

ILLINOIS COMMERCE COMMISSION  
PEERS SUMMARY  
April 2009

**Phases 1 and 2**

In Federal Fiscal Year (FFY) 2003 and FFY 2004, the Federal Railroad Administration (FRA) and the Rail Safety Section of the Illinois Commerce Commission (ICC) implemented the Public Education and Enforcement Research Program (PEERS), a program to test the effectiveness of rail safety education and enforcement programs to reduce traffic law violations at highway-rail grade crossings. The purpose of this test was to evaluate the role of low-cost education and enforcement activities to improve safety in a quantitative manner.

In Phase 1, the ICC contributed \$102,500 and the FRA contributed approximately \$500,000 to collect and analyze data at eight control locations: three locations in Arlington Heights; three in Macomb; and two locations in Bartlett. FRA's \$500,000 contribution went to the Volpe National Transportation Systems Center (Volpe), while ICC's contribution went equally to Arlington Heights, Bartlett, Downers Grove and Macomb in grants of \$25,625 each. In Phase 2, the FRA provided \$496,750 to the ICC in the form of a Next Generation High Speed Rail program grant so that ICC could include more communities, as well as Metra, Operation Lifesaver and Health World Children's Museum, in the PEERS program.

Phase 1 and Phase 2 of PEERS resulted in the following accomplishments:

- 52 police officers, fire fighters and other community leaders were trained as Operation Lifesaver presenters
- The newly trained presenters conducted made 1,170 presentations that reached an audience of 58,751 individuals
- Local police departments spent approximately 3,458 hours enforcing highway-rail crossing traffic laws
- The enforcement resulted in 902 citations being issued to motorists and pedestrians, and an additional 1,236 warnings to motorists and pedestrians.

According to an analysis conducted by Volpe on behalf of FRA, PEERS demonstrated a statistically significant ability to reduce violations at highway-rail grade crossings. Data analyzed from over 60,000 train events at the three highway-rail grade crossings in Arlington Heights indicated that the community's education and enforcement efforts achieved a 72 percent (72%) reduction in Type 3 (drive around) violations, along with a 29 percent (29%) reduction in Type 2 violations (gates are descending, but not completely down). The net result was a reduction of 30.9 percent (30.9%) in all types of violations.

**PEERS Phase 3 and 4**

In FFY 2005, FRA appropriated to the Illinois Department of Transportation (IDOT) \$400,000 for Phase 3 of the PEERS program. This amount was later reduced by a budget recission to \$342,000. In FFY 2006, FRA appropriated to the ICC \$500,000 from the Corridor Planning, Development and Improvement program at FRA. This amount was later reduced by a budget recission to \$495,000. This program required a match by the recipient in that the "federal share payable under such grants shall be 50 percent."

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Due to difficulties in completing the arrangement between IDOT, ICC and FRA, the funds were lumped together to provide a total of \$837,000 distribution. In addition, there was a small amount of leftover funds from Phase 1 and 2 that were not spent (\$96.65). Therefore, a grand total of \$837,096.65 was distributed in a combined Phase 3 and 4.

In order to distribute the funds, a competitive Call for Proposals was issued to solicit participants statewide. In particular, ICC staff targeted areas of Illinois that have traditionally been under-served in terms of exposure to the Operation Lifesaver program. The general core education and enforcement programs to be implemented by grantees are presented below.

**Education Program Core Elements:**

- Cable access and local radio program public service announcements (PSA) and more in-depth 5, 10 and 30 minute safety programs. PSAs to run consistently throughout program.
- Continuous loop videos to be played at points of interest throughout town, such as commuter rail stations, community administrative offices, shopping centers, schools, etc. Use of PSAs already developed is thereby maximized.
- Safety poster contests in local schools. Winning entries may be published in a calendar to be distributed within the community.
- "It's the Law" safety poster campaign. Safety posters placed in storefront windows near Metra and Amtrak rail stations to reinforce the safety message.
- Community telephone systems used to run railroad safety messages while callers to village offices are on hold.
- Press releases and safety columns promoting railroad safety may be ran in local newspapers, community newsletters and media outlets.
- Railroad safety messages may be inserted into utility bills, or other types of routine mailings, on a regular basis. The use of pre-existing routine mailings to residents increases community awareness at minimal cost.
- Community and Village staff, such as police officers, fire fighters, emergency medical technicians and media/public affairs specialists, may be trained as Operation Lifesaver presenters. In order to provide a consistent and informed safety message to the community, it is desirable to have staff trained to utilize the standard Operation Lifesaver presentation techniques.
- Operation Lifesaver presentations are then made by staff that had recently undergone training, as well as staff members who are already certified Operation Lifesaver presenters. Once staff is trained, they are required to conduct at least four presentations to become certified as an Operation Lifesaver presenter.
- Town hall meetings may be organized that highlight the highway-rail grade crossing safety and trespass prevention program. Communities may use a town hall meeting to initiate their PEERS program and pass resolutions by the Village Council in support of railroad safety.
- Sustained use of town hall meetings and local cable access programs are effective in keeping the railroad safety message fresh in the minds of village residents.

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**Enforcement Program Core Elements:**

- Positive reinforcement campaigns may be implemented to reward motorists and pedestrians for good behavior. Coupons for a cup of coffee, or an Operation Lifesaver trinket, may be distributed to motorists and pedestrians who comply with traffic safety laws.
- Enhanced routine patrol of entire right-of-way to deter trespassing may be implemented. Police officers engage in additional patrols along the railroad right-of-way to reinforce the message that railroad property is private property and that trespassing is not only dangerous, but unlawful, as well. Trespassing citations result in fines of \$150 to those convicted.
- Focused enforcement details (often called Blitzes) may be conducted at identified hot spots where traffic law violations consistently occur. The fine for disregarding a warning device is \$250 for a first offense in Illinois with subsequent offenses resulting in a fine of \$500, along with possible suspension of the motor vehicle registration.
- Trooper on the Train program. Railroads may run special trains to provide law enforcement and members of the judiciary first-hand experience of what locomotive engineers see routinely.
- Specialized training may be provided for law enforcement personnel and other first responders who must investigate, or respond to collisions, through successful completion of the Grade Crossing Collision Investigation (GCCl) course.

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**Cumulative Summary of All PEERS Phases:**

For Phases 1 through 4, a total of 53 individual grant agreements were entered into with 39 individual entities.

<b>Grantee</b>	<b>County</b>	<b>Phase 1 '03 ICC Amount</b>	<b>Phase 2 '04 FRA Amount</b>	<b>Phase 3 '05 IDOT/FHWA Amount</b>	<b>Phase 3.1 IDOT/FHWA Redistribute</b>	<b>Phase 4 '06 FRA Amount</b>	<b>Phase 4.1 FRA Redistribute</b>	<b>Total Amount</b>
Arlington Heights Police Dept	Cook	\$25,625	\$10,221	\$22,103				\$57,949
Bartlett - Village of	Cook	\$25,625						\$25,625
Barrington Inverness Police Dept	Cook / Lake					\$18,200	\$4,379	\$22,579
Berwyn - Village of	Cook			\$23,757				\$23,757
Bi-State Development - MetroLink	St Clair					\$16,700		\$16,700
Bureau County Highway Dept	Bureau					\$5,631		\$5,631
Decatur - City of	Macon		\$40,000					\$40,000
Des Plaines Police Dept	Cook		\$40,000	\$31,415				\$71,415
Dixmoor - Village of	Cook		\$25,000					\$25,000
Dolton - Village of	Cook		\$14,700					\$14,700
Downers Grove - Village of	DuPage	\$25,625				\$13,975		\$39,600
Elburn Police Dept	Kane		\$18,056	\$16,200				\$34,256
Elmhurst Police Dept	DuPage					\$38,700	\$5,245	\$43,945
Elmwood Park Police Dept	Cook					\$19,500		\$19,500
Evergreen Park Police Dept	Cook		\$7,928			\$10,500	\$4,731	\$23,159
Fairmont City Police Dept	St Clair			\$64,700				\$64,700
Frankfort - Village of	Will		\$5,030					\$5,030
Galesburg Police Dept	Knox		\$20,000					\$20,000
Glenwood Police Dept	Cook		\$12,620					\$12,620
Health World Children's Museum	Cook		\$33,503			\$170,000	\$5,245	\$208,748
Hinsdale Police Dept	DuPage					\$8,274		\$8,274
Illinois Operation Lifesaver	Lake		\$20,000			\$81,000	\$12,062	\$113,062
LaGrange Police Dept	Cook		\$20,000	\$22,360				\$42,360
Lansing Police Dept	Cook		\$25,005					\$25,005
Macomb - City of	McDonough	\$25,625				\$19,700		\$45,325
Metra Commuter Railroad	Cook		\$50,000					\$50,000
Mount Prospect Police Dept	Cook		\$25,000	\$19,405				\$44,405
Mount Vernon - City of	Jefferson		\$20,000			\$16,400		\$36,400
Naperville Police Dept	DuPage		\$50,000					\$50,000
North Chicago - City of	Lake		\$25,000					\$25,000
Park Ridge - Village of	Cook		\$24,992			\$19,679		\$44,671
Rich Township	Will					\$1,797	\$1,836	\$3,633
Riverside - Village of	Cook					\$3,546		\$3,546
Thornton Police Dept	Cook					\$17,900		\$17,900
Villa Park Police Dept	DuPage			\$31,119				\$31,119
West Chicago Police Dept	DuPage			\$31,879				\$31,879
Western Springs - Village of	DuPage		\$9,695	\$5,862				\$15,557
Wheaton Police Dept	DuPage			\$32,500	\$13,730			\$46,230
Wheeling Police Dept	Cook			\$26,971				\$26,971
<b>Total</b>		<b>\$102,500</b>	<b>\$496,750</b>	<b>\$328,271</b>	<b>\$13,730</b>	<b>\$461,503</b>	<b>\$33,497</b>	<b>\$1,436,250</b>
		<b>\$500,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$495,000</b>	<b>\$0</b>	<b>\$995,000</b>
		<b>\$602,500</b>	<b>\$496,750</b>	<b>\$328,271</b>	<b>\$13,730</b>	<b>\$956,503</b>	<b>\$33,497</b>	<b>\$2,431,250</b>
				<b>IDOT Phase 3 &amp; 3.1 \$342,000</b>		<b>ICC Phase 4 &amp; 4.1 \$990,000</b>		

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Cumulatively, 77 individuals were trained as Operation Lifesaver presenters and they made 1,647 presentations to an audience of 101,172 individuals. In addition, law enforcement efforts totaling 6,758 hours were implemented that resulted in 6,053 uniform traffic law citations or warnings issued, or arrests made. The Table below summarizes the education and enforcement efforts from the first four phases of PEERS.

PEERS Phase	Operation Lifesaver			Enforcement			
	Presenters Trained	Presentations Made	Audience Reached	Hours	Citations	Warnings	Arrests
1 and 2	52	1,170	58,751	3,458	902	1,236	0
3 and 4	25	477	42,421	3,300	2,521	1,293	101
<b>Total</b>	<b>77</b>	<b>1,647</b>	<b>101,172</b>	<b>6,758</b>	<b>3,423</b>	<b>2,529</b>	<b>101</b>

A National, Statewide and Regional Comparison of Collisions, before and since introduction of the PEERS Program at three communities along the Union Pacific / Metra Northwest Line, is summarized below:

The Union Pacific Northwest Line Corridor includes the three adjacent communities that have implemented PEERS programs:

- Des Plaines
- Mount Prospect
- Arlington Heights

These three communities include 21 public highway or pedestrian crossings over a stretch of 7.35 miles along the Union Pacific/Metra Northwest Line. The Table summarizes the basic characteristics of the three communities.

Community	2000 Population	Public At-Grade Crossings	PEERS Program Began	Collisions 5-Years Before	Collisions 5-Years Since	Total Amount Received
Des Plaines	58,720	6	April 2004	6	4	\$71,415.00
Mount Prospect	56,265	3	March 2004	7	2	\$44,405.00
Arlington Heights	76,031	12	June 2003	10	4	\$57,949.00
<b>Total</b>	<b>191,016</b>	<b>21</b>		<b>23</b>	<b>10</b>	<b>\$173,769.00</b>

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Comparatively speaking, the three communities that implemented PEERS programs achieved a significantly greater reduction in collisions compared to the 5-year period before and the 5-year period since the program was implemented.

<b>Illinois Public Collisions Before PEERS</b>				<b>UP/Metra NW Public Collisions Before PEERS</b>			
<b>Year</b>	<b>Collisions</b>	<b>Injuries</b>	<b>Fatalities</b>	<b>Year</b>	<b>Collisions</b>	<b>Injuries</b>	<b>Fatalities</b>
1999	178	102	48	1999	6	2	3
2000	198	57	23	2000	7	2	1
2001	187	81	29	2001	4	2	1
2002	155	64	23	2002	3	1	0
2003	150	64	29	2003	3	1	1
<b>Total</b>	<b>868</b>	<b>368</b>	<b>152</b>	<b>Total</b>	<b>23</b>	<b>8</b>	<b>6</b>
<b>Avg</b>	<b>174</b>	<b>74</b>	<b>30</b>	<b>Avg</b>	<b>4.6</b>	<b>1.6</b>	<b>1.2</b>
<b>Illinois Public Collisions Since PEERS</b>				<b>UP/Metra NW Public Collisions Since PEERS</b>			
<b>Year</b>	<b>Collisions</b>	<b>Injuries</b>	<b>Fatalities</b>	<b>Year</b>	<b>Collisions</b>	<b>Injuries</b>	<b>Fatalities</b>
2004	159	66	26	2004	3	0	0
2005	144	75	30	2005	1	0	0
2006	152	55	22	2006	3	2	0
2007	130	54	28	2007	0	0	0
2008	129	52	25	2008	3	1	1
<b>Total</b>	<b>714</b>	<b>302</b>	<b>131</b>	<b>Total</b>	<b>10</b>	<b>3</b>	<b>1</b>
<b>Avg</b>	<b>143</b>	<b>60</b>	<b>26</b>	<b>Avg</b>	<b>2.0</b>	<b>0.6</b>	<b>0.2</b>
<b>Diff</b>	<b>154</b>	<b>66</b>	<b>21</b>	<b>Diff</b>	<b>13</b>	<b>5</b>	<b>5</b>
<b>% Diff</b>	<b>17.7%</b>	<b>17.9%</b>	<b>13.8%</b>	<b>% Diff</b>	<b>56.5%</b>	<b>62.5%</b>	<b>83.3%</b>

The reduction in collisions in the three communities along the Union Pacific / Metra Northwest line was 56.5 percent (56.5%) compared to a comparable reduction statewide in Illinois of only 17.7 percent (17.7%). In conjunction with the analysis conducted by Volpe of violation data at Arlington Heights that showed an overall reduction in violations of 30.9 percent (30.9%), PEERS has quantitatively demonstrated the effectiveness of sustained education and enforcement programs to improve safety at highway-rail crossings.