Schooner said.

A spokesman for the highway administration, Brian Keeter, said that to make sure states "use federal funds appropriately," they are required to report on the progress of crossing projects and whether they have helped to reduce accidents.

But in written responses to questions, he did not specifically answer how the government could ensure that those funds are used properly if many projects are not audited. Mr. Keeter also did not provide the percentage of projects that are audited.

Federal rules do not require states, which administer the lights-and-gates program, to seek competitive bids as long as railroads manage the projects. While states can seek bids from private contractors if they run the projects themselves, they prefer to let railroads handle the work, since they own the crossings and are obligated to maintain them.

"On the highway, we can do what we want," said Lamar McDavid, an auditor with the Alabama Transportation Department. "But we're on private property, so we have to do what they want." Keith Golden of the Georgia Transportation Department added, "We don't have the power to negotiate with them."

States said they do negotiate prices with railroads. In Tennessee, after a 17-year-old girl was killed at a rail crossing in 1997, the state told CSX to install gates there. The railroad said it would cost \$122,000, nearly three times what the state thought was fair, according to state records. CSX eventually agreed to do the work for half its original proposal. The upgrade was finished in 1999.

Today, a full set of lights and gates costs \$80,000 to \$200,000 or more, depending on the crossing, state transportation officials said.

The federal government does not require states to audit every project. "States perform the day-to-day oversight of this program and thus determine when or if audits occur," said Doug Hecox, a Federal Highway Administration spokesman.

The Association of American Railroads, a trade group, said railroads did not make a profit on lights and gates. And, the association added, "Taxpayers can be assured that they are getting the best price possible because states conduct audits."

But Ohio, for example, does no audits of signal projects at grade crossings, state officials said.

Officials in other states said they feared that some audits were becoming less reliable. Because one major railroad - Norfolk Southern - is moving toward a paperless work environment, verifying bills is becoming "nearly impossible," according to a joint audit in 2003 involving 10 states, including New York. The rail association said its members are not violating federal reimbursement rules.

Railroads said overcharges were simply unintentional mistakes, a statement not disputed by state auditors. Kansas City Southern, for example, said its overbillings were generally small and due to the complexity of different state contracts.

BNSF said Missouri's audit findings were the result of misunderstandings. And while the railroad did not always agree with the state's findings, BNSF said it reimbursed the state anyhow.

It is also true that two separate joint audits, representing 8 Eastern states in one group and 10 in another, found only minimal overcharges by CSX and Norfolk Southern. But these joint audits covered only a tiny percentage of projects, fewer than 10 projects in all from the participating states. And those reviews are not done every year, records show. CSX, for example, has not undergone a joint audit by the group of Eastern states since 2000, in part because auditors said they did not expect to find significant problems.

An official with the federal Department of Transportation's inspector general said he was unaware of any comprehensive investigation by his office of the federal lights-and-gates program. But when the inspector general followed up on a whistle-blower complaint in the 1990's, investigators found that CSX had knowingly padded its expenses. CSX agreed in 1995 to pay \$5.9 million to settle civil fraud accusations.

In addition to federal funds, state money is also used in signal programs. California, for example, pays railroads for maintaining lights and gates at crossings after they are installed. But when state officials checked these billings, they found that railroads had submitted expenses for maintaining signals at crossings that were closed, crossings with no warning signals, crossings with no rail service, and crossings claimed by more than one railroad. As a result, California officials rejected \$346,492 in 2003.

Illinois officials also use state money to pay railroads for upgrading rail crossings. But in a highly critical report in November 2003, the Illinois auditor general found that even though state transportation officials had said railroad bills "seemed unreasonably high," they still did not verify charges for materials, labor or personnel expenses.

Railroads, for example, submitted bills for trench-digging equipment that was rented for weeks - even months - longer than necessary, the report found. State officials, the report added, do "not assure the prescribed work is done, work is done on schedule or that expenditures for the project are appropriate." The projects sampled by the auditor general took nearly four years to complete.

## Highway Agency Disavows Claims by Rail Safety Group

By **WALT BOGDANICH** and **JENNY NORDBERG**

Published: January 23, 2005

For years, a national railroad safety group with ties to the rail industry has promoted itself with an impressive claim: its educational programs have saved thousands of lives by emphasizing the role of motorists, not trains, in preventing grade-crossing accidents.

"The Federal Highway Administration credits Operation Lifesaver with preventing 10,000 deaths and 40,000 injuries," Gerri L. Hall, the group's executive director, said in a statement submitted to Congress in 1998. In Congressional testimony, in interviews and on its Web page, Operation Lifesaver has cited the highway administration as the basis for the claim that its primary message - that drivers and pedestrians should pay closer attention at rail crossings - has helped save thousands of lives.

The highway administration, however, insists that it has said no such thing.

According to the agency, an estimated 11,000 deaths have been prevented not because of Operation Lifesaver but because of a federal program that poured billions of federal dollars into improving safety at rail crossings, including installing warning lights and gates. Operation Lifesaver has said little on the issue of lights and gates, which the railroads are required to keep in working order.

Late last year, The New York Times asked the highway agency to validate Operation Lifesaver's claim, which the safety group had provided to the newspaper for an article. The highway administration's spokesman, Brian C. Keeter, declined to be interviewed, but in a statement last week he said that the federal agency had asked Operation Lifesaver, a recipient of at least \$14 million in federal subsidies, to be more accurate in the future, and that the group had agreed "to clarify its role in highway-rail grade-crossing safety."

In its article on Operation Lifesaver, The Times reported that a former executive director of the group, Leila Osina, said she was fired in 1995 for protesting what she described as the group's pro-railroad slant. Operation Lifesaver encourages the police and judges to crack down on drivers who do not obey traffic safety laws at crossings, but the group rarely criticizes railroads when they fail to keep crossings safe.

Operation Lifesaver, a nonprofit association co-founded three decades ago by Union Pacific, has denied having a pro-railroad agenda. The group has placed more non-railroad people on its board since the mid-1990's, though 6 of the 10 voting members still represent the rail industry.



Asked to comment on the highway administration's statement, Ms. Hall, the group's executive director, said it "has always been our understanding" that the agency had credited Operation Lifesaver with being part of a broader effort to reduce fatalities at grade crossings.

Over the last decade, the highway administration has given the group at least \$7 million to support its work, which is widely praised by the police and community groups. But an agency spokesman said the highway administration had "made no internal estimates on the number of lives saved by Operation Lifesaver."

Ms. Hall said she only recently learned of the highway agency's objection, even though, she added, her group has been working with that agency for the last decade. The agency, she pointed out, publicly corrected the record only after The Times's inquiry.

Another agency, the Federal Railroad Administration, has also given Operation Lifesaver more than \$7 million since 1997. Both the railroad administration and highway administration said any future decisions about whether to give Operation Lifesaver money are up to Congress.

Ms. Hall of Operation Lifesaver said the group's claim that it has helped to save lives is also backed by a university study of highway grade-crossing fatalities. She said Operation Lifesaver "would never pretend" to be the sole reason for fewer deaths at crossings. The engineering and law enforcement communities have also helped to reduce fatal accidents, Ms. Hall added.

But Vicky Moore, who runs a small rail-safety group in Ohio that focuses more on dangerous crossings than driver behavior, said the highway administration's statement showed that Operation Lifesaver had not been telling the truth "to our government, legislators and anyone who would listen."

Table No. 1

## NUMBER OF GRADE-CROSSING ACCIDENTS AND CASUALTIES

Year	All Crossings				Public Crossings				Private Crossings			
	Accident	Death	Injury	Casualty	Accident	Death	Injury	Casualty	Accident	Death	Injury	Casualty
1975	12,125	917	3,860	4,777	11,408	888	3,736	4,624	718	29	124	153
1976	13,182	1,115	4,740	5,855	12,374	1,066	4,333	5,601	808	49	205	254
1977	13,412	992	4,863	5,855	12,594	944	4,646	5,590	817	48	217	263
1978	13,557	1,064	4,447	5,481	12,667	1,918	4,124	6,042	890	46	187	233
1979	12,759	883	4,378	5,261	11,777	834	4,172	5,006	982	40	206	255
1980	10,796	833	3,890	4,723	9,926	788	3,662	4,450	870	45	228	273
1981	9,461	728	3,293	4,061	8,698	697	3,121	3,818	763	31	172	203
1982	7,932	607	2,637	3,244	7,324	580	2,508	3,088	608	27	129	156
1983	7,303	375	2,623	3,198	6,691	542	2,467	3,009	614	33	156	189
1984	7,456	649	2,910	3,559	6,798	610	2,723	3,333	658	39	187	226
1985	7,073	582	2,687	3,269	6,497	537	2,568	3,105	576	45	179	224
1986	6,513	616	2,438	3,074	5,965	578	2,328	2,906	548	38	130	168
1987	6,426	624	2,429	3,053	5,861	598	2,313	2,913	535	26	116	142
1988	6,617	689	2,589	3,278	6,027	652	2,417	3,069	590	37	172	209
1989	6,526	801	2,868	3,669	5,980	757	2,683	3,440	545	44	185	229
1990	5,715	698	2,407	3,105	5,233	648	2,254	3,550	480	50	153	203
1991	5,388	608	2,094	2,702	4,861	565	1,923	2,488	525	43	171	214
1992	4,901	579	1,975	2,554	4,465	536	1,830	2,366	445	43	145	188
1993	4,892	626	1,837	2,463	4,437	574	1,744	2,318	455	42	93	135
1994	4,979	615	1,961	2,576	4,503	572	1,829	2,401	476	43	132	175
1995	4,633	579	1,894	2,473	4,153	524	1,754	2,278	480	55	140	195
1996	4,257	488	1,610	2,098	3,788	449	1,486	1,935	469	65	124	189
1997	3,865	461	1,540	2,001	3,414	419	1,730	2,149	451	42	170	212
1998	3,508	431	1,303	1,734	3,086	385	1,179	1,564	422	48	124	170
1999	3,489	402	1,396	1,798	3,090	363	1,262	1,625	399	39	134	173
2000	3,502	425	1,219	1,644	3,032	359	1,079	1,448	470	56	140	196
2001	3,237	421	1,157	1,578	2,843	386	1,038	1,424	394	35	119	154
2002	3,077	357	999	1,356	2,709	316	866	1,196	368	41	133	174
2003 (P)	2,928	332	1,028	1,360	2,559	301	913	1,214	369	31	115	146
2004 (T)	3,050	368	1,071	1,439	2,665	334	951	1,285	385	34	120	154

(P) Preliminary. There are immaterial inconsistencies in year 2003 data.

(T) Preliminary for all crossings. Estimated for public and private crossings based on year 2003 ratios

Source: Federal Highway Administration, Highway-Rail Crossing Accident/Incident and Inventory Bulletin, various years, and Federal Railroad Administration, Railroad Safety Statistics, various years (on FRA website in more recent years).

Table No. 2

## NUMBER OF GRADE CROSSINGS

Year	Total	Public	Private*	
			Total	At Grade
1975	361,452	219,161	142,291	
1976	361,420	219,082	142,338	
1977	360,048	218,354	141,694	
1978	357,721	217,068	140,653	
1979	356,340	216,123	140,217	
1980	355,145	215,428	139,717	
1981	353,089	213,907	139,182	
1982	345,337	209,541	135,796	
1983	338,350	205,339	133,011	
1984	330,986	200,730	130,256	
1985	325,179	197,383	127,936	
1986	318,033	192,454	125,579	
1987	307,062	185,643	121,419	
1988	301,039	181,953	119,086	
1989	296,192	178,627	117,565	
1990	292,839	176,572	116,267	
1991	289,519	174,094	115,425	
1992	280,585	170,622	113,076	109,963
1993	276,468	168,116		108,352
1994	362,750	166,035		196,715
1995	268,676	163,917		104,759
1996	265,721	162,426		103,295
1997	262,268	160,395		101,873
1998	259,240	158,590		100,650
1999	257,995	157,690		100,305
2000	254,759	155,974		98,785
2001	252,042	153,848		98,194
2002	251,243	152,453		97,790
2003 (P)	246,601	150,744		95,857
2004 (E)	243,000	149,000		94,000

\* Number of private at-grade crossings not available until 1992.

(P) Preliminary.

(E) Estimated based on year 2002 to year 2003 declines.

Source: Federal Highway Administration, Highway-Rail Crossing Accident/Incident and Inventory Bulletin, various years, and Federal Railroad Administration, Railroad Safety Statistics, various years (on FRA website in more recent years.)

Table No. 3

## CASUALTIES PER PUBLIC GRADE CROSSING

<u>Year</u>	<u>Number of Casualties*</u>	<u>Number of Crossings</u>	<u>Casualties Per Crossing</u>
1975	4,624	219,161	.0210
1976	5,601	219,082	.0255
1977	5,590	218,354	.0256
1978	6,042	217,068	.0278
1979	5,006	216,123	.0231
1980	4,450	215,428	.0206
1981	3,818	213,907	.0178
1982	3,088	209,541	.0147
1983	3,009	205,339	.0146
1984	3,233	200,730	.0166
1985	3,105	197,383	.0157
1986	2,906	192,454	.0150
1987	2,911	185,643	.0156
1988	3,069	181,953	.0168
1989	3,333	178,627	.0192
1990	3,550	176,572	.0201
1991	2,488	173,094	.0142
1992	2,366	170,622	.0138
1993	2,318	168,116	.0137
1994	2,401	166,035	.0144
1995	2,278	163,917	.0138
1996	1,935	162,426	.0119
1997	2,149	160,395	.0133
1998	1,564	158,590	.0098
1999	1,625	157,690	.0103
2000	1,448	155,974	.0092
2001	1,424	153,848	.0092
2002	1,196	152,453	.0078
2003 (P)	1,214	150,744	.0080
2004 (E)	1,325	149,000	.0088

\* Deaths plus injuries.

(P) Preliminary.

(E) Preliminary number of casualties. Number of crossings estimated based on decline from year 2002 to year 2003.

Source: Federal Highway Administration, Highway-Rail Crossing Accidents/Incident and Inventory Bulletin, various years, and Federal Railroad Administration, Railroad Safety Statistics, various years (on FRA website in more recent years).

Table No. 4

## CASUALTIES PER PRIVATE GRADE CROSSING

Year	Number of Casualties*	Number of Crossings	Casualties Per Crossing
1975	153	142,291	.0010
1976	254	142,338	.0017
1977	265	141,694	.0018
1978	233	140,653	.0016
1979	255	140,217	.0018
1980	273	139,717	.0019
1981	203	139,182	.0014
1982	156	135,796	.0011
1983	189	133,011	.0014
1984	126	130,256	.0009
1985	224	127,936	.0017
1986	168	125,579	.0013
1987	142	121,419	.0011
1988	209	119,086	.0017
1989	229	117,565	.0019
1990	203	116,267	.0017
1991	214	115,425	.0018
1992	188	109,963	.0017
1993	135	108,352	.0012
1994	175	106,715	.0016
1995	195	104,759	.0018
1996	189	103,295	.0018
1997	212	101,873	.0020
1998	179	100,650	.0017
1999	173	100,305	.0017
2000	196	98,798	.0019
2001	154	98,194	.0015
2002	174	97,790	.0017
2003 (P)	146	95,857	.0015
2004	154	94,000	.0016

\* Deaths plus injuries.

(P) Preliminary.

(F) Preliminary number of casualties. Number of crossings estimated based on decline from year 2002 to year 2003.

Source: Federal Highway Administration, Highway-Rail Crossing Accident/Incident and Inventory Bulletin, various years, and Federal Railroad Administration, Railroad Safety Statistics, various years (on FRA website in more recent years).

Table No. 5

## GATE INSTALLATIONS AT PUBLIC GRADE CROSSINGS

Year	Number of <u>Public Crossings</u>	Number of <u>Automated Gates</u>	Percentage of <u>Gates to Total</u>
1975 (E)	219,161	12,300	5.6%
1976 (E)	219,082	13,100	6.0
1977 (E)	218,354	13,900	6.4
1978 (E)	217,068	14,700	6.8
1979 (E)	216,123	15,300	7.2
1980	215,428	16,291	7.6
1981	213,907	16,899	7.9
1982	209,541	18,429	8.8
1983	205,339	19,473	9.5
1984	200,730	20,136	10.0
1985	197,383	21,129	10.7
1986	192,454	22,066	11.5
1987	185,643	23,677	12.8
1988	181,953	24,635	13.5
1989	178,627	25,377	14.2
1990	176,572	26,194	14.8
1991	174,094	26,783	15.4
1992	170,622	27,507	16.1
1993	168,116	28,139	16.7
1994	166,035	29,050	17.5
1995	163,917	29,912	18.2
1996	162,426	30,813	19.0
1997	160,395	31,696	19.8
1998	158,590	32,406	20.4
1999	157,690	33,235	21.1
2000	155,974	34,296	22.0
2001	153,848	35,422	23.0
2002	152,453	36,403	23.9
2003 (P)	150,744	37,100	24.6
2004 (P)	149,000	37,900	25.4

(E) Estimated based on averages in ensuing years.

(P) Preliminary estimates based on averages in prior years.

Source: Federal Highway Administration, Highway-Rail Crossing Accident/Incident and Inventory Bulletin, various years, and Federal Railroad Administration, Railroad Safety Statistics, various years (on FRA website in more recent years).