



Minnesota Operation Lifesaver, Inc



**OPERATION
LIFESAVER®**

Minnesota

It is the Mission of Minnesota Operation Lifesaver to create awareness and provide education to the public on *how to make safer decisions* around tracks and trains in an effort to reduce collisions, deaths and injuries at highway-rail grade crossings and on railroad property in Minnesota.

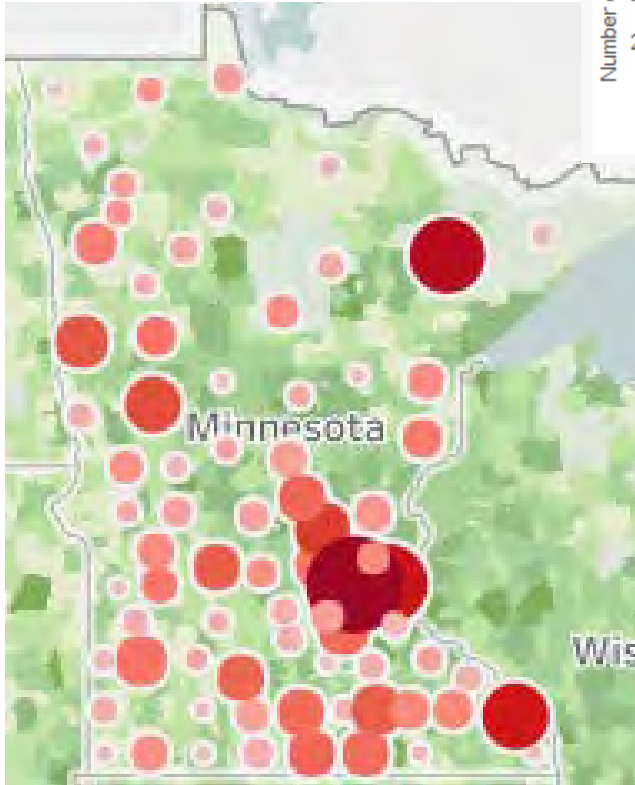
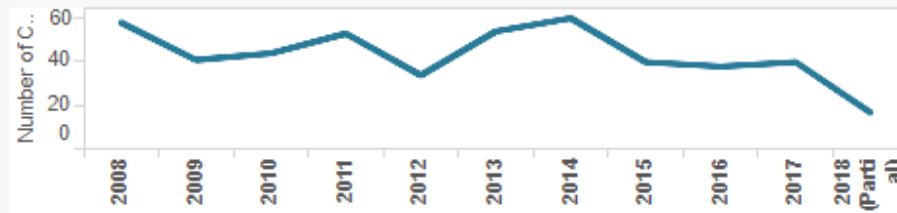


Decline in collisions

We've helped to reduce the number of train/motor vehicle collisions from a 1972 high of roughly 12,000 annual incidents to approximately 1,953 incidents in 2012.

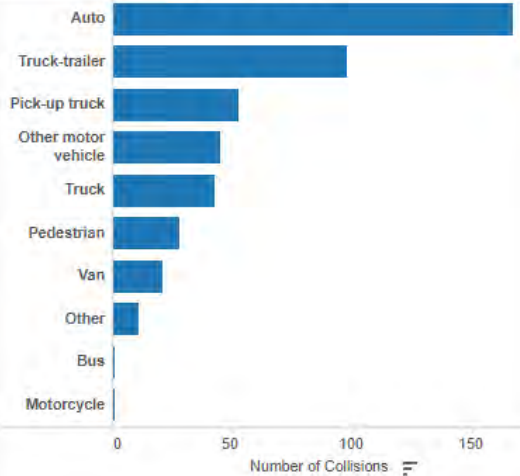
(Source: FRA preliminary 2012 statistics).

Collisions Over Time

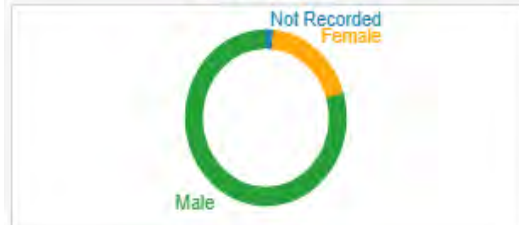


U.S. Department of Transportation
Federal Railroad Administration

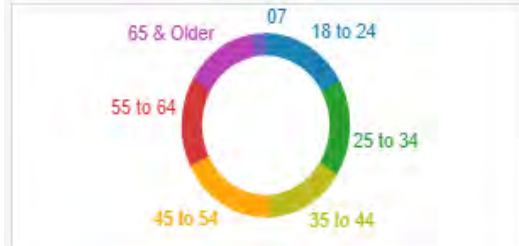
Type of Vehicle



Driver Gender



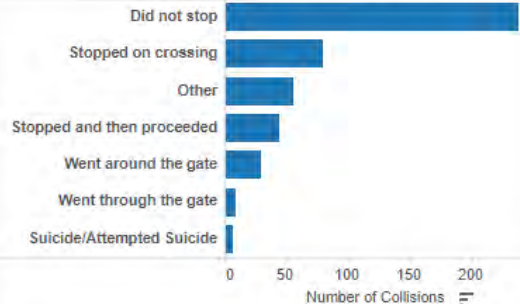
Driver Age



Warning Device



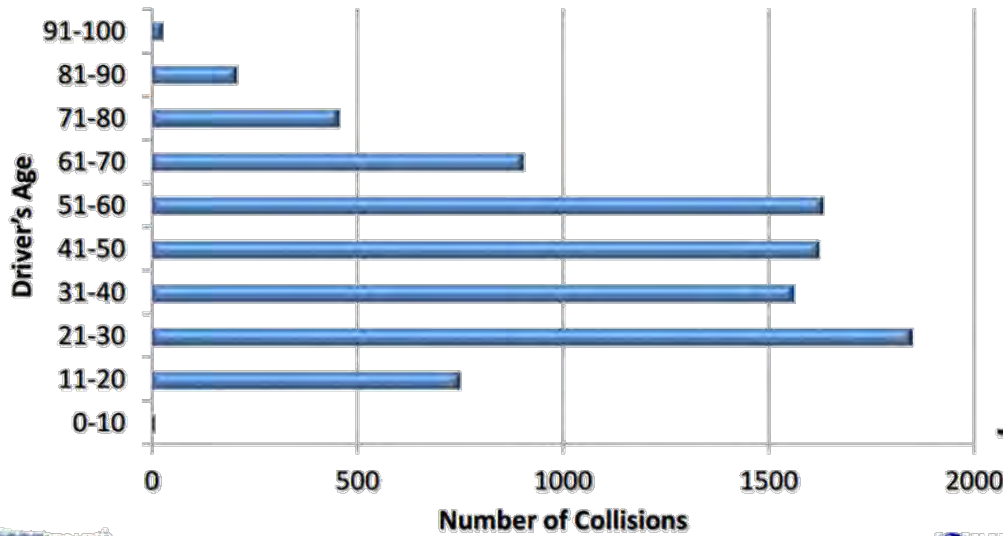
Highway User Action



Vehicle Position



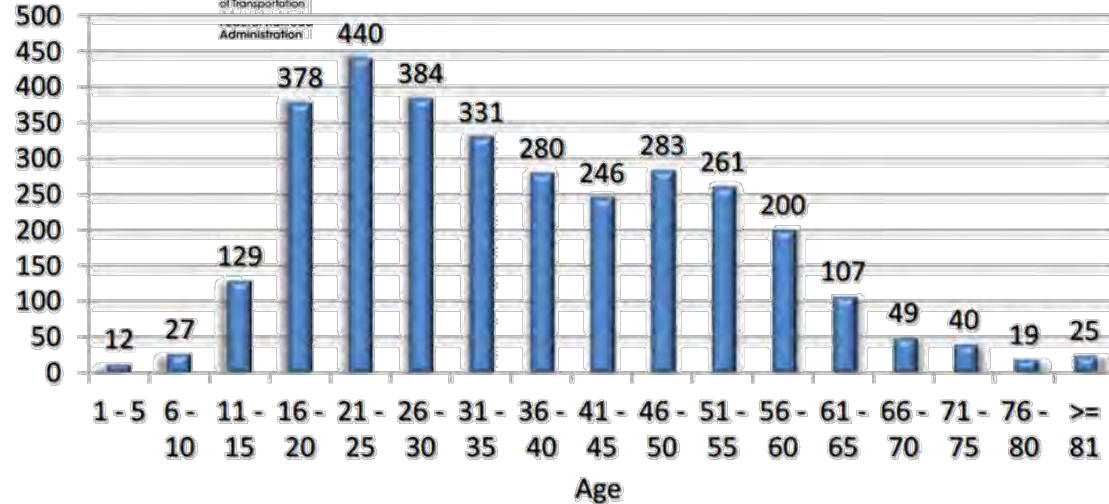
Public Crossing Collisions By Age 2012-2016



Trespass Fatalities by Age (2014-2016)



FRA – Highway-Rail Crossing & Trespasser Programs Division
3/14/2017



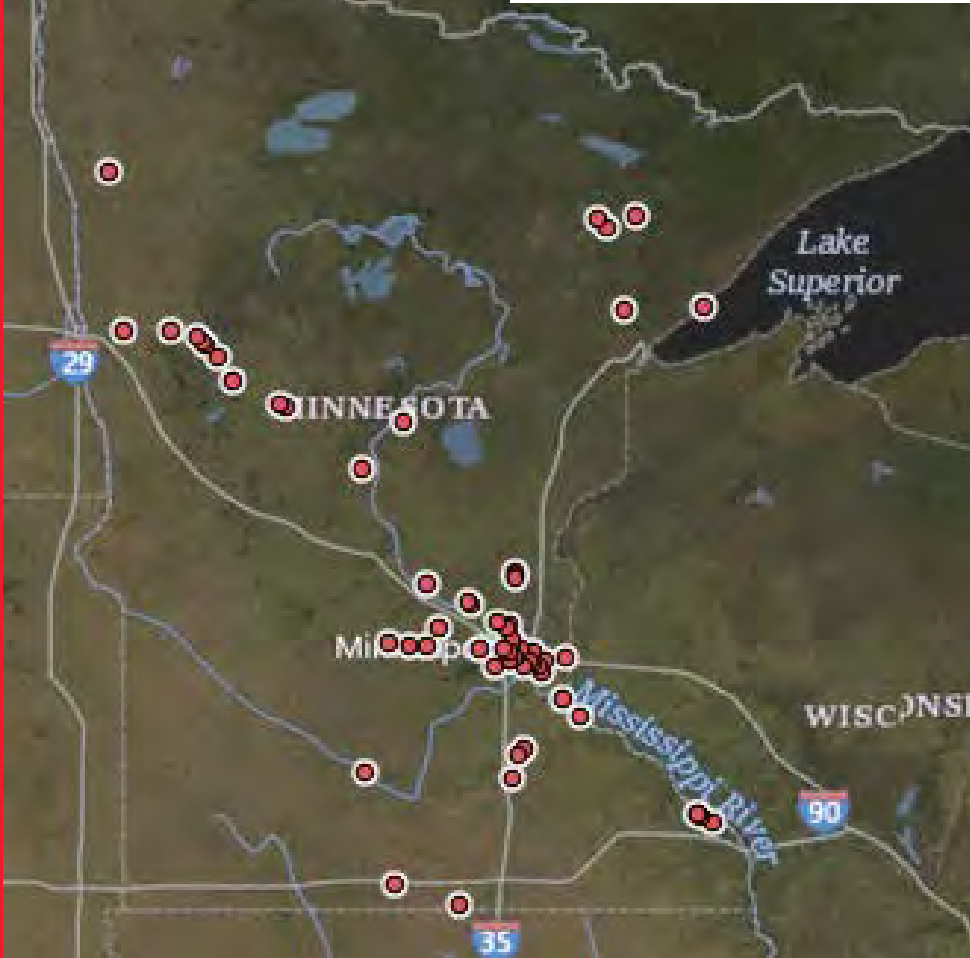
FRA – Highway-Rail Crossing & Trespasser Programs Division
3/14/2017



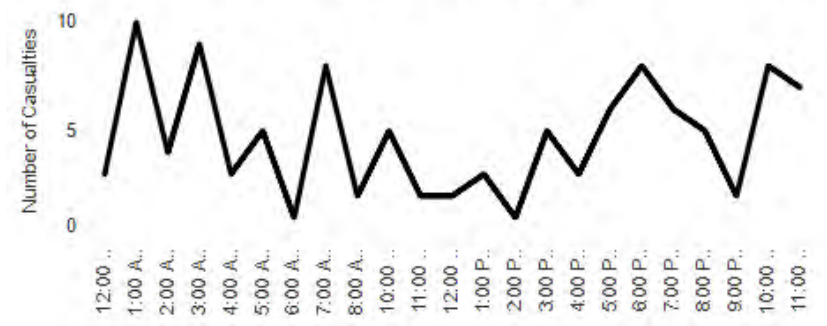
Trespass Detail Jan 2008 - Jul 2018



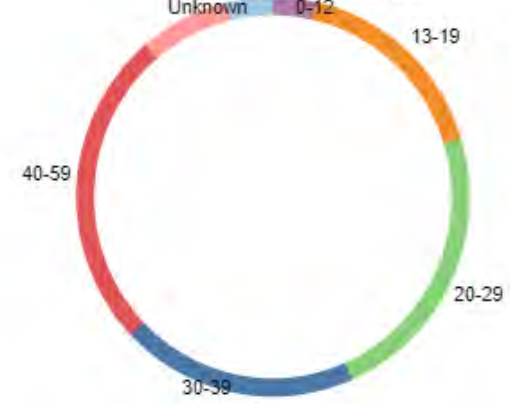
U.S. Department of Transportation
Federal Railroad Administration



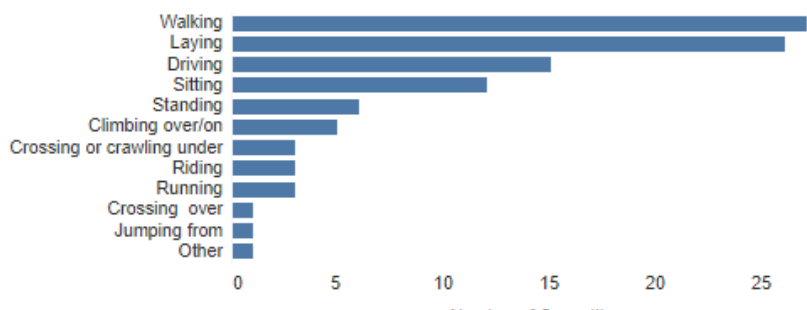
Trespassing by Time of Day



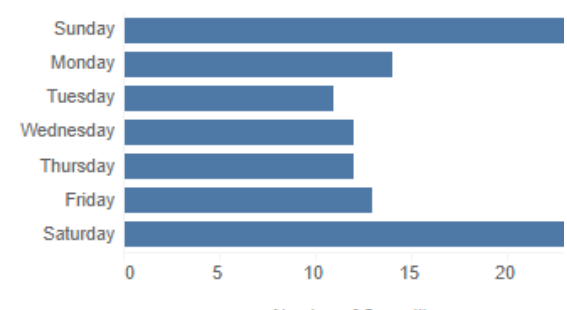
Trespassers by Age



Physical Act Before Collision



Trespassing by Day of the Week



 Don't text while driving!



 **OPERATION LIFESAVER®**



Playing On



Too Close



Under

The Strength of Digital



The average American spends **24 hours** a week online.



89% of Americans use the internet



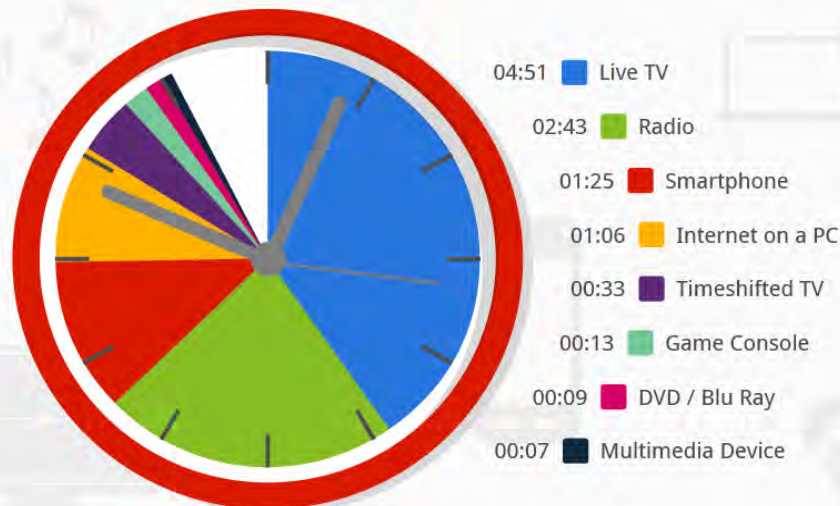
80% of internet users own a Smartphone.



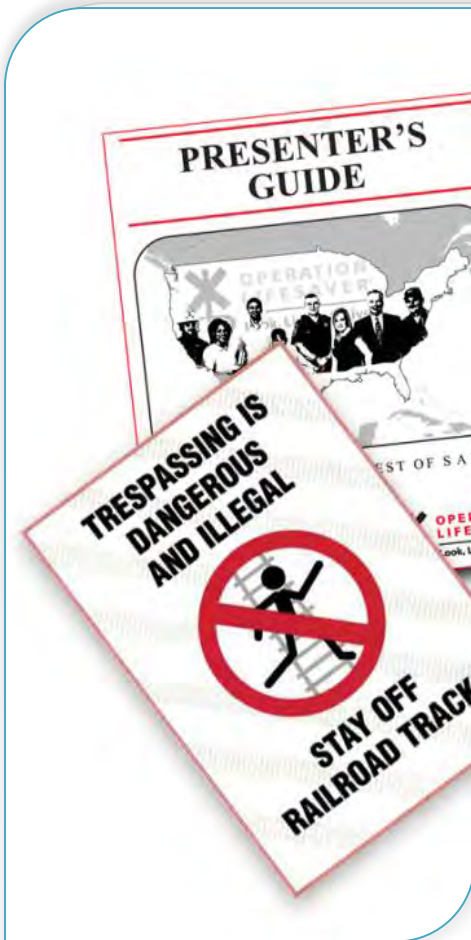
57% of all US online traffic now come from smartphones and tablets

Americans Use Electronic Media 11+ Hours A Day

Average time American adults (18+) spent with electronic media in Q4 2014 (hours:minutes)



Public Education



- Presentations
- Safety Booths
- Public Service Announcements
- Videos at oli.org
- Printed Materials
- Training for Authorized Volunteer Presenters

STAY ALIVE WHEN YOU DRIVE

Highway-Rail Grade Crossing Training for Professional Truck Drivers

Presented by Operation Lifesaver

PROVIDED IN THE INTEREST OF SAFETY



Myths or Realities? Pedestrian Safety Around Tracks & Trains.

PROVIDED IN THE INTEREST OF SAFETY



FOR PEDESTRIANS



Key Safety Tips at Highway-Rail Grade Crossings

PROVIDED IN THE INTEREST OF SAFETY



FOR ALL DRIVERS





Tips for Snow Plow Operators

Snowplow operators frequently encounter highway-railway crossings. Special caution is required at these crossings to protect the operator, roadway users, the railway and employees.

Laws and policies vary in each state and company—know the law, regulations and policies that apply in your state and within your organization!

Following the plowing procedures recommended below can prevent needless tragedies.

Approaching a Crossing

- If required, stop the plow before reaching the crossing no closer than fifteen feet from the nearest rail.
- Before resuming, make sure there is enough room on the other side for the whole unit to clear the tracks, including your vehicle's overhang.

Know the length of your vehicle! Remember, the train will be at least a few feet wider than the rails on both sides;

- Ensure it is safe to cross the tracks by looking both ways. Open windows/doors and turn off radios or fans so as to see and hear better. Ensure you can see past obstructions such as mirrors, pillars, or attachments;
- Raise the plow blade and wing or other attachments high enough to clear the tracks and signals;
- To avoid stalling, use a gear which will let you cross the tracks without shifting;
- Be especially careful at crossings without gates, flashing lights or bell. Even if there are active warning signals, and they do not indicate a train is approaching, you must look and listen to be sure it is safe to proceed;
- After you have started over the tracks, if the crossing lights begin to flash, **KEEP GOING.** It is safer to continue forward than to reverse.

Snow, Salt, & Chemicals

Avoid piling snow on or near railway crossings. Windrows must be kept to a minimum as they reduce visibility at crossings and may be hit by a passing train.

Thrown ice or hard packed snow could result in possible injury to the public.

- Do not pile snow under gate arms or mechanisms. This may result in the malfunction of railway signal equipment.
- When possible, do not pile snow on access roads parallel and adjacent to the tracks;
- When possible, "clear" crossing approaches to bare pavement in order to expose railway/pavement markings.
- Never dump salt or chemicals directly on or near any highway-railway crossing. Salt or chemicals reduce the resistant properties of track ties and rock ballast. This in turn can cause the electrical signals carried through the rails to short out, resulting in activation of flashing light warning devices or malfunction of train signals.
- To prevent sand from being carried onto the tracks, ensure sand is not applied within fifteen feet of railway crossing tracks.
- To prevent a build-up at the crossing, which could contribute to derailments, avoid or limit the use of abrasives at railway crossings

Maintenance Considerations

Contact the railway before performing work in proximity to a crossing!

If maintenance requires work within close proximity to the trackage, you need permission from the railway before starting in order to ensure safety and compliance with regulations.

Please remember: **ANYTIME IS TRAIN TIME!** As you carry out maintenance at a railway crossing, crossing signals may activate as little as 20 seconds before a train arrives. An average large truck can take 18 seconds to clear the track area from a standing start.

Emergency Situations/Reporting Hazards

If your plow stalls or gets stuck on a crossing, get out immediately and move quickly to a point at least 100 feet away from the track and the truck. This will reduce the chances of being struck by flying debris if a train hits the vehicle.

If the plow or wing accidentally hits the rail, signage, or signal equipment, report it immediately. Notify your dispatcher and/or contact the railway directly.

Many railway companies post their emergency numbers prominently at crossings. If the number cannot be located immediately, call 911 or the local emergency number.

Police Officer or Flag Person at the Crossing

If a police officer or properly identified railway flag person is at the crossing, obey directions. Remember, however, you are not relieved of the responsibility to ensure your personal safety and you must confirm it is safe to cross the tracks by looking and listening for the approach of a train.

For additional railway safety information, please visit:

- **Website:** www.oli.org
- **Facebook:** www.facebook.com/operation.lifesaver
- **Twitter:** www.twitter.com/olinational

LOOK, LISTEN, LIVE!

OPERATION LIFESAVER
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E-mail: general@oli.org

Innovative Outreach



Ryan's Brain & Challenge

- Full Video and shorts
- Free Lesson plans
- Chromebook giveaway

Parody music videos

- Think Train!
- Operation Lifesaver Rap
- You Better Be Aware
- A Story To Tell

Operation Lifesaver on Social Media



Operation Lifesaver Inc. added a new photo.

Yesterday at 5:39 PM · 🌐

Railways are fascinating, but incidents surrounding them are very unforgiving.



Minnesota Operation Lifesaver, Inc. ...

Thursday at 12:15 PM · 🌐

#Throwbackthursday Miss our **#TransitThursday** activities and outreach during **#RailSafetyWeek2018**? Check out these great safety tips from **Operation Lifesaver Inc.** for everyone! <http://ow.ly/udGd30mfXCp> <https://twitter.com/olinational/status/1052023396383494144>



Operation Lifesaver Inc. ...

21 mins · 🌐

We appreciate when people like Betsy Daugherty become rail safety advocates. <https://bit.ly/2yr7RyO>



WANDTV.COM

Mother who lost son in train accident teaches others about safety



Follow
Operation
Lifesaver, Inc.



Then Post &
Tell Your Friends
About Us!

- Facebook** facebook.com/operation.lifesaver
- Twitter** twitter.com/olinational
- Pinterest** pinterest.com/olinational
- Instagram** instagram.com/operation_lifesaver_inc
- Vimeo** vimeo.com/operationlifesaver/
- Skype** operation.lifesaver

- ✔ Post about an Operation Lifesaver presentation.
- ✔ Respond to tweets sent by Operation Lifesaver.
- ✔ Share Operation Lifesaver accounts with friends.
- ✔ Take pictures at Operation Lifesaver events.
- ✔ Send messages about rail safety.
- ✔ Share #railsafety hashtags.

See Tracks? Think Train!



OL FOR KIDS

Operation Lifesaver helps kids and adults learn about staying safe when it comes to railroads. You'll find our most popular materials for kids right here!



Click on the [Sty Fox & Birdie Coloring Page](#) for pictures you can print and color.



Check out our [safety posters](#).



Complete our [word search puzzles](#).



View and print the Operation Lifesaver [activity sheets](#) from our partners in Canada. (Note: Page 7 stats are in KMH).

Videos for Kids

Did you know we have a number of videos intended for the younger audience? You can click here to [see videos specifically "For Young People"](#).



[SEE ALL VIDEOS](#)



Contact Us

Did you know Operation Lifesaver has programs in states across the U.S.? Contact your [OL State Coordinator](#) or call us at 703-739-0308 for information about free safety presentations, training and volunteer opportunities available in your area.



Is a phone call worth your life?

According to the AAA, 67% of drivers admit to talking on cell phones while driving, and 21% read or send text messages or email while driving. That figure rises to 40% for drivers under the age of 35.



SIGNS



ADVANCED WARNING

This sign warns you that the road crosses railroad tracks ahead.



CROSSBUCK

This sign marks the crossing; you should look both ways and listen for the train.



FLASHING RED LIGHTS

When the red lights are flashing, it means a train is coming.

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“Trespassing” is going somewhere you’re not supposed to go, like walking into a stranger’s house without permission.

TRESPASSING IS AGAINST THE LAW.

This law is meant to keep us safe.

**PRIVATE
PROPERTY**



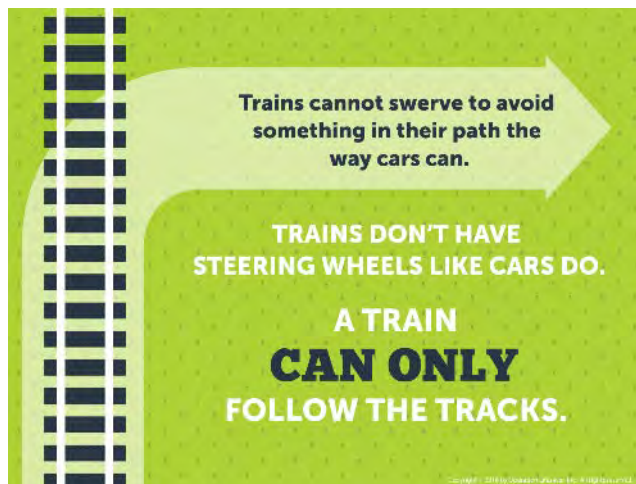
**NO
TRESPASSING**

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TEST YOUR TRAIN SAFETY KNOWLEDGE

THE FOLLOWING ARE SOME COMMON BELIEFS ABOUT TRAINS.
WHICH OF THE FOLLOWING ARE **TRUE** AND WHICH ARE **FALSE**?



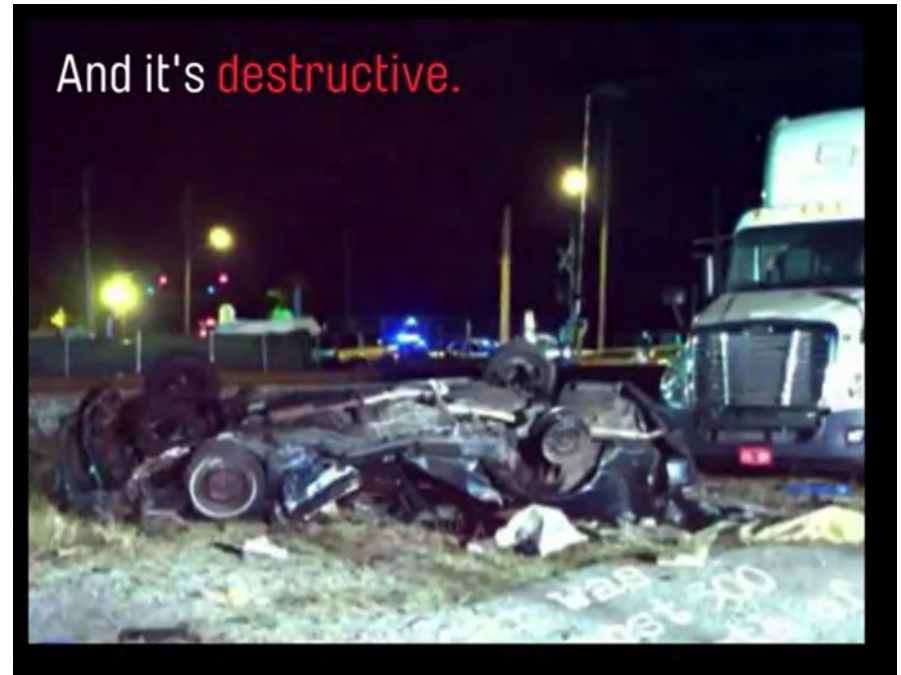
Updated Presentation Materials



Cheating Death



Imagine



E-Learning for School Bus Drivers



SCHOOL BUS DRIVER'S GUIDE

Safety for Photographers



[Volunteer for OLI](#) | [Login](#) | [Request a Safety Presentation](#)

Search Site [GO](#)



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FILMMAKER SAFETY TIPS

Operation Lifesaver, Inc., the nation's rail safety organization, works with the film industry and film schools to ensure no filming occurs on or near railroad tracks without permission from the railroad.

Filmmakers - follow these safety tips to ensure a safe set:

- Railroad tracks, trestles, yards and rights-of-way are private property.
- All filmmakers, crews, film students, and amateur who want to film **MUST** get permission from the railroad to film on or near the railroad tracks.
- Filmmakers must obtain a formal permit or contract from the railroad, based on the individual railroad's legal requirements.
- Any filming on or near railroad tracks without explicit permission from the railroad can result in severe injury or death.

No Shot is Worth the Risk: Get a Permit or Stay Off the Tracks

Thinking of filming
on train tracks?



A 100-CAR FREIGHT TRAIN TRAVELING AT 55 MILES PER HOUR REQUIRES MORE THAN A MILE TO STOP. THAT'S THE LENGTH 18 FOOTBALL FIELDS.

[READ THE STORY](#)

Trains Can't Stop Quickly . . .

The laws of physics in action.

ALL VIDEOS

PSAS

FOR ADULT DRIVERS

FOR KIDS

TRAINING MODULES

STOP TRACK TRAGEDIES

VOLUNTEERS



Operation Lifesaver PSA - Trespassing Changes Your Life

9-27-2018 PSAs

Mark Kalina talks about what happened to him.



Look for the Blue and White ENS Sign PSA :15

9-20-2018 PSAs

For Adult Drivers

Look for the Blue and White to Save Your Life :15 PSA by Operation Lifesaver, Inc.



How to Drive Near Trains

3-02-2018 PSAs

Training Modules

This full-length training video features teen vlogger Ryan helping his sister prepare for her driving test by learning how to drive safely near trains.



Drive Safe PSA

3-02-2018 PSAs

Training Modules

This :30 PSA tells you why it's important to drive safely near trains – and how to enter to win a prize!



Railroad Safety Signs

3-02-2018 PSAs

Training Modules

Jessica talks about signs you need to know to stay safe when driving near train tracks. Educators - download the [lesson plan](#).



What to do at a Crossing

3-02-2018 PSAs

Training Modules

This video shows drivers what to do at the railroad crossing. Educators - download the [lesson plan](#).



Distractions

3-02-2018 PSAs

Training Modules

Distractions can be deadly near train tracks – watch to find out why. Educators - download the [lesson plan](#).



Train Facts

3-02-2018 PSAs

Training Modules

Learn why your car is like a soda can, and other train facts, in this video. Educators - download the [lesson plan](#).

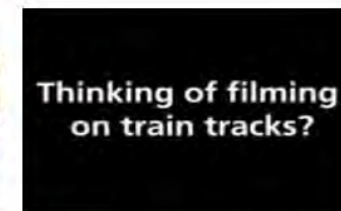


Light Rail

3-02-2018 PSAs

Training Modules

How can drivers safely share the road with light rail trains? Educators - download the [lesson plan](#).



No shot is worth the risk:

Get a permit or stay off the tracks

3-01-2018 PSAs

This PSA for filmmakers shows that filming on train tracks is deadly and illegal if proper permits are not obtained. Play it



Minimizing Collisions at Metro Transit

Michael Conlon, Director – Rail and Bus Safety
Metro Transit

Toward Zero Deaths Conference
Oct 23, 2018

Metro Transit Facts

- Largest transit operator in the state of MN
- Multimodal operations serve 7 counties (Anoka, Hennepin, Ramsey, Carver, Scott, Dakota, Washington)
- 80 million passengers annually on a network of commuter rail, light rail and bus
- 900 buses, 91 LRVs and 28 commuter rail coaches (powered by 6 locomotives)

Topics for Today

- Recap of LRT Blended Outreach and Engineering Since 2016.
- Bus Operator Training Program
- Vision Zero Pedestrian Safety Working Group
- MT Ped/Cyclist Awareness Notification System (PeCANS)

Rail Safety Outreach

- BILLBOARDS – more than 1.25 Million impressions
- TRAIN ULTRA SUPER KING AD PANELS (4 TRAINS) – over 50 Million impressions
- LIVE RADIO SPOTS – more than 200,000 impressions
- SOCIAL MEDIA (Facebook & Twitter) – over 700,000 impressions



Rail Safety Outreach (cont'd)

- SCHEDULE-SIZED BROCHURES – Somali, Hmong, Spanish, and English
- STATION SAFETY BLITZES – handing out trinkets with safety messaging, and engaging in conversation with patrons about safe behavior at stations and around trains
- OPERATION LIFESAVER ACTIVITY BOOKS for daycare, elementary and preschools near LRT.



LRT Engineering – Cantilevered Blankout



LRT Engineering – WigWag Headlights



Outreach/Engineering Program Outcomes

LRT PEDESTRIAN COLLISIONS

	Blue Line	Green Line	Total	Increase (Decrease)
Jan 4 2015 to Jan 3 2016 ¹	7	7	14	7 fewer after program ²
Jan 4 2016 to Jan 3 2017 ¹	3	4	7	

1. The year-long comparison begin and end dates have been shifted to account for the last accident of the 6 that prompted this program.

2. There were zero pedestrian fatalities (3 fewer) during the year of the blended outreach/engineering program.

Metro Transit earned the 2017 American Public Transportation Association Gold Award for transit systems with >20 M trips annually.

Bus Operator Training Program Enhancements

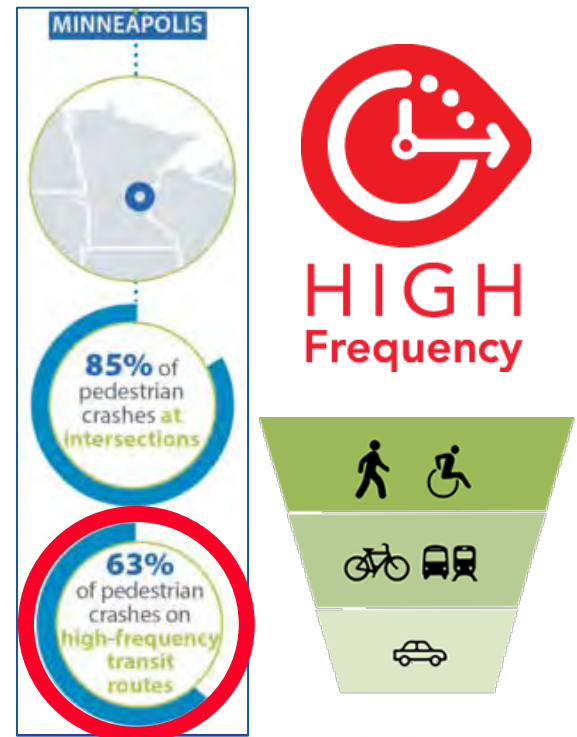
- Increased attention to safety conferences
- Safety-delivered modules in new operator training classes
- Overcoming the “forgetting curve”
 - Post-accident 1 on 1 training
 - Programmed refresher training
 - Triennial Safety Keys
 - Annual Winter Driving Tips

Data Mining Drives the Supplemental Training

- Bus Accident Probability Tool
 - Age, driving experience, route experience, work schedule, snowfall, rainfall, and time of day.
 - A database of 18 M trips is the base for queries involving combinations of variables for forecasting mishap probability.
- The same database is used to map mishap locations so as to identify clusters for further analysis.
- Results: comparing the 2007 rate per 100k mi against the five year average 2013 – 2017, 100 fewer collisions, equating to \$284,200 in mishap cost savings.
- This program earned the 2018 APTA Bus Safety Awards Certificate Of Merit

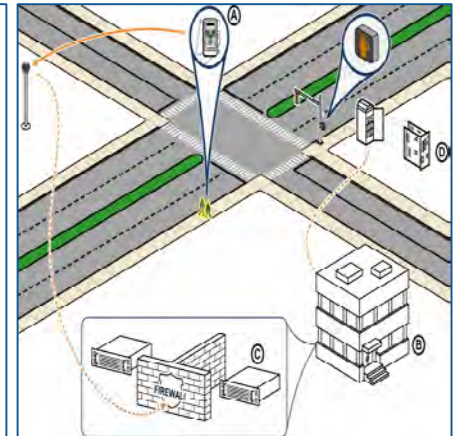
Pedestrian & Cyclist Awareness Notification Study (PeCANS)

- Operator Challenges
 - A-Pillar impedes visibility
 - Unpredictable road and traffic conditions
 - Reactive braking vs. informative monitoring
- City of Minneapolis Pedestrian Crash Study (2017)
 - 85% of pedestrian crashes at intersections
 - **63% of pedestrian crashes on high-frequency transit routes**
- On-Street Bike Lanes Growth = Increasing Probability of Bus-Bike Interactions
 - Minneapolis Bike Master Plan (2015): 127 miles existing; **222 miles planned**
 - Saint Paul Bicycle Plan (2015): 79 miles existing; **132 miles planned**



Potential PeCANS Proof-of-Concept Approaches

- No-Cost Proof-of-Concept (POC)
- Awareness Notifications (Alert / Warning)
 - Direct to bus operators
 - Bus to pedestrians and cyclists via announcements
- Collision Awareness Monitor Display for Bus Operators
- Vehicle-to-Everything (V2X) Communications
 - Bus to pedestrians and cyclists via mobile app
 - Bus to riders via pylon displays / announcements at bus stops
 - Bus to Digital Message Signs (DMS) at intersections



Forging New Tracks



Working with our partners... MNOL has looked for ways to forge new tracks in reaching important audiences

IntoxBox Breathalyzer Kiosk

Helping you know before you go

As we have entered the age of information and technology, it's time to do more than simply asking people not to drink and drive. The IntoxBox allows consumers to know when they've reached their limit and helps them make informed decisions,



Identifying the Problem

While drunk driving has long been written off as a reckless and irresponsible act, we do not accept that these are the only causes. In surveying hundreds of DWI offenders, we have found that *over 60% believed their BAC was under .08* when they decided to drive.



Creating the Solution

Speedometers are in cars to help us obey the speed limits. Why shouldn't we have easy access to reliable breathalyzer technology to help us obey the drinking and driving laws? IntoxBox is the resource our society needs to make better decisions.



Quality First

Other bar breathalyzers have come before us, but failed to reach mainstream acceptance with cheap quality and inconsistent maintenance practices. We go the extra mile with law-enforcement breathalyzer technology and professional operators.

Pandora



TARGETED USERS: 100% GUARANTEED

REGISTRATION INFORMATION FOR EACH USER

Age Gender Zip Code

PANDORA ONLY TARGETS YOUR AUDIENCE

No wasted impressions

GUARANTEED VIEW: ADS ARE SERVED WHEN

Users are looking at the screen

Interacting via thumbs

Creating stations

Using site functionality



TIME SPENT DRIVES BRAND ENGAGEMENT

AVG. HOURS SPENT PER USER PER MONTH



OPPORTUNITY

Every year, about 20 million students head to a college campus. They'll do so boasting a tremendous buying power of **\$545 billion** and consuming content on an array of devices. When marketing to students, it's not just about reaching them at scale – it's also about providing contextual relevancy in a cluttered, ad-filled world. Three key factors for marketers to consider for reaching busy, on-the-go students include:



Go go gadget. On average, students own **6.8 total devices**. It is crucial to have a cross-device communication strategy with them on all of their gadgets.



Leverage data and insights to better understand students. Cross-device data and attribution is pivotal, but making sense of that data can be challenging. That's why you need a partner to help translate data and create actionable insights



Mobile Audio



Overview

Mobile Audio offers impactful audio ads delivered to Pandora listeners in between songs that enable brands to connect with users with two-way engagement.

Benefits

Mobile Audio engages users during brief musical breaks enabling the advertiser to reach a target audience whether or not their eyes are on the screen. An audio ad is accompanied by a clickable visual presence, offering increased engagement.



Bloomberg the Company & Its Products | Bloomberg Anywhere Remote Login | Bloomberg Terminal Demo Request



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Bloomberg

U.S. Edition Sign In

Subscribe

Answers™

Ask us anything

GO

SCIENCE MATH HISTORY LITERATURE TECHNOLOGY HEALTH LAW BUSINESS ALL SECTIONS



Answered in Pokemon GO

Is Pokemon GO dangerous



NOT IF U WANT TO SAVE YOUR LIFE.



LATEST FOOD & DRINK



FOOD & DRINK

EVERYONE GETS A FREE SLURPEE AT 7-ELEVEN TODAY



FOOD & DRINK

ANDREW ZIMMERN ON PIG-FACE SOUP, 'AMERICAN' FOOD, AND HATING THE NAME OF HIS SHOW



FOOD & DRINK

HERE ARE ALL THE WHOLE FOODS DEALS FOR AMAZON PRIME DAY



FOOD & DRINK

BLAZE PIZZA IS GIVING OUT FREE PIZZA IN CALIFORNIA TO CELEBRATE JEDON JAMES

Quantum Network Display Program



01

GeoAudience Who You Are

Home neighborhood demographics and spending patterns

02

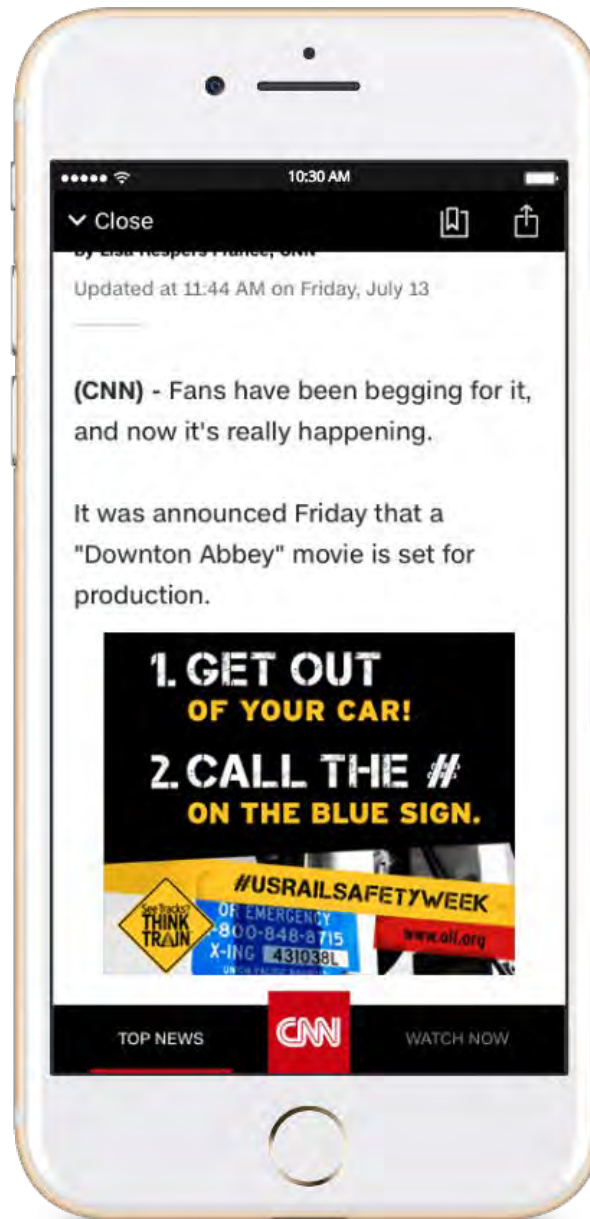
Scored GeoFences Where You Are

Contextually aware proximity-based targeting

03

GeoCookies Where You've Been

Real-world retargeting based on historical location data



#MNOffTheRails

<https://minnesotaoli.com/safety-challenge>

<https://community.oli.org/state/mn>



INTRO TO CHALLENGE

Welcome to the #MNOffTheRails
High School Safety Challenge

Youth and Social Media



Follow Us and post your ST3 selfie to win great prizes!



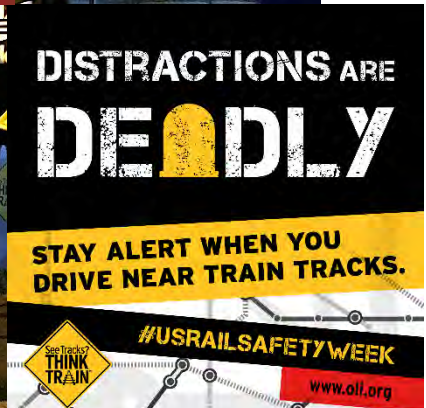
@MinnesotaOperationLifesaver

@MinnesotaOL

@Minnesota_Operation_Lifesaver



about with @Minnesota
#StayOff
#StayAway
#StayAlive
#SeeTracksThinkTrain



Minnesota Operation Lifesaver, Inc is a 501c3 registered nonprofit whose mission is to reduce tragedies through free public awareness, presentations, and events. We can be reached at mnooperationlifesaver@gmail.com 651-328-3259 P.O. Box 22254 Minneapolis, MN 55422

Questions?



Thank You!