

# State of Illinois Highway-Rail Grade Crossing Safety Action Plan



*Adopted*  
October 2008

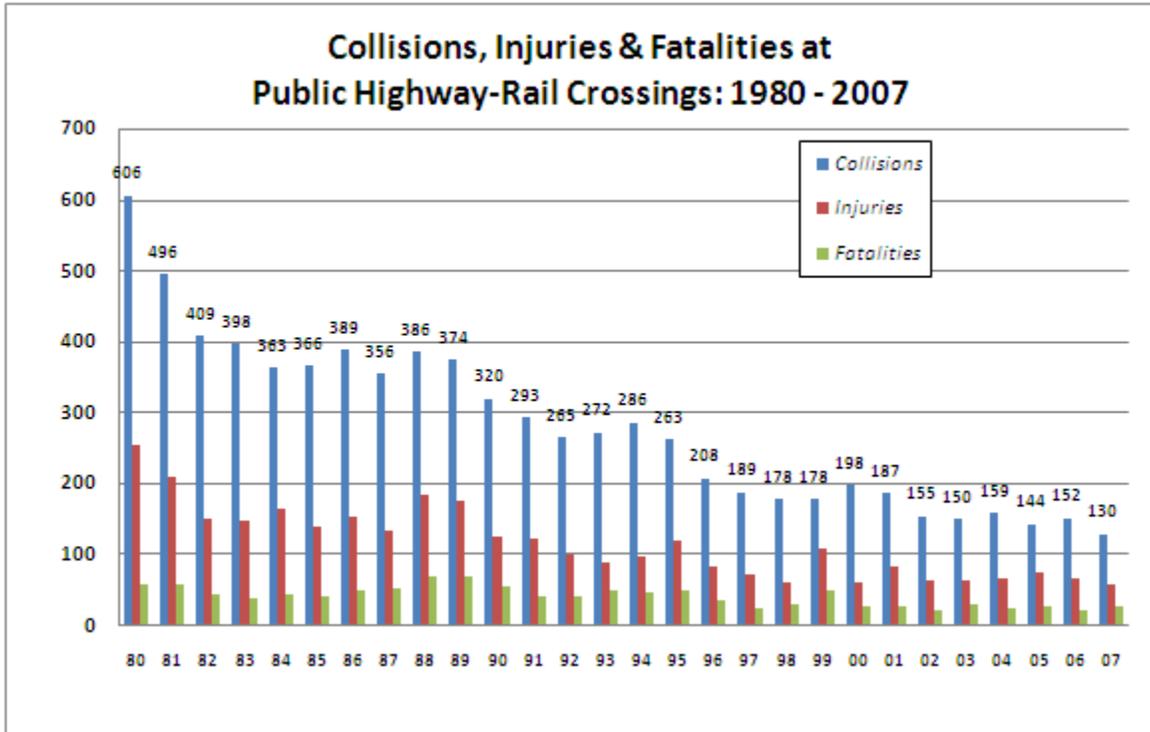
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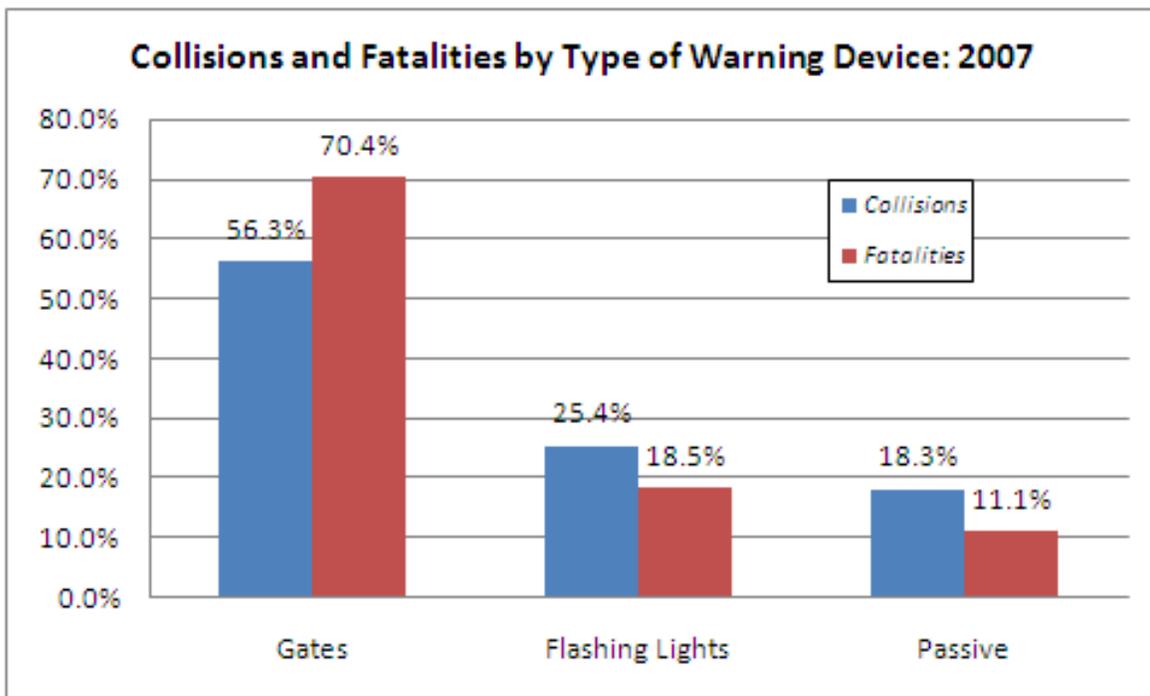
## INTRODUCTION

It is the goal of the State of Illinois to carryout a highway-rail safety program that promotes a safe, economical and efficient railroad transportation system in the public interest. This goal is accomplished through efforts of both the Illinois Department of Transportation (Department) and the Illinois Commerce Commission (ICC). These efforts include assuring compliance with all applicable state and federal laws and regulations that the ICC is empowered to enforce. The size of the rail safety challenge in Illinois is underscored by noting:

- Illinois has approximately 7,200 miles of railroad track, the 2<sup>nd</sup> largest railroad system of any state in the nation.
- About 500 million tons (1 trillion pounds) of freight move on Illinois' railroad system each year which is the most of any state in the nation. Approximately 30 million tons of hazardous materials are transported on Illinois' railroad system each year.
- Chicago's railroad hub is the largest in the U.S. and third largest intermodal container/trailer port in the world, following only Singapore and Hong Kong.
- There are over 50 railroad companies, including all seven Class 1 railroads, which operate their trains in and through Illinois which is the 3<sup>rd</sup> highest in the nation.
- There are 11,022 public highway-rail grade crossings and structures located within Illinois, which is second only to Texas.
- Illinois has significantly more public highway-rail grade crossings equipped with train activated warning devices than the nation as a whole.
- Illinois has more interconnected<sup>1</sup> highway-rail grade crossing warning systems than any other state in the nation (<sup>1</sup>railroad and highway traffic signal systems engineered to work together).
- Since 1980, collisions at public highway-rail grade crossings have declined by 78.5 percent (78.5%), injuries by 80 percent (80%), and fatalities by 54 percent (54%), while vehicle miles of highway travel and ton-miles of railroad transport have increased by over 30 percent (30%).



The majority of collisions (82%) and fatalities (89%) in Illinois occur at crossings equipped with train activated warning devices, such as automatic flashing light signals, or automatic flashing light signals and gates.



Within the state of Illinois, the ICC has the statutory responsibility to improve safety at public highway-rail crossings. As of April 1, 2008, there are 8,271 public highway-rail grade crossings in Illinois, of which 807 are on state roads, and 7,464 are on local roads. The Table below summarizes the quantity of highway-rail crossings by type and position.

Illinois Highway-Rail Crossings by Type and Position.

Crossing Type	Crossings	Percent
Pedestrian Grade	389	2.4%
Pedestrian-RR Over	60	0.4%
Pedestrian-RR Under	29	0.2%
Private Grade	4,665	28.6%
Private-RR Over	137	0.8%
Private-RR Under	26	0.2%
Public Grade	8,271	50.7%
Public-RR Over	1,806	11.1%
Public-RR Under	945	5.8%
<b>Total</b>	<b>16,328</b>	<b>100.0%</b>

The Illinois Compiled Statutes (ILCS) assigns responsibility for the safety oversight of railroad operations within the state to the ICC. The statutes contained in Chapters 386, 388, 389 and 622 provide the ICC with responsibilities that apply to all railroads and companies that are a part of the general railroad system in Illinois. Title 92 of the Illinois Administrative Code contains rules that the ICC uses to regulate rail operations in Illinois.

The ICC orders safety improvements at public highway-rail crossings with the cost of such improvements paid by the state, the railroads, and local governments. For safety improvements at crossings located on state roads, the Illinois Department of Transportation (IDOT) pays the majority of the costs utilizing federal funds. For safety improvements at crossings located on local roads, the ICC utilizes the Grade Crossing Protection Fund (GCPF), created by the Illinois General Assembly, and IDOT utilizes federal funds to pay the majority of the costs of improvements.

This Action Plan is intended to analyze and systematically identify issues affecting safety at highway-rail crossings in Illinois. It is a living document that will be updated on a regular basis. Illinois is unique in having one of the largest state funded highway-rail crossing improvement programs in the nation. The Action Plan will be implemented by the Rail Safety Implementation Team (Team) consisting of members of IDOT, ICC, Operation Lifesaver, the Federal Railroad Administration, Federal Highway Administration and local and state law enforcement agencies. The Team will meet on a regular basis to review current practices and explore new ideas in order to continue

making progress with ways to improve safety, and reduce collisions and fatalities at highway-rail crossings throughout Illinois.

## **RAILROAD CROSSING SAFETY - THE THREE E's**

Illinois is one of the key transportation hubs in the nation, with the country's second largest rail system, including the largest rail freight hub in Chicago, and the nation's third largest highway system, with 139,940 miles of highways, streets and roads and over 26,400 bridges.

Both the rail and highway systems are among the most heavily used in the nation in terms of volume of traffic, with much of the traffic concentrated in the Chicago metropolitan region. There, the urban mass transit system serves an average of nearly 600 million passengers a year over an extensive network of bus and rail routes.

Keeping the grade crossing portion of this transportation network operating safely and efficiently involves local, state and federal governments as well as the private sector. These safety efforts can be summarized as the Three E's - **Education, Engineering and Enforcement**.

**Education:** The state is actively involved in developing programs to educate the public about the danger at grade crossings. One example of this public education program is the ICC's participation in Operation Lifesaver. The Operation Lifesaver program is a public-private partnership designed to increase public awareness of highway-rail grade crossing hazards. It also strives to improve driver and pedestrian behavior at railroad crossings by encouraging compliance with traffic laws relating to crossing signs and signals.

**Enforcement:** Enforcement of existing traffic and trespass laws is key, especially the issuance of fines (up to \$500) or community service to persons crossing railroad tracks after the warning signals have activated.

**Engineering:** Grade crossing safety improvements are also critical to reducing collisions. The state identifies and implements physical and system improvements, including the installation and upgrading of grade crossing warning signs and automatic warning devices and, where warranted, grade separations. While education and enforcement are absolutely essential, the focus of this report is the engineering of capital improvements to further railroad crossing safety on local roads.

## CROSSING SAFETY IMPROVEMENTS

The state utilizes state and federal funds to assist highway agencies and railroads with the cost of making safety improvements at public highway-rail crossings on state highways and local roads and streets. The Department, working with highway agencies and railroads, utilizes the Federal Highway-Rail Safety Program to pay for safety improvements at grade crossings of state highways and local roads and streets that it has programmed.

The ICC works with local highway agencies and railroads to identify and prioritize safety improvement projects at grade crossings and bridges of local roads and streets. The ICC utilizes the Grade Crossing Protection Fund (GCPF) to pay for those improvements.

The GCPF, appropriated to the Department but administered by the ICC, was created by the General Assembly to assist local jurisdictions (counties, townships and municipalities) in paying for safety improvements at highway-railroad crossings on local roads and streets only. Assistance from the GCPF cannot be used for safety improvements at highway-rail crossings located on the state road or highway system. Those improvements are paid for by the Department.

The ICC is directly responsible for the administration and authorization of projects that receive assistance from GCPF. Each year the ICC authorizes approximately \$27 million from the GCPF for crossing safety improvement projects statewide, including the construction of new pedestrian structures (overpasses or underpasses), where the proposed pedestrian bridge will not be adjacent to an existing public highway-rail grade crossing.

Crossing safety improvements typically paid for, in part or in total, by the state (ICC and/or IDOT) include:

- **Warning Device Upgrades:** Installation of automatic flashing light signals and gates at public grade crossings currently not equipped with automatic warning devices; installation of automatic flashing light signals and gates at public grade crossings currently equipped only with automatic flashing light signals; signal circuitry improvements at public grade crossings currently equipped with automatic warning devices;
- **Grade Separations - New and Reconstructed:** Construction, reconstruction, or repair of bridges carrying a roadway over railroad tracks (overpass); construction, reconstruction, or repair of bridges carrying railroad tracks over a roadway (subway);
- **Grade Separations - Vertical Clearance Improvements:** Lowering the existing highway pavement surface under a railroad bridge to improve vertical clearance for motor vehicles;
- **Pedestrian Grade Separations:** Construction of a bridge to carry pedestrian/bicycle traffic over or under railroad tracks;

- **Interconnects:** Upgrading the circuitry at grade crossings where warning signals are connected to the adjacent traffic signals so that the two systems operate in a synchronized manner;
- **Highway Approaches:** Improvements to those portions of a public roadway directly adjacent to a crossing surface;
- **Connecting Roads:** Construction of a roadway between a closed crossing and an adjacent open, improved crossing;
- **Remote Monitoring Devices:** Sensor devices in the circuitry of grade crossing warning devices which immediately alert the railroad to any failures in warning device operations;
- **Low Cost Improvements at Unsignalized Crossings:** Installation of new, more reflective crossbuck warning signs and YIELD signs at crossings that do not require automatic warning devices; and
- **Crossing closures:** Incentive payments to local agencies for the voluntarily closure of public highway-rail grade crossings.

## PROJECT IDENTIFICATION

The state places a strong emphasis on the importance of considering local agency input through various methods, including: solicitation for applications for potential projects for the Federal Highway Rail Safety Program; review of application submittals for the GCPF projects; involvement with the ICC Stipulated Agreement process; and, local agency involvement with diagnostic reviews when appropriate.

## PROJECT SELECTION

Project selection for Federal Highway-Rail Safety and GCPF projects is based upon improving safety, with the goal of reducing collisions and injuries and highway-rail crossings. Selection to be made based on an emphasis on considerations, such as; the number, speed and type of trains; amount and type of vehicular traffic; restrictions to stopping and clearing visibility for the motorist; roadway geometrics; roadway approach grades; use of crossing by school buses or vehicles carrying hazardous materials; and collision history. Project selection to be based on problem crossings with marked collision histories, as well as a proactive approach with selection based on efforts to improve crossings in order to prevent a potential collision.

## COLLISION INVESTIGATIONS

In order to reduce the number and severity of train-vehicle and pedestrian-vehicle collisions, it is first necessary to understand the causes of those incidents. Collision investigations are used as fact-finding evaluations of train-vehicle and pedestrian-vehicle incidents to identify causal trends. It is also necessary to determine if the cause of a train-vehicle or pedestrian-vehicle incident is the direct result of the highway vehicle

users' or the railroad's apparent failure to comply with any state or federal law or regulation. It is necessary to conduct an investigation immediately following certain incidents. Results of collision investigations are used by the state when making determinations where crossing safety improvements are necessary.

## **ACTION PLAN STRATEGIES**

### ***GRADE CROSSING CLOSURES / CONSOLIDATIONS***

The state works with railroad companies and local agencies to offer state and federal incentive funds for the voluntary closure of hazardous highway-rail grade crossings. Staff from the ICC and the Department meet with public project engineers from the railroad companies on a regular basis and will place added emphasis on crossing closures and consolidations in the future. Since 1998, the state has closed well over 1,600 public highway-rail grade crossings and significantly increased the percentage of those crossings remaining that are equipped with automatic flashing light signals and gates.

<b>Type of Warning Device</b>	<b>1998</b>	<b>2007</b>	<b>Change</b>	<b>Percent Change</b>
Gates	2,246	3,003	757	34%
Flashing Lights	2,610	2,009	-601	-23%
Other Active Devices	113	30	-83	-73%
Crossbucks	4,364	2,716	-1,648	-38%
Other Passive Signs	612	513	-99	-16%
<b>Total</b>	<b>9,945</b>	<b>8,271</b>	<b>-1,674</b>	<b>-17%</b>

**Goal: Close fifty (50) highway-rail grade crossings within five years.**

### ***CORRIDORS***

The state will work with the railroads to identify corridors in Illinois where train volumes and/or train speeds have significantly increased, and consider those locations for safety improvements. When looking at a corridor approach, efforts will be made to achieve consolidation or closures of existing grade crossings.

**Goal – Analyze and program improvements at grade crossings in three rail corridors per year.**

## ***PUBLIC EDUCATION AND AWARENESS PROGRAMS: OPERATION LIFESAVER***

The state will increase involvement with educational efforts through the Local Technology Assistance Program (Illinois Technology Transfer Center). The team will assist in preparation of articles concerning highway-rail safety programs for publication in the "Illinois Interchange" newsletter. In cooperation with Operation Lifesaver and the Illinois Broadcasters Association, the state will conduct regional public service campaigns, along with identification of specific "hot spots" to target 30 to 39 year old motorists and pedestrians.

**Goal – Operation Lifesaver presenters will make at least 4,000 presentations reaching an audience of at least 400,000 each year.**

## ***ENFORCEMENT***

The state will develop and maintain a policy for the use of automated enforcement at highway-rail grade crossings in Illinois. The state will seek involvement from the Illinois State Police and local law enforcement agencies to explore ways to increase motorist and pedestrian compliance with applicable traffic safety laws.

**Goal – Develop and implement policy.**

## ***RESEARCH AND ANALYSIS***

Compile and analyze collision data to identify trends and to evaluate the effectiveness of proposed countermeasures. Reconcile differences in grade crossing inventory data between FRA, the state and the railroads. Incorporate new inventory data being collected that includes aerial photographs, ground photographs, sketches and many attributes that are not part of the "standard" FRA grade crossing inventory database. Provide industry and public access to the enriched grade crossing inventory as appropriate. Identify promising technologies and develop field tests to evaluate potential for application in Illinois.

**Goal – Publish an annual analysis of train-vehicle collisions that occurred at highway-rail grade crossings in Illinois for the previous ten-year period. Incrementally over next three years, reconcile discrepancies between the federal, state and railroad inventory databases. As appropriate over next two years, make selected elements of the reconciled inventory data available to industry partners and the public. Annually implement and evaluate one new proposed grade crossing safety device or program of education and/or enforcement.**

***EMERGENCY RESPONSE***

Review the current practice of railroad companies regarding the on-site posting of emergency response telephone numbers for motorists to call in case of emergencies or an apparent malfunction of automatic warning devices at a grade crossing. Implement a program to promote timely and complete installation of emergency notification signs.

**Goal – Have 100 percent (100%) of crossings posted with the AAR/DOT crossing number and emergency notification phone number within 12 months.**

## HIGHWAY-RAIL GRADE CROSSINGS IN ILLINOIS

### Number of Highway-Rail Crossings (by County and by Type)

County	Pedestrian			Private			Public			Total	Percent
	At-Grade	RR-Over	RR-Under	At-Grade	RR-Over	RR-Under	At-Grade	RR-Over	RR-Under		
Adams	3	0	0	49	0	0	51	6	6	115	0.7%
Alexander	0	0	0	15	2	0	14	4	2	37	0.2%
Bond	0	0	0	22	0	0	46	4	8	80	0.5%
Boone	1	0	0	30	0	1	22	4	4	62	0.4%
Brown	0	0	0	0	0	0	1	0	0	1	0.0%
Bureau	2	0	0	88	6	1	96	9	13	215	1.3%
Carroll	2	0	2	29	2	0	53	10	10	108	0.7%
Cass	0	0	0	11	0	0	11	1	1	24	0.1%
Champaign	5	2	0	74	0	0	193	15	9	298	1.8%
Christian	4	0	0	32	1	0	85	4	0	126	0.8%
Clark	0	0	0	8	0	0	34	2	1	45	0.3%
Clay	0	0	0	23	0	0	32	7	9	71	0.4%
Clinton	1	0	0	60	0	0	69	1	1	132	0.8%
Coles	0	0	0	33	0	0	85	4	11	133	0.8%
Cook	137	39	14	443	16	2	934	1,133	218	2,936	18.0%
Crawford	0	0	0	24	1	0	36	0	0	61	0.4%
Cumberland	0	0	0	26	0	0	40	2	2	70	0.4%
De Kalb	2	1	0	57	4	1	107	5	6	183	1.1%
De Witt	0	0	0	22	1	1	69	7	4	104	0.6%
Douglas	0	0	0	41	0	0	78	2	4	125	0.8%
Du Page	30	6	1	38	2	0	163	21	23	284	1.7%
Edgar	1	0	0	27	0	0	85	2	2	117	0.7%
Edwards	1	0	0	37	1	0	9	0	1	49	0.3%
Effingham	3	0	0	44	0	0	87	5	6	145	0.9%
Fayette	2	0	0	16	0	0	48	3	9	78	0.5%
Ford	0	0	2	37	0	0	83	1	4	127	0.8%
Franklin	1	0	0	48	2	1	93	14	16	175	1.1%
Fulton	2	0	0	100	2	1	113	4	7	229	1.4%
Greene	1	0	0	18	2	0	36	4	2	63	0.4%
Grundy	4	1	0	34	0	0	69	5	5	118	0.7%
Hamilton	0	0	0	13	0	0	30	0	0	43	0.3%
Hancock	1	0	0	52	0	0	62	2	0	117	0.7%
Henderson	0	0	0	22	1	0	21	7	4	55	0.3%
Henry	3	0	0	28	2	1	77	3	10	124	0.8%
Iroquois	5	0	0	101	0	1	235	3	3	348	2.1%
Jackson	0	0	2	36	0	0	53	7	4	102	0.6%
Jasper	0	0	0	27	0	0	58	0	0	85	0.5%
Jefferson	1	0	0	90	1	0	162	12	27	293	1.8%
Jersey	0	0	0	13	0	0	21	0	0	34	0.2%
Jo Daviess	4	0	1	28	3	0	29	8	5	78	0.5%
Johnson	1	0	0	35	2	0	12	3	2	55	0.3%
Kane	13	2	1	91	8	2	133	25	27	302	1.8%
Kankakee	1	0	0	56	1	0	140	10	6	214	1.3%
Kendall	6	1	0	38	1	0	37	4	4	91	0.6%

County	Pedestrian			Private			Public			Total	Percent
	At-Grade	RR-Over	RR-Under	At-Grade	RR-Over	RR-Under	At-Grade	RR-Over	RR-Under		
Knox	5	0	0	44	2	0	118	20	11	200	1.2%
La Salle	6	0	1	114	6	0	202	10	13	352	2.2%
Lake	20	1	1	30	2	1	144	37	17	253	1.5%
Lawrence	0	0	0	1	2	0	18	1	3	25	0.2%
Lee	3	0	0	19	1	0	47	2	4	76	0.5%
Livingston	4	0	0	50	0	0	150	3	6	213	1.3%
Logan	2	0	0	40	2	2	95	6	7	154	0.9%
Macon	5	0	0	60	0	1	144	28	8	246	1.5%
Macoupin	6	0	0	55	1	0	109	10	1	182	1.1%
Madison	0	0	0	143	0	1	168	27	38	377	2.3%
Marion	1	0	0	40	0	0	102	6	16	165	1.0%
Marshall	0	0	0	38	3	0	32	0	5	78	0.5%
Mason	0	0	0	36	1	0	43	1	2	83	0.5%
Massac	0	0	0	33	0	0	19	13	7	72	0.4%
McDonough	3	0	0	52	0	0	99	2	7	163	1.0%
McHenry	6	0	0	33	1	0	89	8	2	139	0.9%
McLean	10	0	1	97	1	0	180	10	22	321	2.0%
Menard	0	0	0	26	5	0	29	1	1	62	0.4%
Monroe	1	0	0	40	0	0	24	0	2	67	0.4%
Montgomery	1	0	0	49	0	0	110	4	5	169	1.0%
Morgan	2	0	0	78	1	0	97	18	11	207	1.3%
Moultrie	0	0	0	24	0	0	57	0	0	81	0.5%
Ogle	5	0	0	59	2	2	110	2	16	196	1.2%
Peoria	6	0	0	136	4	0	155	19	26	346	2.1%
Perry	4	0	0	70	2	0	83	5	1	165	1.0%
Piatt	1	0	0	39	1	0	94	2	4	141	0.9%
Pike	1	1	0	41	5	0	43	9	5	105	0.6%
Pope	0	0	0	6	2	0	0	0	2	10	0.1%
Pulaski	2	0	0	38	0	0	22	0	1	63	0.4%
Putnam	0	0	0	18	0	0	24	0	1	43	0.3%
Randolph	4	1	0	127	0	0	94	10	4	240	1.5%
Richland	0	0	0	7	0	0	32	1	4	44	0.3%
Rock Island	4	0	0	103	4	0	94	1	12	218	1.3%
Saline	0	0	0	25	0	1	27	2	0	55	0.3%
Sangamon	11	0	2	86	1	1	201	32	18	352	2.2%
Schuyler	0	0	0	4	2	0	2	5	3	16	0.1%
Scott	0	0	0	13	0	0	13	2	0	28	0.2%
Shelby	0	0	0	38	0	0	70	2	1	111	0.7%
St Clair	13	1	0	92	1	0	231	40	74	452	2.8%
Stark	0	0	0	0	0	0	6	0	0	6	0.0%
Stephenson	3	0	0	19	7	1	23	8	5	66	0.4%
Tazewell	1	0	0	92	1	0	112	4	10	220	1.3%
Union	1	0	0	17	0	0	29	0	1	48	0.3%
Vermilion	3	0	0	70	1	1	148	18	15	256	1.6%
Wabash	1	0	0	13	0	0	27	0	2	43	0.3%
Warren	2	0	0	18	0	0	43	7	1	71	0.4%
Washington	1	0	0	42	0	0	41	0	3	87	0.5%
Wayne	1	0	0	9	0	0	33	0	0	43	0.3%
White	1	0	0	34	1	1	30	0	1	68	0.4%
Whiteside	0	0	0	48	0	0	50	4	9	111	0.7%
Will	9	4	1	83	4	1	172	46	28	348	2.1%
Williamson	0	0	0	19	1	0	107	7	6	140	0.9%
Winnebago	2	0	0	63	8	1	138	9	27	248	1.5%
Woodford	1	0	0	18	1	0	29	1	1	51	0.3%
<b>Total</b>	<b>389</b>	<b>60</b>	<b>29</b>	<b>4,665</b>	<b>137</b>	<b>26</b>	<b>8,271</b>	<b>1,806</b>	<b>945</b>	<b>16,328</b>	<b>100.0%</b>

CONFIDENTIAL INFORMATION - This document is based on information compiled or collected pursuant to 23 U.S.C. §§130 and 148 and other federal safety programs and is exempt from discovery or admission under 23 U.S.C. §§ 402 and 409.

## Type of Warning Devices at Public Highway-Rail Grade Crossings (by County)

County	Gates	Flashing Lights	Other Active	XBucks	Other Passive	Total	% Active	% Passive
Adams	17	11	0	23	0	51	55%	45%
Alexander	4	1	0	7	2	14	36%	64%
Bond	20	11	0	14	1	46	67%	33%
Boone	4	13	0	4	1	22	77%	23%
Brown	0	0	0	0	1	1	0%	100%
Bureau	44	10	0	18	24	96	56%	44%
Carroll	26	8	0	18	1	53	64%	36%
Cass	5	3	0	3	0	11	73%	27%
Champaign	57	56	0	68	12	193	59%	41%
Christian	25	9	0	51	0	85	40%	60%
Clark	17	9	1	4	3	34	79%	21%
Clay	13	4	0	14	1	32	53%	47%
Clinton	32	21	0	15	1	69	77%	23%
Coles	11	23	3	46	2	85	44%	56%
Cook	554	108	2	123	146	933	71%	29%
Crawford	5	21	0	10	0	36	72%	28%
Cumberland	14	9	0	17	0	40	58%	43%
De Kalb	52	21	1	11	22	107	69%	31%
De Witt	4	30	0	34	1	69	49%	51%
Douglas	27	14	0	34	3	78	53%	47%
Du Page	96	16	0	35	16	163	69%	31%
Edgar	7	28	0	49	1	85	41%	59%
Edwards	3	2	0	4	0	9	56%	44%
Effingham	46	10	0	28	3	87	64%	36%
Fayette	20	14	1	11	2	48	73%	27%
Ford	6	31	0	43	3	83	45%	55%
Franklin	36	34	0	22	2	94	74%	26%
Fulton	9	32	1	69	2	113	37%	63%
Greene	5	11	0	19	1	36	44%	56%
Grundy	48	7	0	14	0	69	80%	20%
Hamilton	0	4	0	23	3	30	13%	87%
Hancock	11	7	0	41	3	62	29%	71%
Henderson	14	1	0	6	0	21	71%	29%
Henry	38	17	0	20	2	77	71%	29%
Iroquois	54	47	1	126	7	235	43%	57%
Jackson	35	6	0	5	7	53	77%	23%
Jasper	1	12	0	44	1	58	22%	78%
Jefferson	45	40	0	77	0	162	52%	48%
Jersey	6	14	0	1	0	21	95%	5%
Jo Daviess	5	14	1	3	6	29	69%	31%
Johnson	6	2	0	4	0	12	67%	33%
Kane	57	39	1	30	6	133	73%	27%
Kankakee	51	37	0	46	6	140	63%	37%
Kendall	15	10	0	9	3	37	68%	32%
Knox	57	30	0	29	2	118	74%	26%
La Salle	66	53	1	70	12	202	59%	41%
Lake	122	10	1	5	6	144	92%	8%
Lawrence	4	3	0	11	0	18	39%	61%
Lee	24	5	0	12	6	47	62%	38%

County	Gates	Flashing Lights	Other Active	XBucks	Other Passive	Total	% Active	% Passive
Livingston	45	27	0	69	9	150	48%	52%
Logan	28	29	0	33	5	95	60%	40%
Macon	27	62	2	48	5	144	63%	37%
Macoupin	30	41	0	34	4	109	65%	35%
Madison	66	45	2	44	11	168	67%	33%
Marion	39	27	0	33	3	102	65%	35%
Marshall	12	7	0	12	1	32	59%	41%
Mason	3	14	0	26	0	43	40%	60%
Massac	3	7	0	9	0	19	53%	47%
McDonough	32	28	0	35	4	99	61%	39%
McHenry	45	26	0	14	4	89	80%	20%
McLean	43	56	1	77	3	180	56%	44%
Menard	1	11	0	16	1	29	41%	59%
Monroe	16	0	0	7	1	24	67%	33%
Montgomery	32	38	0	39	1	110	64%	36%
Morgan	38	25	4	27	3	97	69%	31%
Moultrie	21	18	0	16	2	57	68%	32%
Ogle	43	22	0	40	5	110	59%	41%
Peoria	22	47	1	79	6	155	45%	55%
Perry	34	13	0	33	3	83	57%	43%
Piatt	19	18	0	54	3	94	39%	61%
Pike	6	5	0	29	3	43	26%	74%
Pulaski	9	3	0	6	4	22	55%	45%
Putnam	0	8	0	15	1	24	33%	67%
Randolph	15	23	1	51	4	94	41%	59%
Richland	7	11	0	13	1	32	56%	44%
Rock Island	23	26	1	40	4	94	53%	47%
Saline	2	2	0	20	3	27	15%	85%
Sangamon	83	64	0	43	11	201	73%	27%
Schuyler	0	0	0	2	0	2	0%	100%
Scott	4	1	0	8	0	13	38%	62%
Shelby	11	12	1	45	1	70	34%	66%
St Clair	93	59	0	35	44	231	66%	34%
Stark	0	2	0	3	1	6	33%	67%
Stephenson	7	7	0	9	0	23	61%	39%
Tazewell	12	59	0	38	3	112	63%	37%
Union	18	0	0	10	1	29	62%	38%
Vermilion	43	47	1	55	2	148	61%	39%
Wabash	9	4	0	14	0	27	48%	52%
Warren	27	0	0	14	2	43	63%	37%
Washington	12	9	0	19	1	41	51%	49%
Wayne	13	6	0	12	2	33	58%	42%
White	4	9	0	14	3	30	43%	57%
Whiteside	27	7	0	15	1	50	68%	32%
Will	127	23	1	16	5	172	88%	12%
Williamson	17	41	1	39	9	107	55%	45%
Winnebago	17	85	0	29	7	138	74%	26%
Woodford	0	17	0	8	4	29	59%	41%
<b>Total</b>	<b>3,003</b>	<b>2,009</b>	<b>30</b>	<b>2,717</b>	<b>512</b>	<b>8,271</b>	<b>61%</b>	<b>39%</b>

### Number of Highway-Rail Crossings (by Railroad and by Type)

Railroad	Pedestrian			Private			Public			Total	Percent
	At-Grade	RR-Over	RR-Under	At-Grade	RR-Over	RR-Under	At-Grade	RR-Over	RR-Under		
ALS	0	0	0	31	0	0	18	1	8	58	0.4%
ATK	1	0	0	0	0	0	1	0	13	15	0.1%
BJRY	0	0	0	19	0	0	7	1	1	28	0.2%
BLOL	1	0	0	54	0	0	83	0	0	138	0.8%
BNSF	62	5	4	773	15	3	1,173	184	165	2,384	14.6%
BRC	0	0	0	82	3	0	43	60	8	196	1.2%
BSDA	9	1	0	0	0	0	22	18	8	58	0.4%
CC	6	3	1	81	24	6	160	39	33	353	2.2%
CCUO	0	0	0	0	0	0	4	0	0	4	0.0%
CGGZ	0	0	0	5	0	0	11	0	1	17	0.1%
CIRY	2	0	0	32	0	0	76	8	1	119	0.7%
COER	0	0	0	2	0	0	56	0	1	59	0.4%
CRL	0	0	0	18	0	0	22	9	0	49	0.3%
CSS	0	0	0	0	0	0	2	0	0	2	0.0%
CSX	6	2	0	257	3	0	657	118	89	1,132	6.9%
DRI	0	0	0	3	0	0	1	0	0	4	0.0%
DT	1	0	0	12	0	1	47	0	1	62	0.4%
EIRC	0	0	0	39	0	0	75	3	3	120	0.7%
EJE	7	3	1	68	3	1	139	29	19	270	1.7%
EVWR	2	0	0	56	1	0	114	0	3	176	1.1%
FFGZ	1	0	0	5	0	0	19	0	1	26	0.2%
GTW	1	0	0	1	0	0	45	37	4	88	0.5%
GWWE	0	0	0	6	0	0	4	0	0	10	0.1%
IAIS	1	0	0	119	4	0	152	3	17	296	1.8%
IC	39	4	5	538	15	6	1,010	171	140	1,928	11.8%
ICE	1	0	1	105	3	2	113	8	9	242	1.5%
IHB	1	1	2	24	0	0	43	19	25	115	0.7%
IMRR	0	0	0	74	4	0	109	4	4	195	1.2%
INRD	0	0	0	53	2	0	81	0	1	137	0.8%
IR	8	1	0	108	4	0	129	6	6	262	1.6%
JERX	0	0	0	0	0	0	3	0	0	3	0.0%
KBSR	0	0	0	62	0	2	106	7	1	178	1.1%
KCS	2	1	0	91	3	0	116	16	7	236	1.4%
KJRY	2	0	0	97	0	0	120	1	3	223	1.4%
KKRX	0	0	0	4	0	0	10	0	0	14	0.1%
MJ	0	0	0	0	2	0	1	1	0	4	0.0%
MRMZ	0	0	0	9	0	0	17	0	0	26	0.2%
NICD	0	0	0	2	2	0	3	2	1	10	0.1%
NIRC	113	14	9	32	0	1	260	258	47	734	4.5%
NS	26	0	1	680	11	2	1,056	185	87	2,048	12.5%
RRCO	0	0	0	0	0	0	4	0	1	5	0.0%
RVPR	0	0	0	0	0	0	2	0	0	2	0.0%
SCIH	0	0	0	0	0	0	2	7	1	10	0.1%
SOO	1	0	0	59	0	0	98	47	6	211	1.3%
STR	0	0	0	0	0	0	5	0	1	6	0.0%
SVIZ	0	0	0	0	0	0	4	0	0	4	0.0%
TPW	4	0	0	108	0	0	167	1	7	287	1.8%
TRRA	0	0	0	11	0	0	43	7	9	70	0.4%
TZPR	3	0	0	16	0	0	67	3	8	97	0.6%
UP	82	24	5	909	37	2	1,652	470	195	3,376	20.7%
VRRC	0	0	0	0	0	0	5	0	0	5	0.0%
WC	7	0	0	5	1	0	73	17	5	108	0.7%
WCRY	0	0	0	0	0	0	3	0	0	3	0.0%
WSOR	0	0	0	15	0	0	13	2	1	31	0.2%
XCTA	0	1	0	0	0	0	25	64	4	94	0.6%
<b>Total</b>	<b>389</b>	<b>60</b>	<b>29</b>	<b>4,665</b>	<b>137</b>	<b>26</b>	<b>8,271</b>	<b>1,806</b>	<b>945</b>	<b>16,328</b>	<b>100.0%</b>

## Type of Warning Devices at Public Highway-Rail Grade Crossings (by Railroad)

Railroad	Gates	Flashing Lights	Other Active	XBucks	Other Passive	Total	% Active	% Passive
ALS	5	8	0	3	2	18	72%	28%
ATK	1	0	0	0	0	1	100%	0%
BJRY	3	2	0	2	0	7	71%	29%
BLOL	1	15	0	60	7	83	19%	81%
BNSF	545	266	2	321	39	1,173	69%	31%
BRC	18	8	0	11	6	43	60%	40%
BSDA	15	0	0	0	7	22	68%	32%
CC	64	53	1	34	8	160	74%	26%
CCUO	0	1	0	3	0	4	25%	75%
CGGZ	0	1	2	6	2	11	27%	73%
CIRY	3	24	0	34	15	76	36%	64%
COER	6	21	0	29	0	56	48%	52%
CRL	7	1	0	10	4	22	36%	64%
CSS	0	0	0	1	1	2	0%	100%
CSX	234	189	5	187	42	657	65%	35%
DRI	0	0	0	0	1	1	0%	100%
DT	0	5	1	39	2	47	13%	87%
EIRC	0	25	0	49	1	75	33%	67%
EJE	107	14	1	12	5	139	88%	12%
EVWR	12	34	0	67	1	114	40%	60%
FFGZ	0	0	0	16	3	19	0%	100%
GTW	44	0	0	1	0	45	98%	2%
GWWE	0	2	0	2	0	4	50%	50%
IAIS	50	44	1	51	6	152	63%	38%
IC	318	264	2	370	57	1,011	58%	42%
ICE	35	41	1	33	3	113	68%	32%
IHB	14	5	0	16	8	43	44%	56%
IMRR	7	43	0	55	4	109	46%	54%
INRD	5	31	0	43	2	81	44%	56%
IR	6	60	0	51	12	129	51%	49%
JERX	0	0	0	3	0	3	0%	100%
KBSR	0	34	1	68	3	106	33%	67%
KCS	14	39	4	55	4	116	49%	51%
KJRY	2	34	0	79	5	120	30%	70%
KKRX	1	2	0	7	0	10	30%	70%
MJ	0	0	0	0	1	1	0%	100%
MRMZ	0	3	0	13	1	17	18%	82%
NICD	2	1	0	0	0	3	100%	0%
NIRC	246	5	2	1	6	260	97%	3%
NS	351	289	1	370	45	1,056	61%	39%
RRCO	0	0	0	4	0	4	0%	100%
RVPR	0	0	0	2	0	2	0%	100%
SCIH	2	0	0	0	0	2	100%	0%
SOO	8	8	0	32	50	98	16%	84%
STR	0	0	0	5	0	5	0%	100%
SVIZ	0	0	1	3	0	4	25%	75%
TPW	7	77	0	76	7	167	50%	50%
TRRA	19	12	0	7	5	43	72%	28%
TZPR	4	24	1	32	6	67	43%	57%
UP	754	311	4	448	134	1,651	65%	35%
VRRC	0	4	0	1	0	5	80%	20%
WC	66	2	0	2	3	73	93%	7%
WCRY	0	0	0	0	3	3	0%	100%
WSOR	2	7	0	3	1	13	69%	31%
XCTA	25	0	0	0	0	25	100%	0%
<b>Total</b>	<b>3,003</b>	<b>2,009</b>	<b>30</b>	<b>2,717</b>	<b>512</b>	<b>8,271</b>	<b>61%</b>	<b>39%</b>

## EXPOSURE TO RISK OF A COLLISION OCCURRING

Exposure to the risk of a collision is calculated by multiplying the number of daily trains by the average annual daily highway traffic. Exposure can then be allocated and compared by type of warning device, geographical sub-region, type of highway, or railroad. Alternatively, the number of predicted collisions to occur annually may be used in a similar manner.

Type of Railroad	Crossings	Percent	Exposure	Percent	Predict	Percent
Class 1	6,045	73.1%	286,238,377	56.7%	119,980	74.7%
Commuter	265	3.2%	139,949,721	27.7%	15,190	9.5%
Transit	47	0.6%	44,518,737	8.8%	2,470	1.5%
Switch	286	3.5%	21,941,853	4.3%	6,980	4.3%
Local/Regional	1,628	19.7%	11,996,134	2.4%	15,970	9.9%
<b>Total</b>	<b>8,271</b>	<b>100.0%</b>	<b>504,644,822</b>	<b>100.0%</b>	<b>160,590</b>	<b>100.0%</b>

Class 1 railroads have 73 percent of all crossings in Illinois, and 57 percent of risk. On the contrary, commuter and transit railroads have only 4 percent of all the crossings, yet represent 36.5 percent of the risk of a collision.

Type of Roadway	Crossings	Percent	Exposure	Percent	Predict	Percent
Urban Minor Arterial	765	9.2%	182,372,689	36.1%	29,130	18.1%
Urban Other Principal Arterial	312	3.8%	118,382,647	23.5%	15,330	9.5%
Urban Collector	865	10.5%	112,111,341	22.2%	26,830	16.7%
Urban Local Road	1,481	17.9%	54,881,420	10.9%	27,380	17.0%
Rural Major Collector	659	8.0%	13,903,783	2.8%	12,140	7.6%
Rural Local	3,529	42.7%	11,825,774	2.3%	42,560	26.5%
Rural Minor Arterial	155	1.9%	6,011,852	1.2%	3,430	2.1%
Rural Other Principal Arterial	56	0.7%	2,624,650	0.5%	1,240	0.8%
Urban Other Freeway/Expressway	4	0.0%	1,362,700	0.3%	0,210	0.1%
Rural Minor Collector	152	1.8%	1,167,966	0.2%	2,340	1.5%
Unknown or Not Classified	293	3.5%	0	0.0%	0,000	0.0%
<b>Total</b>	<b>8,271</b>	<b>100.0%</b>	<b>504,644,822</b>	<b>100.0%</b>	<b>160,590</b>	<b>100.0%</b>

Urban minor arterial roads account for are only 9 percent of all roadways in Illinois, but represent 36 percent of risk. 43 percent of all crossings are located on rural local roadways, yet they account for only 2 percent of all the collisions.

State Highway?	Crossings	Percent	Exposure	Percent	Predict	Percent
No - Not on State Highway	7,464	90.2%	305,441,335	60.5%	128,320	79.9%
Yes - On State Highway	807	9.8%	199,203,487	39.5%	32,270	20.1%
<b>Total</b>	<b>8,271</b>	<b>100.0%</b>	<b>504,644,822</b>	<b>100.0%</b>	<b>160,590</b>	<b>100.0%</b>

Only 10 percent of all crossings in Illinois are located on state highways, but they represent 40 percent of the risk of a collision occurring.

Type of Warning Device	Crossings	Percent	Exposure	Percent	Predict	Percent
Gates	3,003	36.3%	464,069,512	92.0%	93.920	58.5%
Flashing Lights	2,009	24.3%	33,980,238	6.7%	33.790	21.0%
Other Active Devices	30	0.4%	248,291	0.0%	0.360	0.2%
Crossbucks	2,716	32.8%	4,618,554	0.9%	28.870	18.0%
Other Passive Signs	513	6.2%	1,728,227	0.3%	3.650	2.3%
<b>Total</b>	<b>8,271</b>	<b>100.0%</b>	<b>504,644,822</b>	<b>100.0%</b>	<b>160.590</b>	<b>100.0%</b>

60 percent of all grade crossings in Illinois are equipped with automatic flashing light signals and have almost 99 percent of all risk. Yet, about 20 percent of all collisions still occur at crossings equipped only with Crossbuck warning signs demonstrating the true randomness of collisions.

Portion of Illinois	Crossings	Percent	Exposure	Percent	Predict	Percent
6-County Northeastern Illinois Region	1,635	19.8%	391,228,313	77.5%	59.570	37.1%
Rest of Illinois	6,636	80.2%	113,416,509	22.5%	101.020	62.9%
<b>Total</b>	<b>8,271</b>	<b>100.0%</b>	<b>504,644,822</b>	<b>100.0%</b>	<b>160.590</b>	<b>100.0%</b>

Only 20 percent of all grade crossings in Illinois are located in northeastern Illinois, but 77 percent of the risk of a collision occurs in that 6 county region.

When looking at crossing safety, using a variable such as the number of collisions per 100,000 annual average daily traffic (AADT) for example, crossings in Illinois are “safer” as compared to other states. The Table on Page 21 illustrates this point.

## National Comparison of the Rate of Collisions Involving Motor Vehicles (2006)

States	2006 Collisions (Vehicles ONLY)						
	Collisions	Per 100 Xings	Rank	Per 100K Vehicles	Rank	Per 100K ADT	Rank
Arkansas	75	2.55	6	3.77	1	2.12	1
Louisiana	126	3.91	2	3.25	3	1.94	2
Alabama	112	3.8	3	2.41	4	1.82	3
Mississippi	74	3.15	4	3.69	2	1.73	4
Arizona	44	5.62	1	1.08	20	1.7	5
Oklahoma	65	1.66	19	1.71	8	1.52	6
Nebraska	28	0.91	36	1.61	12	1.44	7
Kentucky	55	2.28	8	1.58	13	1.42	8
Georgia	116	2.01	10	1.41	15	1.24	9
North Dakota	12	0.33	47	1.67	9	1.13	10
South Dakota	14	0.68	44	1.56	14	1.13	11
West Virginia	18	1.17	30	1.31	17	1.09	12
Missouri	47	1.11	32	1.01	25	1.08	13
Iowa	58	1.31	24	1.64	10	1.06	14
Idaho	18	1.39	21	1.26	18	1.05	15
Kansas	49	0.85	37	2.01	6	1.03	16
Colorado	34	1.95	12	1.77	7	1.03	17
Montana	12	0.85	38	1.14	19	0.93	18
Tennessee	53	1.86	14	1.04	22	0.91	19
Wyoming	3	0.76	41	0.44	38	0.91	20
Indiana	121	2	11	2.37	5	0.86	21
Texas	287	2.93	5	1.61	11	0.81	22
New Mexico	7	0.95	35	0.44	37	0.79	23
Minnesota	50	1.06	34	1.03	23	0.76	24
Ohio	108	1.73	17	0.99	26	0.73	25
Washington	34	1.33	23	0.59	33	0.73	26
Utah	10	1.27	28	0.44	36	0.7	27
Illinois	136	1.69	18	1.39	16	0.64	28
Wisconsin	51	1.24	29	1.01	24	0.56	29
Maryland	14	2.04	9	0.32	42	0.55	30
South Carolina	36	1.29	26	1.06	21	0.51	31
Florida	97	2.45	7	0.6	32	0.5	32
North Carolina	56	1.35	22	0.9	27	0.49	33
Michigan	69	1.29	25	0.81	28	0.47	34
Connecticut	6	1.62	20	0.19	43	0.46	35
Virginia	26	1.29	27	0.39	39	0.45	36
Delaware	5	1.79	16	0.66	29	0.43	37
Oregon	18	0.84	40	0.61	31	0.41	38
Pennsylvania	49	1.12	31	0.48	34	0.38	39
Maine	7	0.84	39	0.63	30	0.36	40
California	118	1.82	15	0.36	41	0.34	41
New Jersey	29	1.9	13	0.45	35	0.33	42
New York	21	0.72	42	0.17	44	0.27	43
Nevada	2	0.71	43	0.14	46	0.27	44
Vermont	2	0.4	46	0.38	40	0.26	45
Alaska	1	0.46	45	0.14	47	0.19	46
Massachusetts	9	1.08	33	0.16	45	0.18	47
<b>USA</b>	<b>2,382</b>	<b>1.7</b>		<b>0.97</b>		<b>0.73</b>	

## **ANALYSIS OF HIGHWAY-RAIL COLLISION DATA: 1998 - 2007**

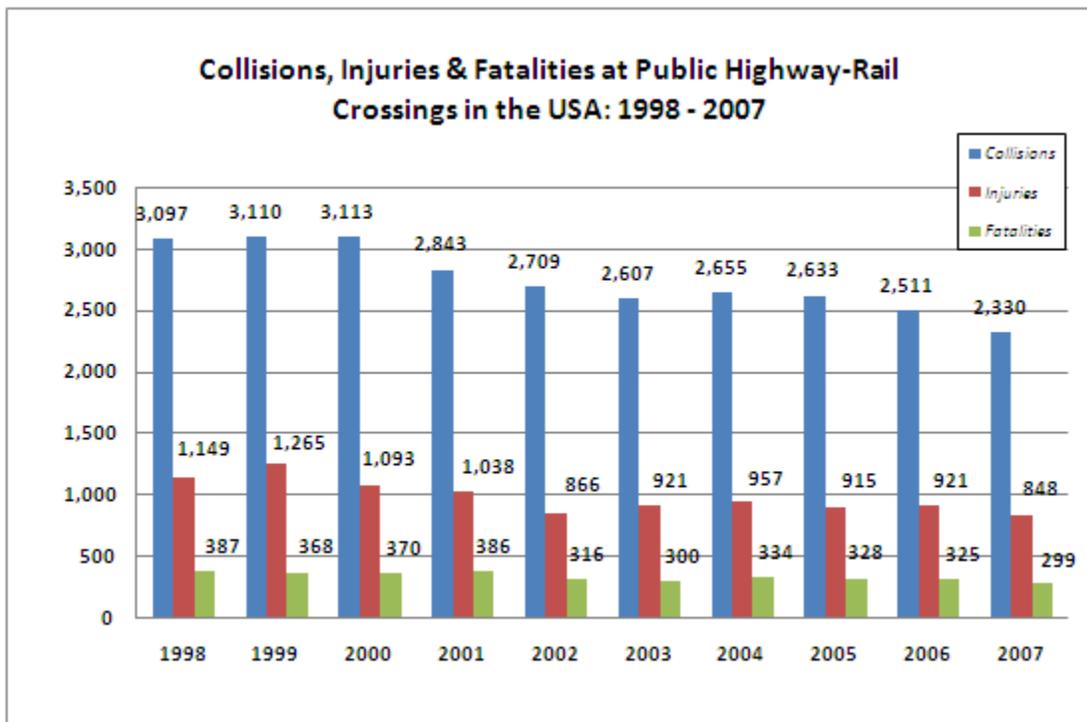
Train-vehicle collisions that occurred between January 1, 1998 and December 31, 2007 encompass the latest 10-year period and are the subject of this report. The FRA 6180.57 Highway-Rail Grade Crossing Database is the source of the data. Documented suicides that occurred at highway-rail grade crossings are also included. However, no casualty counts are assigned to the incident.

There are three types of highway-rail grade crossings; private, pedestrian and public. Train-vehicle collisions occur at all three types of crossings. FRA data classifies collisions that occur at pedestrian and public crossings together as "public". These types of collisions are the focus of this report. Private crossings are defined as locations where a railroad crosses a non-public roadway (i.e., crossings at farms, industries, commercial facilities and residences) and are not under the jurisdiction of either the state or the FRA.

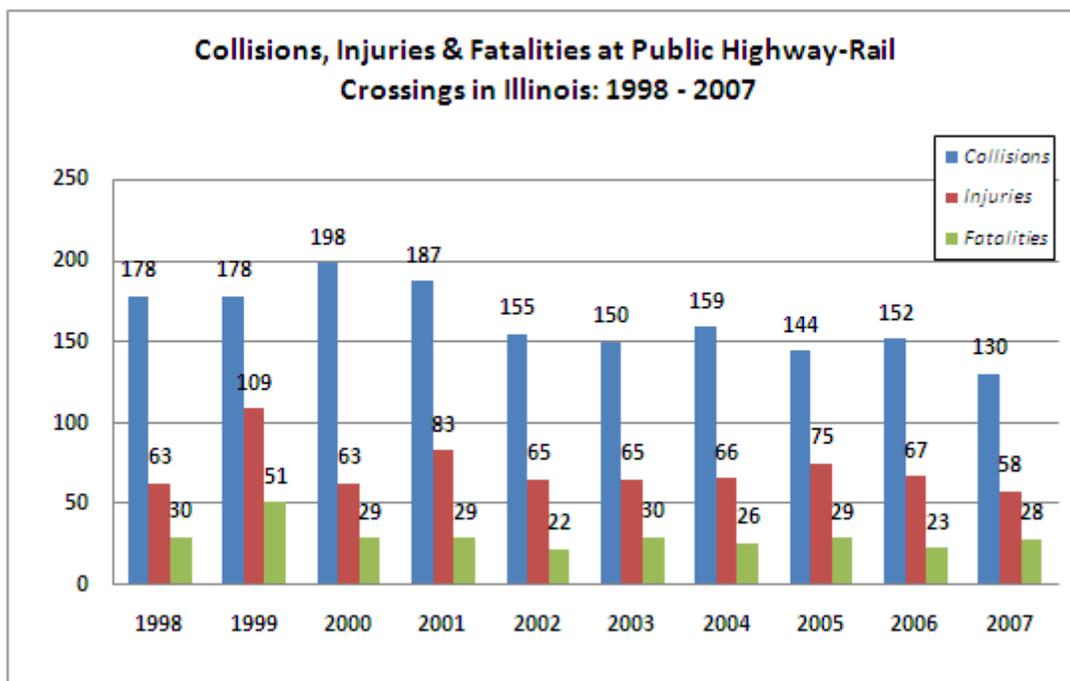
A total of 1,859 train-vehicle collisions occurred at public, private and pedestrian crossings during the 10-year period. These collisions resulted in 770 injuries and 312 fatalities. Public and pedestrian crossing collisions account for 88 percent (88%) of all collisions, 93 percent (93%) of all injuries and 95 percent (95%) of all fatalities.

Over the past ten years, collisions at public crossings have declined by 25 percent (25%) nationally, and by 27 percent (27%) in Illinois. Collisions at private crossings have declined by three percent (3%) nationally and have held steady in Illinois averaging 22 collisions per year. Private crossings pose unique challenges from a regulatory perspective. FRA recently concluded an information gathering effort to learn more about the nature of private crossings.

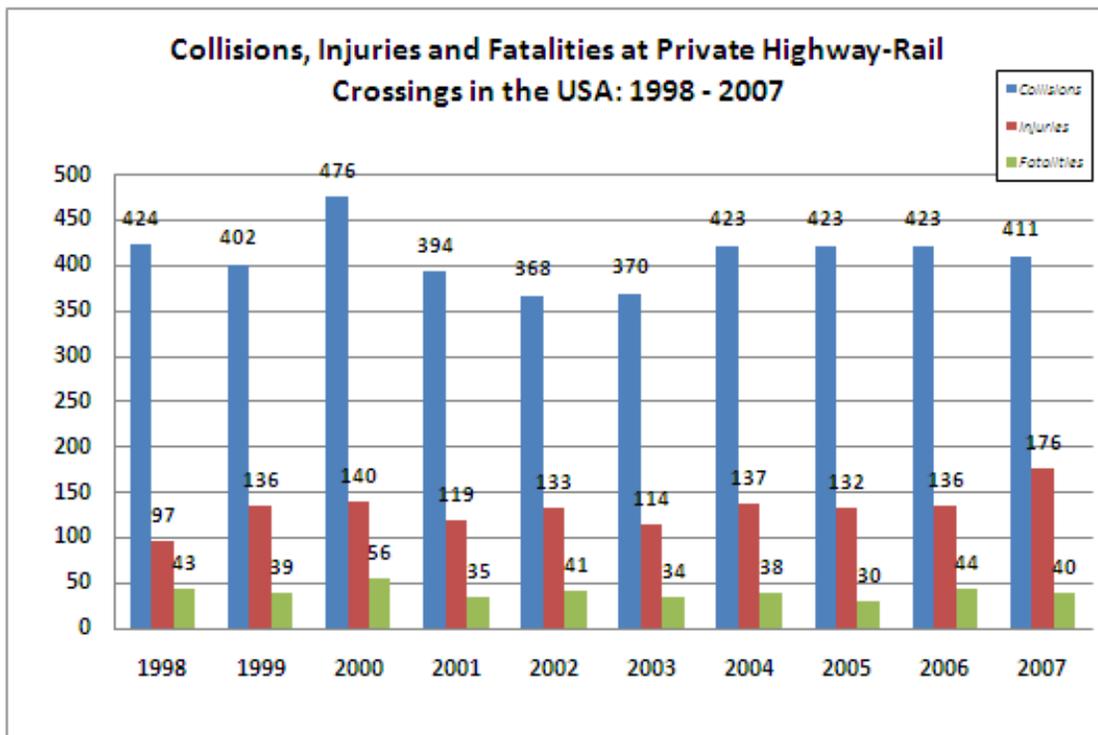
### 10 Year USA Trend in Collisions, Injuries and Fatalities at Public Crossings



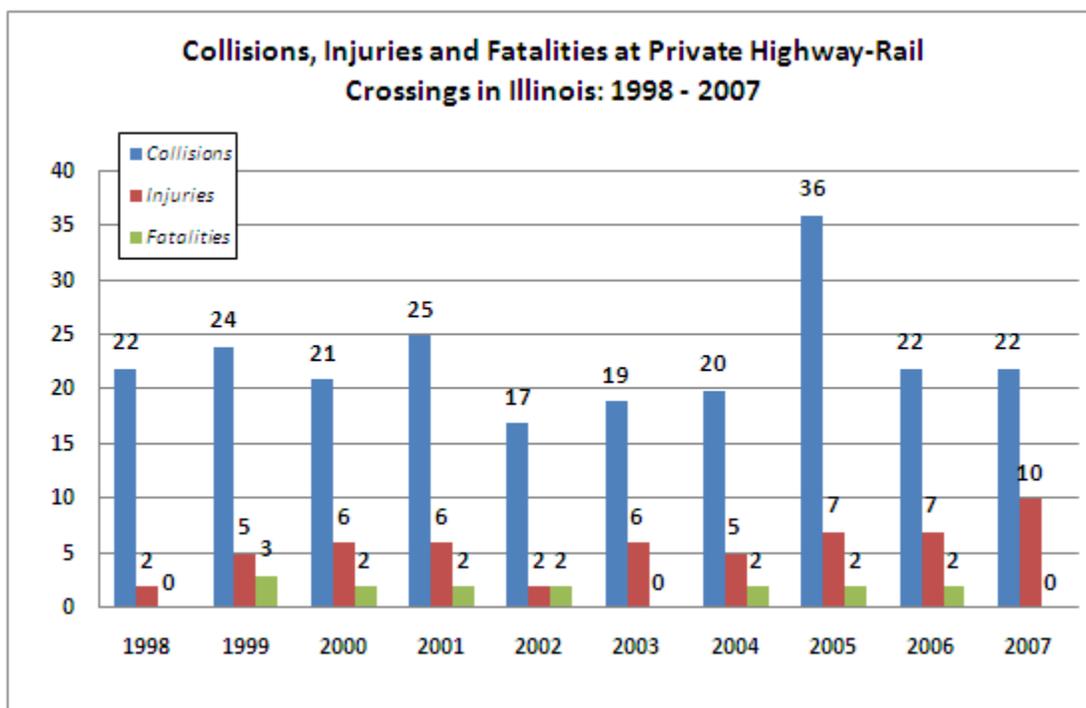
### 10 Year Illinois Trend in Collisions, Injuries and Fatalities at Public Crossings



### 10 Year Illinois Trend in Collisions, Injuries and Fatalities at Private Crossings



### 10 Year Illinois Trend in Collisions, Injuries and Fatalities at Private Crossings



### 93 Counties with One or More Collisions at a Public Crossing: 1998 - 2007

County	Collisions	Percent	Injured	Percent	Killed	Percent
COOK	426	26.1%	178	24.9%	59	19.9%
DU PAGE	67	4.1%	21	2.9%	25	8.4%
WILL	55	3.4%	23	3.2%	8	2.7%
ST CLAIR	54	3.3%	22	3.1%	8	2.7%
LAKE	48	2.9%	11	1.5%	9	3.0%
MADISON	48	2.9%	18	2.5%	6	2.0%
MACON	47	2.9%	9	1.3%	5	1.7%
SANGAMON	41	2.5%	26	3.6%	7	2.4%
CHAMPAIGN	38	2.3%	16	2.2%	4	1.3%
IROQUOIS	33	2.0%	13	1.8%	4	1.3%
KANE	32	2.0%	19	2.7%	6	2.0%
KANKAKEE	29	1.8%	54	7.6%	19	6.4%
DE KALB	27	1.7%	4	0.6%	6	2.0%
VERMILION	27	1.7%	9	1.3%	2	0.7%
OGLE	25	1.5%	13	1.8%	3	1.0%
KNOX	24	1.5%	16	2.2%	3	1.0%
GRUNDY	23	1.4%	13	1.8%	3	1.0%
LA SALLE	21	1.3%	6	0.8%	8	2.7%
MCLEAN	20	1.2%	13	1.8%	6	2.0%
MONTGOMERY	19	1.2%	10	1.4%	8	2.7%
WINNEBAGO	19	1.2%	3	0.4%	0	0.0%
FRANKLIN	18	1.1%	11	1.5%	1	0.3%
MACOUPIN	18	1.1%	9	1.3%	7	2.4%
ROCK ISLAND	18	1.1%	6	0.8%	2	0.7%
MCDONOUGH	17	1.0%	5	0.7%	6	2.0%
EFFINGHAM	16	1.0%	10	1.4%	4	1.3%
JEFFERSON	16	1.0%	8	1.1%	10	3.4%
MCHENRY	16	1.0%	6	0.8%	3	1.0%
TAZEWELL	15	0.9%	3	0.4%	0	0.0%
BUREAU	14	0.9%	4	0.6%	3	1.0%
HENRY	14	0.9%	5	0.7%	5	1.7%
CLINTON	13	0.8%	8	1.1%	1	0.3%
ADAMS	12	0.7%	6	0.8%	3	1.0%
CUMBERLAND	12	0.7%	2	0.3%	4	1.3%
WHITESIDE	12	0.7%	3	0.4%	1	0.3%
MARION	11	0.7%	7	1.0%	2	0.7%
PEORIA	11	0.7%	3	0.4%	0	0.0%
DOUGLAS	10	0.6%	0	0.0%	1	0.3%
FORD	10	0.6%	2	0.3%	2	0.7%
MORGAN	10	0.6%	7	1.0%	1	0.3%
SHELBY	10	0.6%	2	0.3%	0	0.0%
CHRISTIAN	9	0.6%	3	0.4%	2	0.7%
MOULTRIE	9	0.6%	3	0.4%	4	1.3%
PERRY	9	0.6%	3	0.4%	3	1.0%
RANDOLPH	9	0.6%	6	0.8%	1	0.3%
WILLIAMSON	9	0.6%	5	0.7%	2	0.7%

County	Collisions	Percent	Injured	Percent	Killed	Percent
COLES	8	0.5%	3	0.4%	1	0.3%
JACKSON	8	0.5%	0	0.0%	0	0.0%
LOGAN	8	0.5%	6	0.8%	0	0.0%
PIATT	8	0.5%	4	0.6%	3	1.0%
CARROLL	7	0.4%	2	0.3%	1	0.3%
FULTON	7	0.4%	0	0.0%	2	0.7%
LIVINGSTON	7	0.4%	2	0.3%	2	0.7%
MARSHALL	7	0.4%	5	0.7%	1	0.3%
MASON	7	0.4%	1	0.1%	2	0.7%
WARREN	7	0.4%	1	0.1%	1	0.3%
EDGAR	6	0.4%	2	0.3%	0	0.0%
FAYETTE	6	0.4%	2	0.3%	1	0.3%
HANCOCK	6	0.4%	4	0.6%	0	0.0%
HENDERSON	6	0.4%	1	0.1%	3	1.0%
WAYNE	6	0.4%	3	0.4%	0	0.0%
BOONE	5	0.3%	6	0.8%	2	0.7%
PIKE	5	0.3%	4	0.6%	1	0.3%
BOND	4	0.2%	3	0.4%	0	0.0%
JERSEY	4	0.2%	2	0.3%	1	0.3%
JOHNSON	4	0.2%	4	0.6%	3	1.0%
LAWRENCE	4	0.2%	1	0.1%	1	0.3%
LEE	4	0.2%	5	0.7%	0	0.0%
UNION	4	0.2%	1	0.1%	2	0.7%
WABASH	4	0.2%	1	0.1%	0	0.0%
CLAY	3	0.2%	3	0.4%	0	0.0%
DE WITT	3	0.2%	0	0.0%	1	0.3%
EDWARDS	3	0.2%	2	0.3%	1	0.3%
JO DAVIESS	3	0.2%	1	0.1%	0	0.0%
KENDALL	3	0.2%	2	0.3%	0	0.0%
MENARD	3	0.2%	2	0.3%	0	0.0%
RICHLAND	3	0.2%	2	0.3%	0	0.0%
SALINE	3	0.2%	3	0.4%	0	0.0%
ALEXANDER	2	0.1%	2	0.3%	0	0.0%
CLARK	2	0.1%	0	0.0%	0	0.0%
CRAWFORD	2	0.1%	1	0.1%	0	0.0%
GREENE	2	0.1%	1	0.1%	0	0.0%
HAMILTON	2	0.1%	0	0.0%	0	0.0%
MONROE	2	0.1%	0	0.0%	1	0.3%
PULASKI	2	0.1%	1	0.1%	0	0.0%
STARK	2	0.1%	1	0.1%	0	0.0%
WASHINGTON	2	0.1%	2	0.3%	0	0.0%
JASPER	1	0.1%	0	0.0%	0	0.0%
PUTNAM	1	0.1%	0	0.0%	0	0.0%
SCOTT	1	0.1%	0	0.0%	0	0.0%
STEPHENSON	1	0.1%	2	0.3%	0	0.0%
WHITE	1	0.1%	1	0.1%	0	0.0%
WOODFORD	1	0.1%	1	0.1%	0	0.0%
<b>Total</b>	<b>1,631</b>	<b>100.0%</b>	<b>714</b>	<b>100.0%</b>	<b>297</b>	<b>100.0%</b>

### 109 Cities with Four or More Collisions at a Public Crossing: 1998 - 2007

City	Collisions	Percent	Injured	Percent	Killed	Percent
CHICAGO	161	9.9%	89	12.5%	17	5.7%
DECATUR	39	2.4%	5	0.7%	5	1.7%
DES PLAINES	27	1.7%	7	1.0%	3	1.0%
GRANITE CITY	22	1.3%	7	1.0%	1	0.3%
GALESBURG	19	1.2%	15	2.1%	2	0.7%
SPRINGFIELD	19	1.2%	11	1.5%	1	0.3%
JOLIET	18	1.1%	5	0.7%	0	0.0%
BLUE ISLAND	15	0.9%	7	1.0%	0	0.0%
CHICAGO HEIGHTS	15	0.9%	2	0.3%	1	0.3%
DANVILLE	15	0.9%	5	0.7%	0	0.0%
ROCHELLE	15	0.9%	6	0.8%	2	0.7%
BELLEVILLE	14	0.9%	7	1.0%	2	0.7%
EAST ST. LOUIS	14	0.9%	4	0.6%	0	0.0%
ROCKFORD	14	0.9%	1	0.1%	0	0.0%
ARLINGTON HTS	13	0.8%	3	0.4%	3	1.0%
COAL CITY	13	0.8%	5	0.7%	0	0.0%
CHAMPAIGN	12	0.7%	5	0.7%	0	0.0%
DOWNERS GROVE	12	0.7%	1	0.1%	5	1.7%
FRANKLIN PARK	11	0.7%	1	0.1%	0	0.0%
HARVEY	11	0.7%	2	0.3%	1	0.3%
DEKALB	10	0.6%	0	0.0%	4	1.3%
MACOMB	10	0.6%	3	0.4%	4	1.3%
WADSWORTH	10	0.6%	4	0.6%	0	0.0%
ALSIP	9	0.6%	3	0.4%	0	0.0%
BENSENVILLE	9	0.6%	5	0.7%	0	0.0%
ELGIN	9	0.6%	12	1.7%	4	1.3%
ELMWOOD PARK	9	0.6%	17	2.4%	2	0.7%
MAYWOOD	9	0.6%	2	0.3%	2	0.7%
ROCK ISLAND	9	0.6%	0	0.0%	0	0.0%
AURORA	8	0.5%	5	0.7%	3	1.0%
BERWYN	8	0.5%	2	0.3%	4	1.3%
LAGRANGE	8	0.5%	3	0.4%	2	0.7%
MOUNT VERNON	8	0.5%	4	0.6%	6	2.0%
WOODLAND	8	0.5%	7	1.0%	0	0.0%
ALTAMONT	7	0.4%	7	1.0%	3	1.0%
LITCHFIELD	7	0.4%	5	0.7%	2	0.7%
LOMBARD	7	0.4%	1	0.1%	3	1.0%
MOMENCE	7	0.4%	3	0.4%	3	1.0%
RIVER GROVE	7	0.4%	1	0.1%	0	0.0%
SHELBYVILLE	7	0.4%	1	0.1%	0	0.0%
SIDNEY	7	0.4%	2	0.3%	1	0.3%
CHRISTOPHER	6	0.4%	6	0.8%	1	0.3%
EFFINGHAM	6	0.4%	3	0.4%	0	0.0%
ELWOOD	6	0.4%	5	0.7%	3	1.0%
HAVANA	6	0.4%	0	0.0%	2	0.7%
KANKAKEE	6	0.4%	0	0.0%	3	1.0%
LIBERTYVILLE	6	0.4%	2	0.3%	1	0.3%
MELROSE PARK	6	0.4%	2	0.3%	2	0.7%
MOUNT OLIVE	6	0.4%	1	0.1%	2	0.7%
MOUNT PROSPECT	6	0.4%	4	0.6%	2	0.7%
NORTHBROOK	6	0.4%	3	0.4%	4	1.3%
PANA	6	0.4%	1	0.1%	0	0.0%

City	Collisions	Percent	Injured	Percent	Killed	Percent
ARTHUR	5	0.3%	2	0.3%	1	0.3%
AUBURN	5	0.3%	5	0.7%	1	0.3%
BENTON	5	0.3%	4	0.6%	0	0.0%
BLOOMINGTON	5	0.3%	4	0.6%	0	0.0%
BRIGHTON	5	0.3%	3	0.4%	3	1.0%
GLENVIEW	5	0.3%	0	0.0%	3	1.0%
HINSDALE	5	0.3%	0	0.0%	2	0.7%
ILLIOPOLIS	5	0.3%	3	0.4%	2	0.7%
JACKSONVILLE	5	0.3%	2	0.3%	1	0.3%
KEWANEE	5	0.3%	0	0.0%	2	0.7%
MENDOTA	5	0.3%	2	0.3%	1	0.3%
MINOOKA	5	0.3%	4	0.6%	0	0.0%
MORTON GROVE	5	0.3%	0	0.0%	0	0.0%
PEORIA	5	0.3%	1	0.1%	0	0.0%
PLAINFIELD	5	0.3%	2	0.3%	1	0.3%
RIVERDALE	5	0.3%	2	0.3%	0	0.0%
SOUTH PEKIN	5	0.3%	3	0.4%	0	0.0%
STREATOR	5	0.3%	2	0.3%	3	1.0%
WATERMAN	5	0.3%	0	0.0%	1	0.3%
WATSEKA	5	0.3%	0	0.0%	1	0.3%
WESTERN SPRINGS	5	0.3%	0	0.0%	0	0.0%
WHEATON	5	0.3%	0	0.0%	4	1.3%
BUDA	4	0.2%	0	0.0%	1	0.3%
BUFFALO	4	0.2%	2	0.3%	0	0.0%
CAHOKIA	4	0.2%	0	0.0%	0	0.0%
CAMP POINT	4	0.2%	0	0.0%	2	0.7%
CARLINVILLE	4	0.2%	4	0.6%	4	1.3%
DUQUOIN	4	0.2%	2	0.3%	1	0.3%
EAST PEORIA	4	0.2%	0	0.0%	0	0.0%
ELMHURST	4	0.2%	1	0.1%	1	0.3%
GIBSON CITY	4	0.2%	1	0.1%	1	0.3%
GRANT PARK	4	0.2%	0	0.0%	0	0.0%
HIGHWOOD	4	0.2%	1	0.1%	0	0.0%
HOOPESTON	4	0.2%	1	0.1%	1	0.3%
JEWETT	4	0.2%	0	0.0%	1	0.3%
LEAF RIVER	4	0.2%	4	0.6%	1	0.3%
LINCOLN	4	0.2%	3	0.4%	0	0.0%
LOMAX	4	0.2%	0	0.0%	3	1.0%
MATTOON	4	0.2%	1	0.1%	1	0.3%
MONMOUTH	4	0.2%	0	0.0%	1	0.3%
MORRISON	4	0.2%	2	0.3%	0	0.0%
MUNDELEIN	4	0.2%	1	0.1%	1	0.3%
NAPERVILLE	4	0.2%	0	0.0%	3	1.0%
NEOGA	4	0.2%	2	0.3%	1	0.3%
NILES	4	0.2%	1	0.1%	1	0.3%
OAK LAWN	4	0.2%	0	0.0%	2	0.7%
PARIS	4	0.2%	0	0.0%	0	0.0%
RIVERSIDE	4	0.2%	1	0.1%	2	0.7%
ROYAL	4	0.2%	2	0.3%	1	0.3%
SANDWICH	4	0.2%	1	0.1%	0	0.0%
SHATTUC	4	0.2%	3	0.4%	0	0.0%
SPARTA	4	0.2%	3	0.4%	0	0.0%
THOMASBORO	4	0.2%	1	0.1%	2	0.7%
TOLUCA	4	0.2%	3	0.4%	1	0.3%
VILLA PARK	4	0.2%	7	1.0%	0	0.0%
WAUKEGAN	4	0.2%	0	0.0%	2	0.7%
WEST CHICAGO	4	0.2%	2	0.3%	0	0.0%
<b>109 Cities</b>	<b>968</b>	<b>59.4%</b>	<b>390</b>	<b>54.6%</b>	<b>166</b>	<b>55.9%</b>
<b>420 Other Cities</b>	<b>663</b>	<b>40.6%</b>	<b>324</b>	<b>45.4%</b>	<b>131</b>	<b>44.1%</b>
<b>Total</b>	<b>1,631</b>	<b>100.0%</b>	<b>714</b>	<b>100.0%</b>	<b>297</b>	<b>100.0%</b>

### Most crossings were collision free during the ten-year period

Number of Collisions	Crossings	Percent	Killed	Percent	Injured	Percent
Seven	1	0.01%	0	0.00%	17	2.38%
Six	2	0.02%	3	1.01%	0	0.00%
Five	7	0.08%	6	2.02%	11	1.54%
Four	14	0.17%	10	3.37%	39	5.46%
Three	60	0.73%	20	6.73%	67	9.38%
Two	198	2.39%	79	26.60%	164	22.97%
One	946	11.44%	179	60.27%	416	58.26%
None	7,043	85.15%	0	0.00%	0	0.00%
<b>Total</b>	<b>8,271</b>	<b>100.00%</b>	<b>297</b>	<b>100.00%</b>	<b>714</b>	<b>100.00%</b>

### Public Highway-Rail Grade Crossings with Three or More Collisions: 1998 - 2007

DOT	Collisions	Injured	Killed	RR	COUNTY	CITY	STREET	DEVICE	AADT	STHWY	TRAINS
372131E	7	17	0	NIRC	COOK	ELMWOOD PARK	GRAND AVE	AFLS-Gates-Cant-over	20,900	No	106
175042V	6	0	3	UP	DE KALB	DEKALB	4TH ST	AFLS-Gates-Cant-over	5,900	Yes	59
328516E	6	0	0	NS	MACON	DECATUR	BRUSH COLLEGE R	Flash Lites (other)	12,200	No	8
004381E	5	0	0	BNSF	WILL	JOLIET	PATTERSON	Gates	2,700	No	68
079508Y	5	3	1	BNSF	COOK	LAGRANGE	LA GRANGE RD	AFLS-Gates-Cant-over	21,300	Yes	160
173887G	5	2	0	UP	COOK	CHICAGO	NAGLE AV	Gates	15,400	Yes	68
176912X	5	3	2	UP	COOK	MOUNT PROSPEC	ELMHURST RD	AFLS-Gates-Cant-over	19,400	Yes	70
289554E	5	1	2	NIRC	COOK	CHICAGO	75TH ST	Gates	3,200	No	62
326878J	5	0	0	IHB	COOK	FRANKLIN PARK	CHESTNUT AVENUE	Flash Lites (mast)	2,000	No	32
608311K	5	2	1	NIRC	COOK	CHICAGO	119TH ST	AFLS-Gates-Cant-over	21,300	Yes	66
173957U	4	12	0	UP	COOK	CHICAGO	N KILBOURN AV	Gates	59	No	58
173996K	4	1	0	UP	COOK	MAYWOOD	1ST AVE	AFLS-Gates-Cant-over	27,000	Yes	94
174001M	4	2	1	UP	COOK	MELROSE PARK	9TH AV	AFLS-Gates-Cant-over	10,800	No	94
174315J	4	1	0	UP	COOK	CHICAGO	PEORIA ST	Flash Lites (mast)	5,009	No	54
175536P	4	3	0	UP	TAZEWELL	SOUTH PEKIN	TOWNLIN ROAD	Flash Lites (mast)	1,900	No	3
176909P	4	2	0	UP	COOK	DES PLAINES	MT PROSPECT RD	Gates	16,800	No	69
283170A	4	2	1	GTW	COOK	HARVEY	ASHLAND AVE	Gates	8,009	No	5
294354F	4	3	1	UP	SANGAMON	AUBURN	W DIVERNON RD	Gates	2,000	No	10
294423L	4	3	3	UP	JERSEY	BRIGHTON	DAVID LN	Gates	650	No	7
372133T	4	0	0	NIRC	COOK	RIVER GROVE	THATCHER	AFLS-Gates-Cant-over	36,100	Yes	106
388037N	4	2	3	NIRC	COOK	NORTHBROOK	DUNDEE RD	AFLS-Gates-Cant-over	34,100	Yes	96
388063D	4	1	0	CP	LAKE	WADSWORTH	RUSSELL RD	Gates	1,900	No	42
388065S	4	1	0	CP	LAKE	WADSWORTH	ROSECRANS RD	Gates	10,800	Yes	42
608917D	4	6	1	NIRC	COOK	CHICAGO	THROOP ST	Flash Lites (mast)	109	No	47
004403C	3	1	0	BNSF	GRUNDY	COAL CITY	DIVISION ST	Gates	10,200	Yes	60
004404J	3	0	0	BNSF	GRUNDY	COAL CITY	KANKAKEE ST.	Flash Lites (mast)	500	No	37
004664C	3	5	0	BNSF	KNOX	GALESBURG	MAIN ST	AFLS-Gates-Cant-over	10,100	Yes	62
069376N	3	1	0	BNSF	WHITESIDE	FENTON	MOLINE RD	Gates	1,400	Yes	10
069737R	3	0	1	BNSF	KANE	HINCKLEY	W. COUNTY LN RD	Gates	1,350	No	21
069753A	3	0	1	BNSF	DE KALB	WATERMAN	CREGO RD	Crossbucks	25	No	20
069796T	3	3	0	BNSF	OGLE	ROCHELLE	STEAM PLANT RD	Gates	1,200	No	65
079488P	3	0	2	BNSF	COOK	BERWYN	EAST	Gates	4,050	No	160
079493L	3	1	1	BNSF	COOK	RIVERSIDE	HARLEM AV	AFLS-Gates-Cant-over	29,000	Yes	160
079513V	3	0	0	BNSF	COOK	WESTERN SPRING	GILBERT	Gates	14,100	No	160
079530L	3	1	0	BNSF	DU PAGE	WESTMONT	CASS AVE	Gates	18,300	No	160
079597T	3	0	0	BNSF	KENDALL	SANDWICH	DUVICK AVE	Gates	3,350	No	25

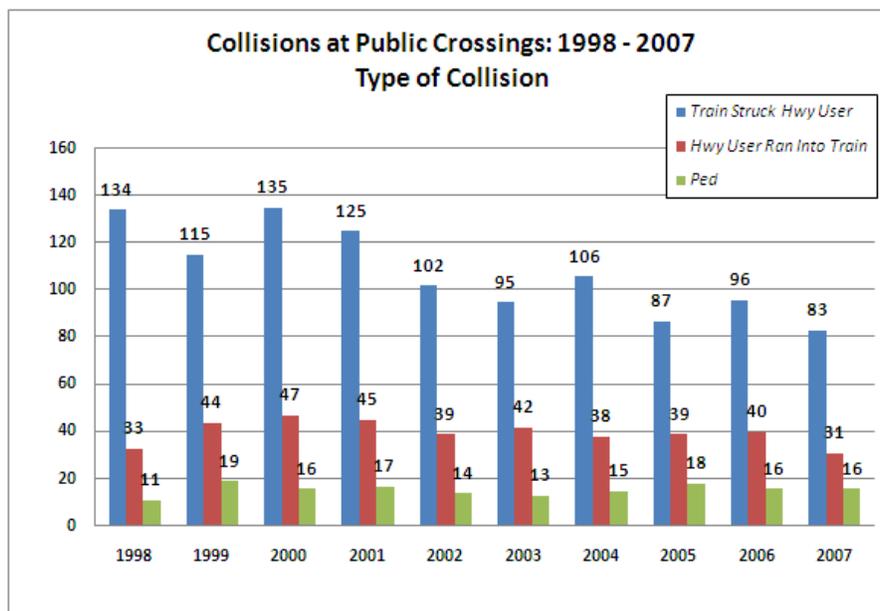
DOT	Collisions	Injured	Killed	RR	COUNTY	CITY	STREET	DEVICE	AADT	STHWY	TRAINS
166881Y	3	1	0	UP	CHRISTIAN	PANA	WASHINGTON ST	Gates	5,300	Yes	14
167569G	3	0	1	UP	IROQUOIS	WATSEKA	TR99B	Crossbucks	59	No	36
173908X	3	0	1	UP	COOK	DES PLAINES	DESPLAINES RIVER	AFLS-Gates-Cant-over	23,000	Yes	68
174009S	3	0	1	UP	COOK	MAYWOOD	19TH AV	AFLS-Gates-Cant-over	5,009	No	94
174319L	3	0	0	UP	COOK	CHICAGO	GRAND AV	AFLS-Cant (over trf)	14,600	No	2
174939A	3	1	0	UP	DU PAGE	LOMBARD	GRACE	Gates	16,000	No	108
175058S	3	0	1	UP	OGLE	ROCHELLE	MULFORD RD	Gates	500	No	60
176809K	3	0	2	UP	LAKE	WAUKEGAN	YORKHOUSE RD	Gates	4,900	No	18
176923K	3	1	1	UP	COOK	ARLINGTON HTS	ARLINGTON HTS RD	AFLS-Gates-Cant-over	25,700	Yes	70
177847X	3	1	0	UP	COOK	ARLINGTON HTS	ARTHUR AVE	Gates	7,300	No	70
260585T	3	2	0	EJE	WILL	PLAINFIELD	RENWICK RD	Flash Lites (mast)	9,300	No	20
260597M	3	1	0	EJE	WILL	JOLIET	WOODRUFF	Gates	7,700	No	22
261014C	3	3	0	EJE	WILL	MINOOKA	MOUND RD	Crossbucks	400	No	4
283169F	3	0	0	GTW	COOK	HARVEY	SIBLEY BLVD	AFLS-Gates-Cant-over	28,400	Yes	5
289534T	3	2	0	NIRC	COOK	CHICAGO	DANTE AV	Gates	10,800	No	62
289551J	3	3	0	NIRC	COOK	CHICAGO	E 72ND ST	Gates	109	No	62
289771E	3	2	0	UP	WILL	JOLIET	LARAWAY RD	Gates	4,000	No	8
289861D	3	7	0	CC	DU PAGE	VILLA PARK	NORTH AVE	AFLS-Gates-Cant-over	45,000	Yes	12
290507T	3	4	0	UP	WILL	BRAIDWOOD	CENTER ST	Flash Lites (mast)	1,209	No	9
290509G	3	1	3	UP	WILL	GODLEY	COUNTY LINE RD	Gates	109	No	9
291378J	3	0	1	IC	MACON	DECATUR	BRUSH COLLEGE R	AFLS-Cant (over trf)	12,200	No	4
296029R	3	1	0	IC	ST CLAIR	BELLEVILLE	S 74TH ST	AFLS-Gates-Cant-over	11,200	No	6
326894T	3	2	0	IHB	COOK	RIVERDALE	INDIANA AVE	AFLS-Gates-Cant-over	7,700	Yes	38
328044K	3	2	0	NS	MADISON	GRANITE CITY	MISSOURI AVE	AFLS-Cant (over trf)	3,450	Yes	2
328512C	3	0	0	NS	MACON	DECATUR	FAIRIES PARKWAY	Flash Lites (mast)	7,300	No	6
328522H	3	2	0	NS	MACON	DECATUR	FAIRIES PARKWAY	Crossbucks	8,900	No	14
372101M	3	1	0	NIRC	COOK	CHICAGO	NARRAGANSETT AV	AFLS-Gates-Cant-over	12,500	Yes	106
372217N	3	1	0	NIRC	KANE	ELGIN	IL RTE 25	AFLS-Gates-Cant-over	11,800	Yes	76
372369K	3	4	1	ICE	OGLE	LEAF RIVER	MT. MORRIS RD.	Flash Lites (mast)	250	No	9
386378A	3	1	0	NIRC	COOK	CHICAGO	CALDWELL AV	AFLS-Gates-Cant-over	25,800	Yes	82
386385K	3	1	0	NIRC	COOK	NILES	HOWARD ST	AFLS-Gates-Cant-over	10,000	Yes	82
386411X	3	0	1	NIRC	COOK	GLENVIEW	CHESTNUT AV	AFLS-Gates-Cant-over	11,700	No	82
386425F	3	0	0	NIRC	LAKE	LIBERTYVILLE	BUTTERFIELD RD	Gates	15,400	No	56
424762C	3	0	0	UP	ST CLAIR	CAHOKIA	WATER ST	Gates	2,800	Yes	26
478712Y	3	0	0	NS	COOK	CHICAGO	TORRENCE AV	AFLS-Gates-Cant-over	10,300	Yes	52
478713F	3	0	0	NS	COOK	CHICAGO	130TH ST	AFLS-Gates-Cant-over	19,600	No	52
479863S	3	1	0	NS	VERMILION	DANVILLE	SOUTH ST	Gates	4,450	No	48
534423B	3	0	1	NS	LIVINGSTON	REDDICK	ILL 17	Flash Lites (mast)	3,000	Yes	12
605903K	3	0	0	IAIS	ROCK ISLAND	ROCK ISLAND	6TH AVENUE	Crossbucks	1,900	No	2
608304A	3	4	0	NIRC	COOK	CHICAGO	103RD ST	AFLS-Gates-Cant-over	12,400	No	66
608846J	3	0	0	NIRC	COOK	BLUE ISLAND	VERMONT ST	AFLS-Gates-Cant-over	10,800	Yes	109
689651T	3	1	0	WC	COOK	DES PLAINES	TOUHY AV	Gates	23,500	Yes	40
689657J	3	1	1	WC	COOK	DES PLAINES	GRACELAND AV	AFLS-Gates-Cant-over	19,500	Yes	40
724546M	3	1	0	NS	ST CLAIR	EAST ST. LOUIS	ST LOUIS AVE	Crossbucks	950	No	4
843806F	3	0	0	BRC	COOK	CHICAGO	ARCHER AV	AFLS-Gates-Cant-over	28,700	Yes	63
846969A	3	1	0	ALS	MADISON	GRANITE CITY	PONTOON RD	AFLS-Cant (over trf)	11,400	No	6
913006N	3	1	0	NS	COOK	CHICAGO	RACINE AV	Flash Lites (mast)	1,750	No	40

The next section of this report presents a number of tables and graphs describing the highway-rail grade crossing collision data for collisions that occurred between 1998 and 2007. The information is provided to assist the reader in understanding the nature of highway-rail grade crossing collisions and to assess the usefulness of various counter measures. The information is provided in five general categories:

- General description of collision
- Highway user characteristics
- Time and seasonal characteristics
- Highway characteristics
- Railroad characteristics

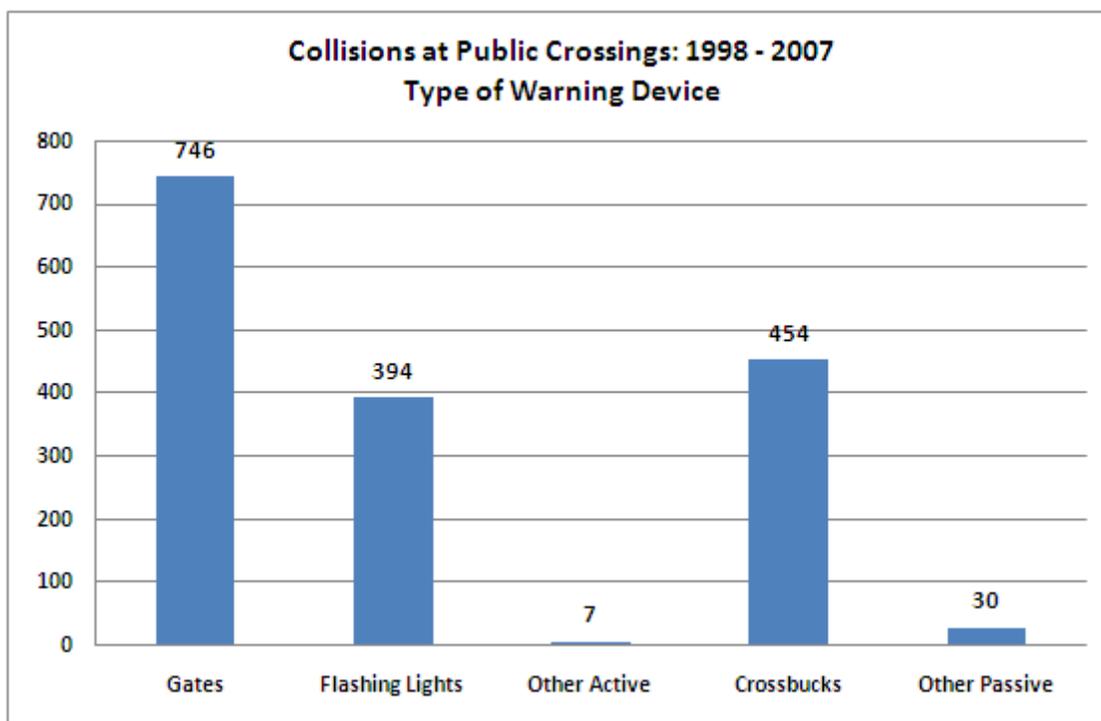
Type of Collision:

Year	Train Struck Hwy User	Percent	Hwy User Ran Into Train	Percent	Pedestrian	Percent	Total
1998	134	75.3%	33	18.5%	11	6.2%	178
1999	115	64.6%	44	24.7%	19	10.7%	178
2000	135	68.2%	47	23.7%	16	8.1%	198
2001	125	66.8%	45	24.1%	17	9.1%	187
2002	102	65.8%	39	25.2%	14	9.0%	155
2003	95	63.3%	42	28.0%	13	8.7%	150
2004	106	66.7%	38	23.9%	15	9.4%	159
2005	87	60.4%	39	27.1%	18	12.5%	144
2006	96	63.2%	40	26.3%	16	10.5%	152
2007	83	63.8%	31	23.8%	16	12.3%	130
<b>Total</b>	<b>1,078</b>	<b>66.1%</b>	<b>398</b>	<b>24.4%</b>	<b>155</b>	<b>9.5%</b>	<b>1,631</b>



## Type of Warning Device

Year	Gates	Percent	Flashing Lights	Percent	Other Active	Percent	Crossbucks	Percent	Other Passive	Percent	Total
1998	62	34.8%	52	29.2%	0	0.0%	61	34.3%	3	1.7%	178
1999	77	43.3%	50	28.1%	0	0.0%	50	28.1%	1	0.6%	178
2000	85	42.9%	53	26.8%	2	1.0%	54	27.3%	4	2.0%	198
2001	90	48.1%	44	23.5%	2	1.1%	48	25.7%	3	1.6%	187
2002	68	43.9%	34	21.9%	1	0.6%	47	30.3%	5	3.2%	155
2003	66	44.0%	40	26.7%	2	1.3%	41	27.3%	1	0.7%	150
2004	81	50.9%	32	20.1%	0	0.0%	44	27.7%	2	1.3%	159
2005	74	51.4%	31	21.5%	0	0.0%	37	25.7%	2	1.4%	144
2006	75	49.3%	26	17.1%	0	0.0%	46	30.3%	5	3.3%	152
2007	68	52.3%	32	24.6%	0	0.0%	26	20.0%	4	3.1%	130
<b>Total</b>	<b>746</b>	<b>45.7%</b>	<b>394</b>	<b>24.2%</b>	<b>7</b>	<b>0.4%</b>	<b>454</b>	<b>27.8%</b>	<b>30</b>	<b>1.8%</b>	<b>1,631</b>



## Age and Gender of Highway User

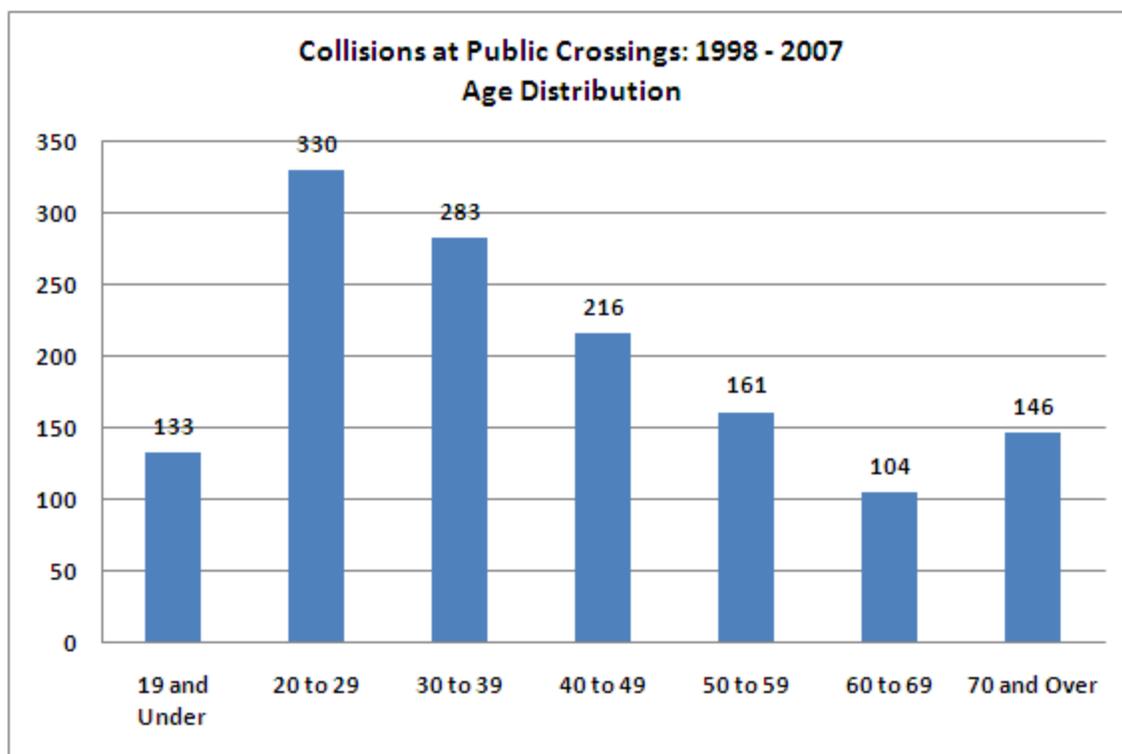
Age	Female	Male	Total
19 and Under	36	97	133
20 to 29	91	239	330
30 to 39	88	195	283
40 to 49	62	154	216
50 to 59	47	114	161
60 to 69	23	81	104
70 and Over	55	91	146
Not Avail	25	132	157
<b>Total</b>	<b>427</b>	<b>1,103</b>	<b>1,530</b>
<b>Percent</b>	<b>27.9%</b>	<b>72.1%</b>	<b>100.0%</b>

Age	Total	Percent
19 and Unde	133	9.7%
20 to 29	330	24.0%
30 to 39	283	20.6%
40 to 49	216	15.7%
50 to 59	161	11.7%
60 to 69	104	7.6%
70 and Over	146	10.6%
<b>Total</b>	<b>1,373</b>	<b>100.0%</b>

Age not available in 258 cases.

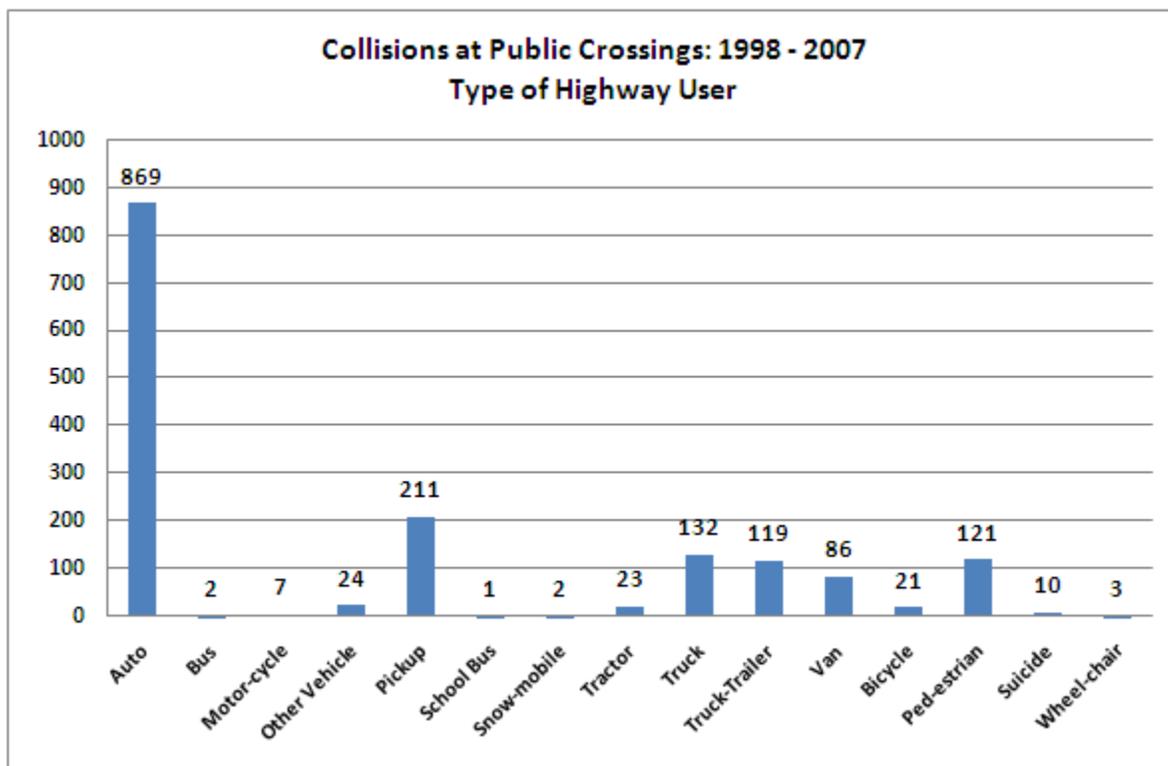
Gender not available in 101 cases.

Age as young as 6 and as old as 99.



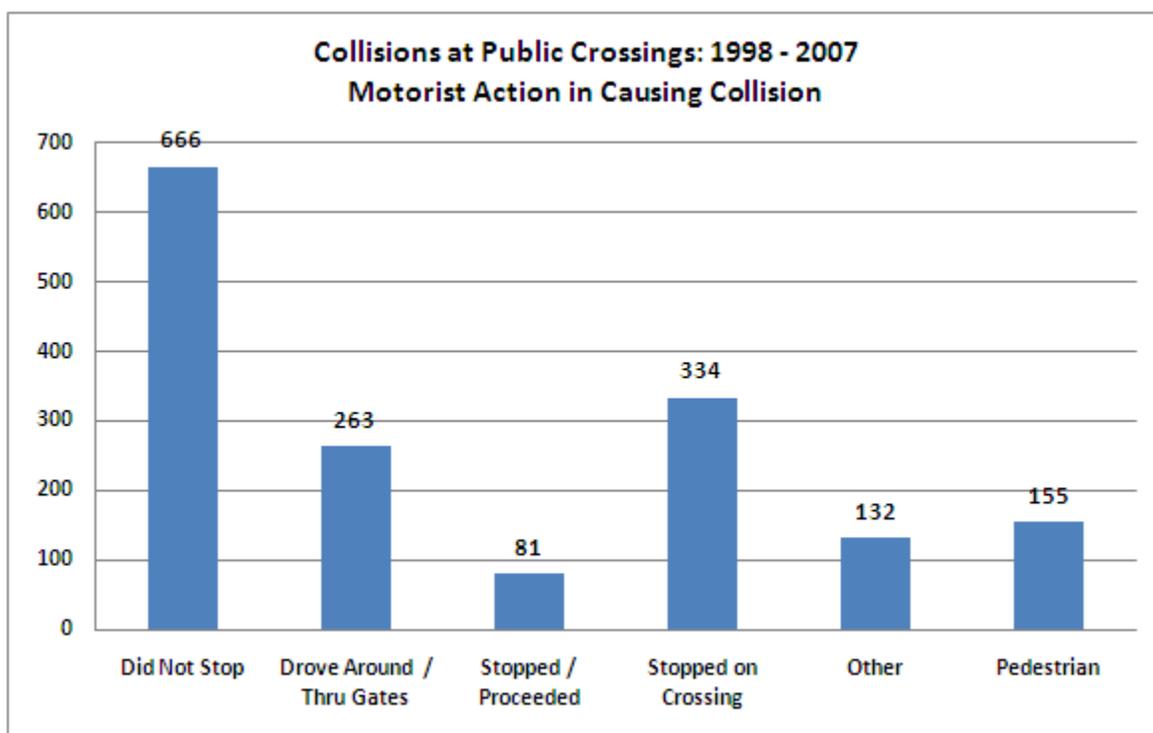
## Type of Highway User

Year	Auto	Bus	Motor-cycle	Other Vehicle	Pickup	School Bus	Snow-mobile	Tractor	Truck	Truck-Trailer	Van	Bicycle	Ped-estrian	Suicide	Wheel-chair	Total
1998	97	0	2	1	23	0	0	3	23	13	5	1	10	0	0	178
1999	86	1	0	1	19	0	1	2	25	16	8	3	16	0	0	178
2000	107	0	2	3	26	0	0	1	16	16	11	0	15	0	1	198
2001	97	0	1	1	24	0	0	3	15	14	15	2	14	0	1	187
2002	76	0	0	0	22	0	1	2	16	12	12	2	12	0	0	155
2003	92	0	0	2	18	0	0	4	8	6	7	1	12	0	0	150
2004	94	0	0	5	20	0	0	2	7	10	6	1	10	3	1	159
2005	80	0	1	3	14	0	0	3	11	7	7	3	13	2	0	144
2006	75	0	1	6	26	1	0	1	4	13	9	4	7	5	0	152
2007	65	1	0	2	19	0	0	2	7	12	6	4	12	0	0	130
<b>Total</b>	<b>869</b>	<b>2</b>	<b>7</b>	<b>24</b>	<b>211</b>	<b>1</b>	<b>2</b>	<b>23</b>	<b>132</b>	<b>119</b>	<b>86</b>	<b>21</b>	<b>121</b>	<b>10</b>	<b>3</b>	<b>1,631</b>
	1,476											155				



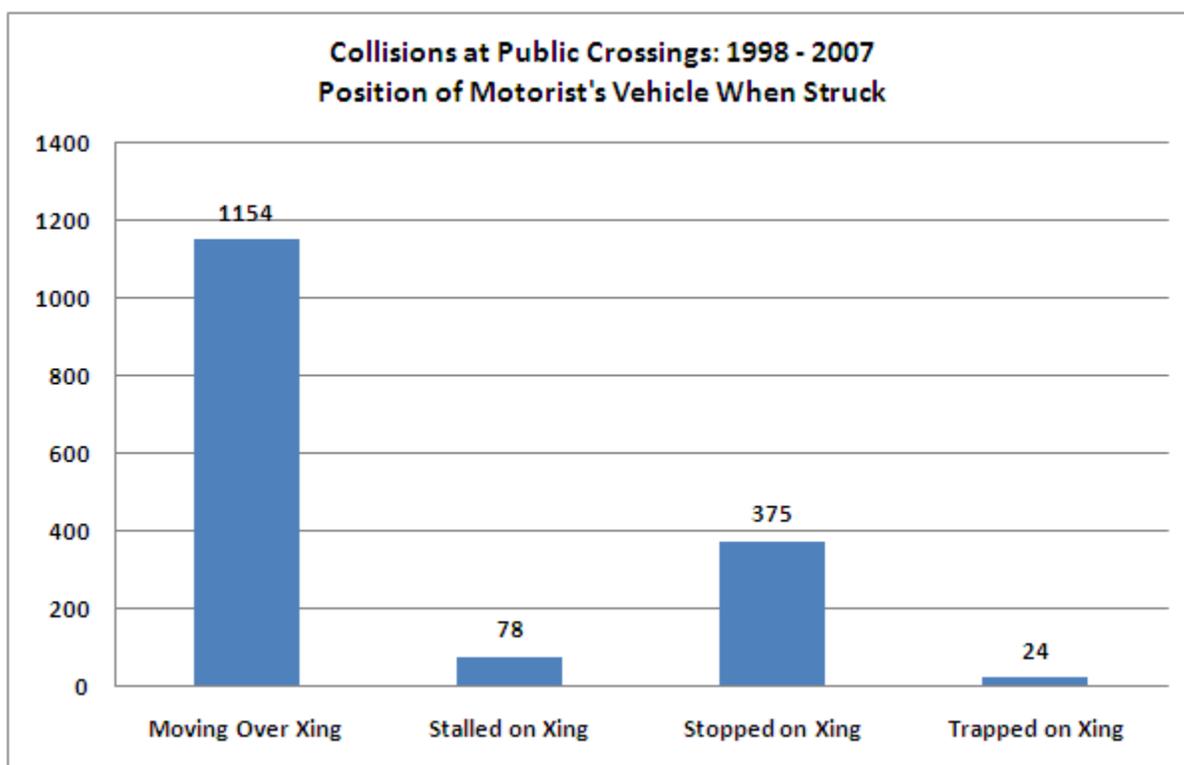
### Action of Highway User in Causing Collision

Year	Did Not Stop	Drove Around / Thru Gates	Stopped / Proceeded	Stopped on Crossing	Other	Pedestrian	Total
1998	81	17	7	48	14	11	178
1999	81	18	7	38	15	19	178
2000	84	29	10	39	20	16	198
2001	76	34	7	38	15	17	187
2002	66	23	7	36	9	14	155
2003	63	34	11	23	6	13	150
2004	51	31	11	32	19	15	159
2005	56	30	6	24	10	18	144
2006	62	26	7	27	14	16	152
2007	46	21	8	29	10	16	130
<b>Total</b>	<b>666</b>	<b>263</b>	<b>81</b>	<b>334</b>	<b>132</b>	<b>155</b>	<b>1,631</b>
<b>Percent</b>	<b>40.8%</b>	<b>16.1%</b>	<b>5.0%</b>	<b>20.5%</b>	<b>8.1%</b>	<b>9.5%</b>	<b>100.0%</b>



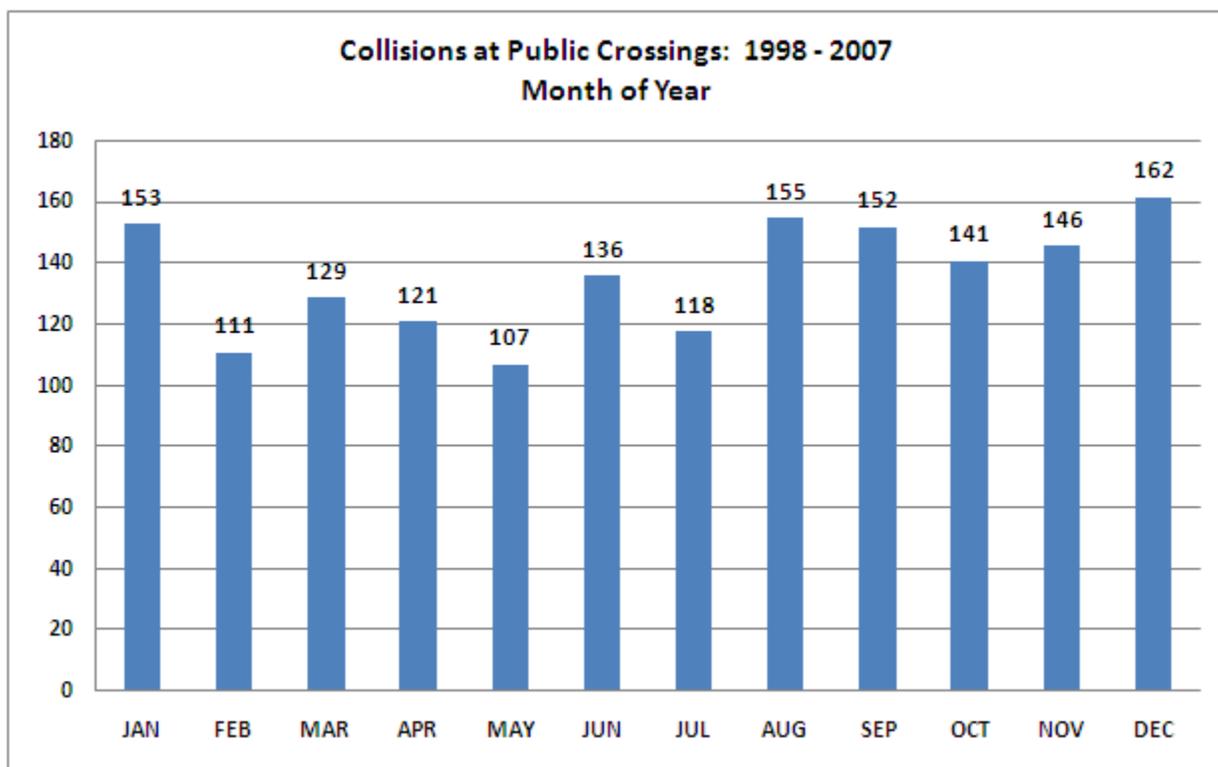
## Position of Highway User on Crossing When Collision Occurred

Year	Moving Over Xing	Stalled on Xing	Stopped on Xing	Trapped on Xing	Total
1998	116	10	51	1	178
1999	122	11	43	2	178
2000	137	10	46	5	198
2001	136	10	35	6	187
2002	108	8	36	3	155
2003	115	6	28	1	150
2004	112	9	34	4	159
2005	109	6	27	2	144
2006	107	3	42	0	152
2007	92	5	33	0	130
<b>Total</b>	<b>1154</b>	<b>78</b>	<b>375</b>	<b>24</b>	<b>1,631</b>
<b>Percent</b>	<b>70.8%</b>	<b>4.8%</b>	<b>23.0%</b>	<b>1.5%</b>	<b>100.0%</b>



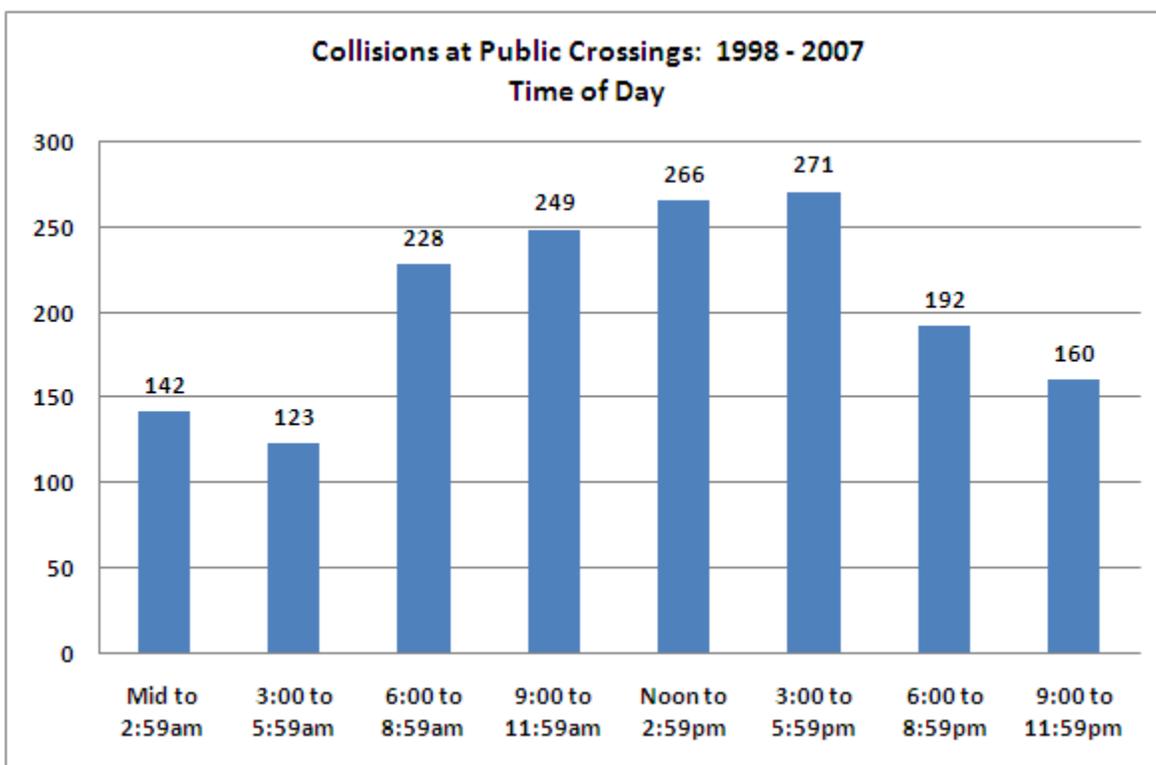
## Month of Year

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
1998	13	12	23	15	11	14	6	18	14	15	22	15	178
1999	31	10	14	13	11	6	8	18	24	12	16	15	178
2000	20	13	11	7	11	19	22	22	13	15	17	28	198
2001	19	13	15	13	7	16	14	22	19	15	14	20	187
2002	10	12	17	13	12	16	13	12	13	14	14	9	155
2003	11	15	14	13	5	16	14	11	13	16	9	13	150
2004	16	12	8	10	14	13	10	15	12	19	14	16	159
2005	13	6	12	15	11	14	11	12	14	11	9	16	144
2006	11	7	8	11	16	13	9	16	18	15	15	13	152
2007	9	11	7	11	9	9	11	9	12	9	16	17	130
<b>Total</b>	<b>153</b>	<b>111</b>	<b>129</b>	<b>121</b>	<b>107</b>	<b>136</b>	<b>118</b>	<b>155</b>	<b>152</b>	<b>141</b>	<b>146</b>	<b>162</b>	<b>1,631</b>
<b>Percent</b>	<b>9.4%</b>	<b>6.8%</b>	<b>7.9%</b>	<b>7.4%</b>	<b>6.6%</b>	<b>8.3%</b>	<b>7.2%</b>	<b>9.5%</b>	<b>9.3%</b>	<b>8.6%</b>	<b>9.0%</b>	<b>9.9%</b>	<b>100.0%</b>



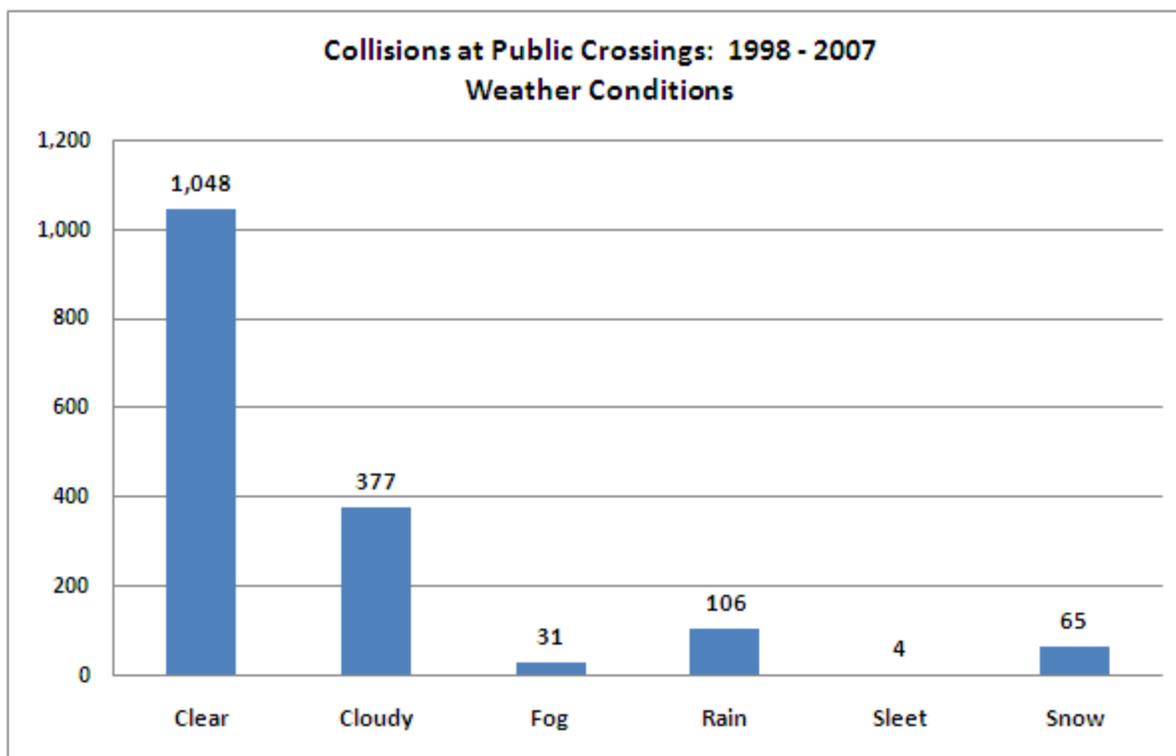
## Time of Day

Year	Mid to 2:59am	3:00 to 5:59am	6:00 to 8:59am	9:00 to 11:59am	Noon to 2:59pm	3:00 to 5:59pm	6:00 to 8:59pm	9:00 to 11:59pm	Total
1998	19	13	33	26	29	30	12	16	178
1999	13	12	26	27	30	34	19	17	178
2000	18	10	33	30	32	35	22	18	198
2001	18	10	26	32	33	30	21	17	187
2002	13	16	14	25	24	26	13	24	155
2003	8	10	22	25	26	19	26	14	150
2004	19	10	16	21	22	30	22	19	159
2005	14	14	22	19	18	21	24	12	144
2006	11	16	19	26	26	25	15	14	152
2007	9	12	17	18	26	21	18	9	130
<b>Total</b>	<b>142</b>	<b>123</b>	<b>228</b>	<b>249</b>	<b>266</b>	<b>271</b>	<b>192</b>	<b>160</b>	<b>1,631</b>
<b>Percent</b>	<b>8.7%</b>	<b>7.5%</b>	<b>14.0%</b>	<b>15.3%</b>	<b>16.3%</b>	<b>16.6%</b>	<b>11.8%</b>	<b>9.8%</b>	<b>100.0%</b>



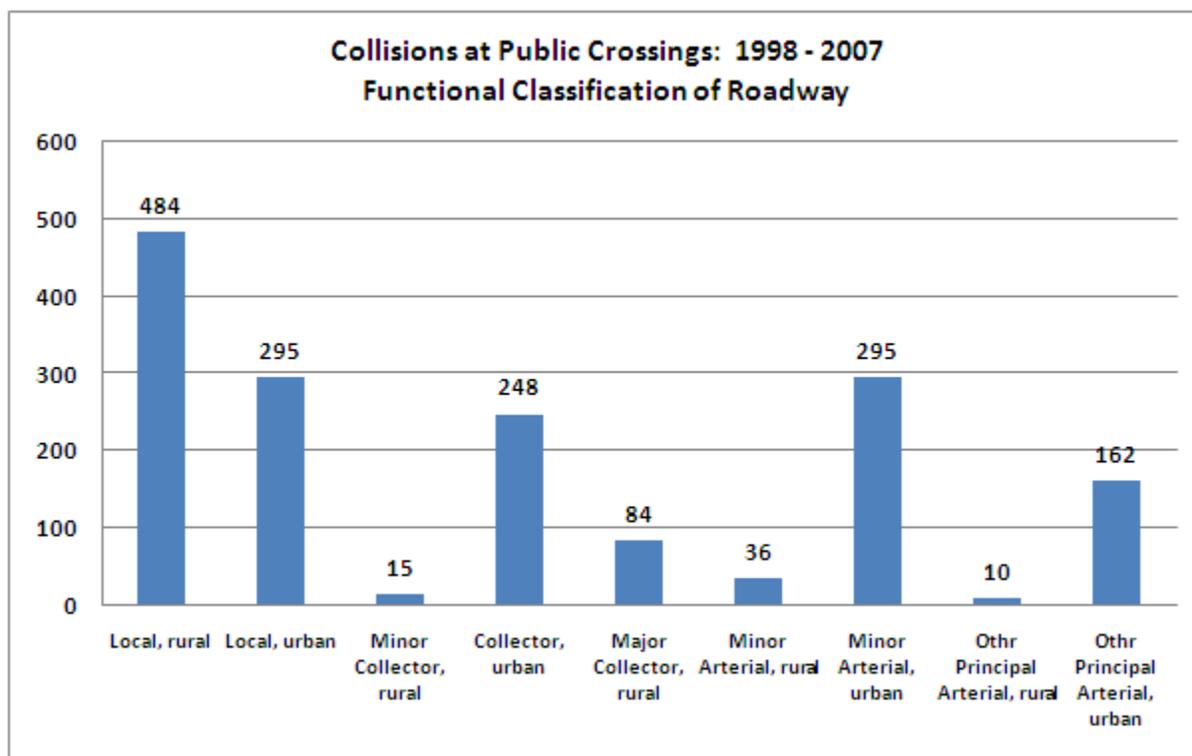
## Weather

Year	Clear	Cloudy	Fog	Rain	Sleet	Snow	Total
1998	112	39	5	17	0	5	178
1999	119	36	5	6	0	12	178
2000	124	45	5	14	0	10	198
2001	128	35	3	18	1	2	187
2002	105	36	1	6	0	7	155
2003	103	31	1	10	1	4	150
2004	100	39	3	10	1	6	159
2005	93	34	4	5	0	8	144
2006	84	45	2	15	0	6	152
2007	80	37	2	5	1	5	130
<b>Total</b>	<b>1,048</b>	<b>377</b>	<b>31</b>	<b>106</b>	<b>4</b>	<b>65</b>	<b>1,631</b>
<b>Percent</b>	<b>64.3%</b>	<b>23.1%</b>	<b>1.9%</b>	<b>6.5%</b>	<b>0.2%</b>	<b>4.0%</b>	<b>100.0%</b>



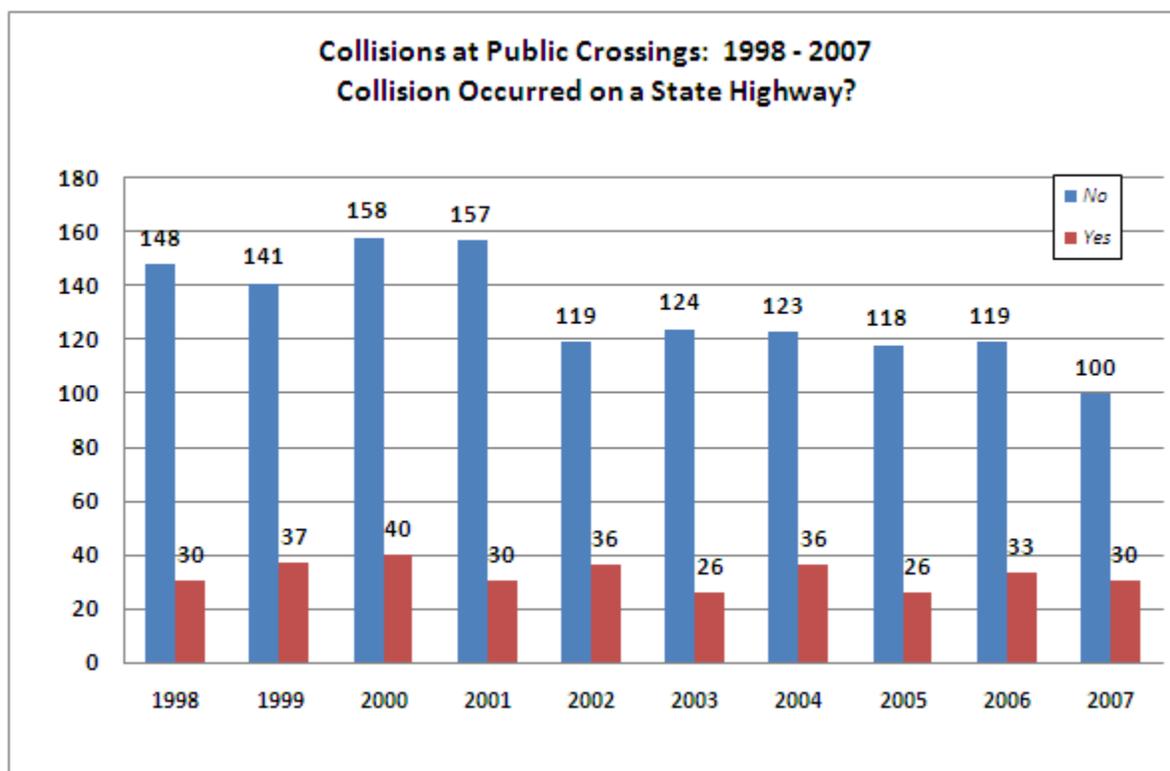
## Functional Classification of Roadway

Year	Local, rural	Local, urban	Minor Collector, rural	Collector, urban	Major Collector, rural	Minor Arterial, rural	Minor Arterial, urban	Oth Principal Arterial, rural	Oth Principal Arterial, urban	Total
1998	64	39	2	13	10	4	30	3	13	178
1999	52	34	1	26	9	3	29	1	23	178
2000	62	33	1	31	9	5	32	2	23	198
2001	51	40	2	28	5	1	42	0	18	187
2002	45	24	1	21	8	8	34	1	13	155
2003	46	26	0	24	9	3	27	0	15	150
2004	46	25	2	35	8	5	27	1	10	159
2005	43	22	2	24	6	1	26	0	20	144
2006	47	26	3	23	9	1	29	0	14	152
2007	28	26	1	23	11	5	19	2	15	130
<b>Total</b>	<b>484</b>	<b>295</b>	<b>15</b>	<b>248</b>	<b>84</b>	<b>36</b>	<b>295</b>	<b>10</b>	<b>162</b>	<b>1,631</b>
<b>Percent</b>	<b>29.7%</b>	<b>18.1%</b>	<b>0.9%</b>	<b>15.2%</b>	<b>5.2%</b>	<b>2.2%</b>	<b>18.1%</b>	<b>0.6%</b>	<b>9.9%</b>	<b>100.0%</b>



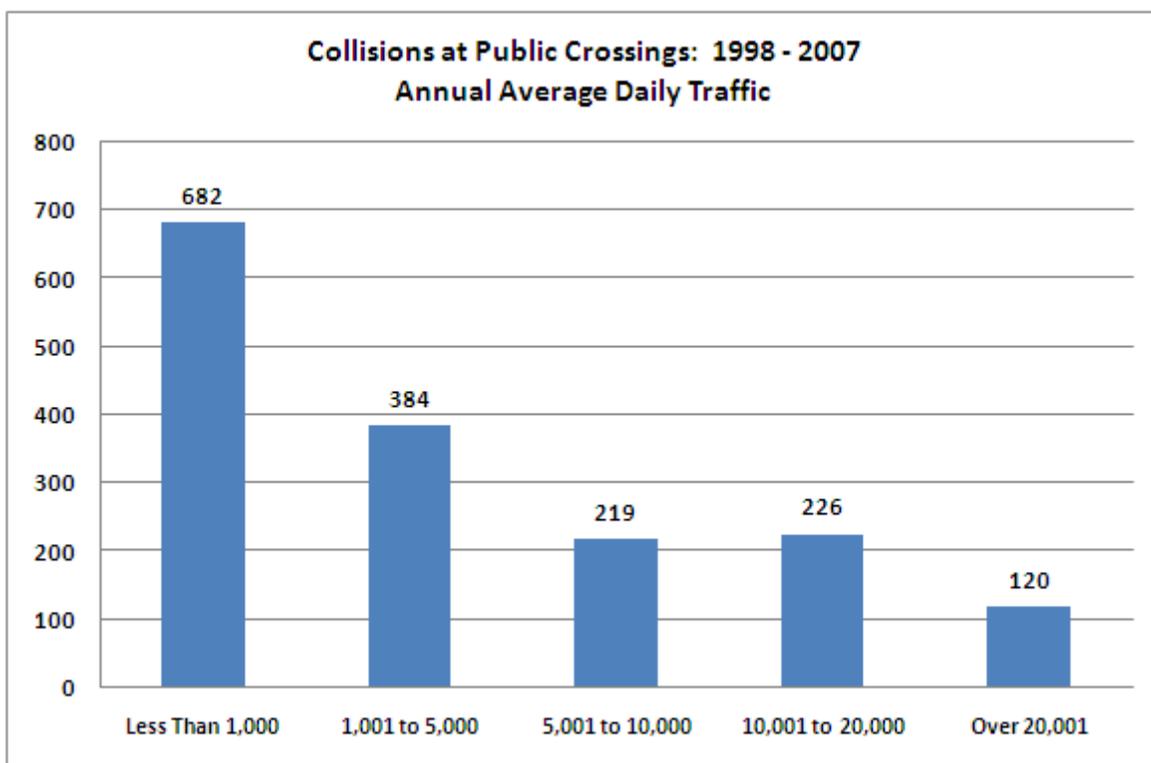
## State Maintained Highway Involved

Year	No	Yes	Total
1998	148	30	178
1999	141	37	178
2000	158	40	198
2001	157	30	187
2002	119	36	155
2003	124	26	150
2004	123	36	159
2005	118	26	144
2006	119	33	152
2007	100	30	130
<b>Total</b>	<b>1,307</b>	<b>324</b>	<b>1,631</b>
<b>Percent</b>	<b>80.1%</b>	<b>19.9%</b>	<b>100.0%</b>



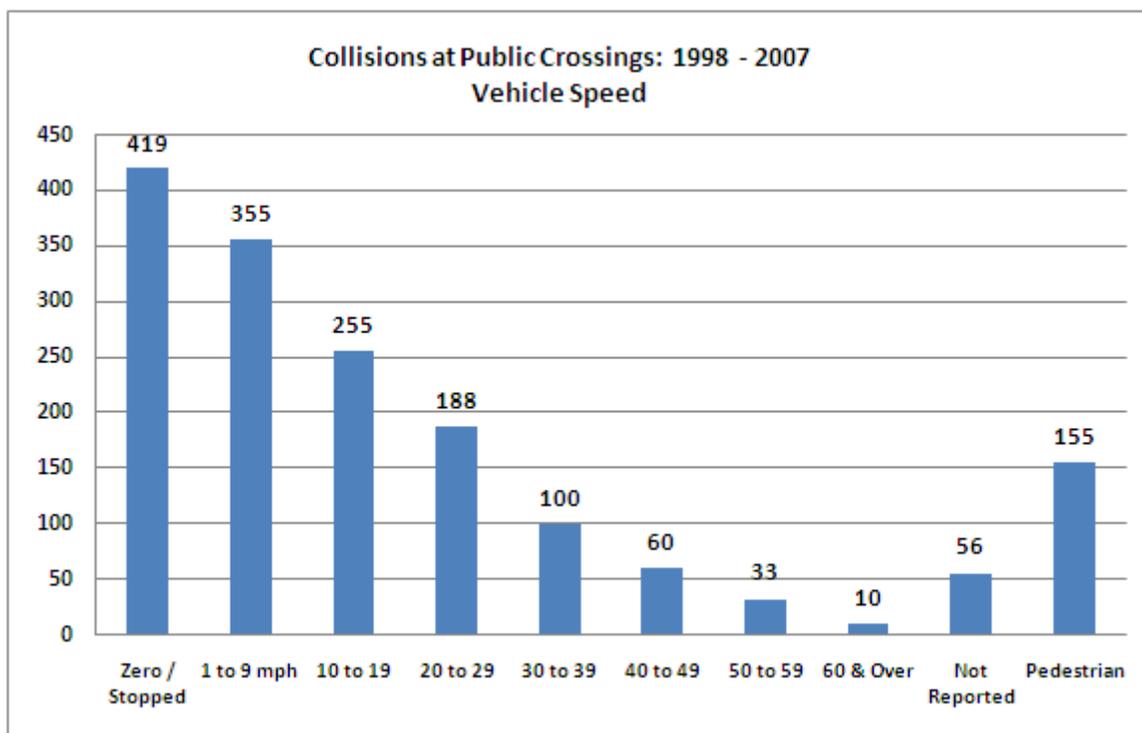
## Annual Average Daily Highway Traffic (AADT)

Year	Less Than 1,000	1,001 to 5,000	5,001 to 10,000	10,001 to 20,000	Over 20,001	Total
1998	88	42	22	15	11	178
1999	72	39	25	23	19	178
2000	85	51	20	27	15	198
2001	76	39	22	32	18	187
2002	64	38	22	26	5	155
2003	64	36	19	24	7	150
2004	62	42	25	18	12	159
2005	58	28	22	23	13	144
2006	68	31	21	20	12	152
2007	45	38	21	18	8	130
<b>Total</b>	<b>682</b>	<b>384</b>	<b>219</b>	<b>226</b>	<b>120</b>	<b>1,631</b>
<b>Percent</b>	<b>41.8%</b>	<b>23.5%</b>	<b>13.4%</b>	<b>13.9%</b>	<b>7.4%</b>	<b>100.0%</b>



## Speed of Motor Vehicle When Collision Occurred

Year	Zero / Stopped	1 to 9 mph	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 & Over	Not Reported	Pedestrian	Total
1998	60	25	32	26	9	4	2	1	8	11	178
1999	50	30	28	26	11	5	4	1	4	19	178
2000	53	40	32	28	11	7	4	0	7	16	198
2001	42	39	30	27	13	5	4	0	10	17	187
2002	40	29	22	17	8	7	6	1	11	14	155
2003	30	39	21	20	16	5	1	2	3	13	150
2004	40	44	25	10	11	6	5	1	2	15	159
2005	30	33	27	15	7	9	1	0	4	18	144
2006	39	41	24	8	8	6	4	1	5	16	152
2007	35	35	14	11	6	6	2	3	2	16	130
<b>Total</b>	<b>419</b>	<b>355</b>	<b>255</b>	<b>188</b>	<b>100</b>	<b>60</b>	<b>33</b>	<b>10</b>	<b>56</b>	<b>155</b>	<b>1,631</b>
<b>Percent</b>	<b>25.7%</b>	<b>21.8%</b>	<b>15.6%</b>	<b>11.5%</b>	<b>6.1%</b>	<b>3.7%</b>	<b>2.0%</b>	<b>0.6%</b>	<b>3.4%</b>	<b>9.5%</b>	<b>100.0%</b>



## Number of Collisions, Injuries and Fatalities by Reporting Railroad

Reporting Railroad	Collisions	Percent	Injured	Percent	Killed	Percent
ALS	3	0.2%	2	0.3%	0	0.0%
ATK	105	6.4%	94	13.2%	48	16.2%
BLOL	2	0.1%	0	0.0%	0	0.0%
BNSF	227	13.9%	109	15.3%	44	14.8%
BNSO	22	1.3%	5	0.7%	8	2.7%
BRC	7	0.4%	0	0.0%	0	0.0%
CC	25	1.5%	16	2.2%	2	0.7%
COER	1	0.1%	1	0.1%	0	0.0%
CRL	1	0.1%	0	0.0%	0	0.0%
CSX	98	6.0%	31	4.3%	17	5.7%
EIRC	4	0.2%	2	0.3%	0	0.0%
EJE	27	1.7%	9	1.3%	2	0.7%
EVWR	3	0.2%	1	0.1%	0	0.0%
GTW	14	0.9%	4	0.6%	1	0.3%
IAIS	27	1.7%	7	1.0%	0	0.0%
IC	127	7.8%	41	5.7%	21	7.1%
ICE	18	1.1%	8	1.1%	1	0.3%
IHB	25	1.5%	7	1.0%	1	0.3%
IMRR	13	0.8%	2	0.3%	2	0.7%
INRD	3	0.2%	1	0.1%	0	0.0%
IR	4	0.2%	4	0.6%	1	0.3%
KBSR	5	0.3%	1	0.1%	0	0.0%
KCS	6	0.4%	1	0.1%	0	0.0%
KJRY	3	0.2%	0	0.0%	0	0.0%
NIRC	154	9.4%	87	12.2%	35	11.8%
NS	245	15.0%	106	14.8%	42	14.1%
PRY	1	0.1%	0	0.0%	0	0.0%
SOO	29	1.8%	10	1.4%	2	0.7%
SVIZ	1	0.1%	0	0.0%	0	0.0%
TPW	15	0.9%	2	0.3%	1	0.3%
TRRA	10	0.6%	3	0.4%	0	0.0%
TZPR	2	0.1%	0	0.0%	0	0.0%
UP	297	18.2%	114	16.0%	45	15.2%
UPME	79	4.8%	38	5.3%	22	7.4%
WC	27	1.7%	8	1.1%	2	0.7%
WSOR	1	0.1%	0	0.0%	0	0.0%
<b>Total</b>	<b>1,631</b>	<b>100.0%</b>	<b>714</b>	<b>100.0%</b>	<b>297</b>	<b>100.0%</b>

## Comparison of the Number of Predicted and Actual Collisions: 1998 - 2007

Railroad	Public At-Grade Crossings	Percent	Exposure to Risk	Percent	10 Year Predicted Collisions	Percent	10 Year Actual Collisions	Percent	Compare Predicted V. Actual
ALS	18	0.2%	435,429	0.1%	4	0.3%	3	0.2%	-1
ATK	1	0.0%	381,710	0.1%	1	0.0%	105	6.4%	**
BJRY	7	0.1%	29,218	0.0%	1	0.0%	0	0.0%	-1
BLOL	83	1.0%	43,433	0.0%	2	0.1%	2	0.1%	0
BNSF	1,173	14.2%	65,181,881	12.9%	254	15.8%	249	15.3%	-5
BRC	43	0.5%	7,220,238	1.4%	14	0.8%	7	0.4%	-7
BSDA	22	0.3%	11,329,100	2.2%	10	0.6%	0	0.0%	-10
CC	160	1.9%	8,203,572	1.6%	32	2.0%	25	1.5%	-7
CCUO	4	0.0%	168,100	0.0%	2	0.1%	0	0.0%	-2
CGGZ	11	0.1%	750	0.0%	0	0.0%	0	0.0%	0
CIRY	76	0.9%	2,473,864	0.5%	12	0.8%	0	0.0%	-12
COER	56	0.7%	497,750	0.1%	8	0.5%	1	0.1%	-7
CRL	22	0.3%	1,227,370	0.2%	4	0.2%	1	0.1%	-3
CSS&SB	2	0.0%	636	0.0%	0	0.0%	0	0.0%	0
CSX	657	7.9%	22,835,229	4.5%	108	6.7%	98	6.0%	-10
DRI	1	0.0%	27,300	0.0%	0	0.0%	0	0.0%	0
DT	47	0.6%	45,689	0.0%	3	0.2%	0	0.0%	-3
EIRC	75	0.9%	73,532	0.0%	3	0.2%	4	0.2%	1
EJE	139	1.7%	8,125,486	1.6%	32	2.0%	27	1.7%	-5
EVWR	114	1.4%	263,773	0.1%	7	0.4%	3	0.2%	-4
FFGZ	19	0.2%	0	0.0%	0	0.0%	0	0.0%	0
GTW	45	0.5%	4,344,998	0.9%	19	1.2%	14	0.9%	-5
GWWE	6	0.1%	35,800	0.0%	1	0.0%	0	0.0%	-1
IAIS	152	1.8%	412,110	0.1%	12	0.7%	27	1.7%	15
IC	1,010	12.2%	20,273,178	4.0%	153	9.5%	127	7.8%	-26
ICE	113	1.4%	1,457,573	0.3%	18	1.1%	18	1.1%	0
IHB	43	0.5%	3,568,268	0.7%	11	0.7%	25	1.5%	14
IMRR	109	1.3%	543,505	0.1%	10	0.6%	13	0.8%	3
INRD	81	1.0%	403,323	0.1%	10	0.6%	3	0.2%	-7
IR	129	1.6%	1,719,313	0.3%	18	1.1%	4	0.2%	-14
JERX	3	0.0%	0	0.0%	0	0.0%	0	0.0%	0
KBSR	106	1.3%	175,565	0.0%	9	0.5%	5	0.3%	-4
KCS	114	1.4%	781,108	0.2%	10	0.6%	6	0.4%	-4
KJRY	120	1.5%	590,853	0.1%	12	0.7%	3	0.2%	-9
KKRX	10	0.1%	8,400	0.0%	0	0.0%	0	0.0%	0
MJ	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0
MRMZ	17	0.2%	21,677	0.0%	1	0.1%	0	0.0%	-1
NICD	3	0.0%	705,156	0.1%	1	0.1%	0	0.0%	-1
NIRC	260	3.1%	139,243,929	27.6%	151	9.4%	154	9.4%	3
NS	1,056	12.8%	24,391,583	4.8%	197	12.3%	245	15.0%	48
RRCO	4	0.0%	5,550	0.0%	1	0.0%	0	0.0%	-1
RVPR	2	0.0%	352	0.0%	0	0.0%	0	0.0%	0
SCIH	2	0.0%	127,000	0.0%	0	0.0%	0	0.0%	0
SOO	98	1.2%	4,312,726	0.9%	18	1.1%	29	1.8%	11
STR	5	0.1%	0	0.0%	0	0.0%	0	0.0%	0
SVIZ	4	0.0%	0	0.0%	0	0.0%	1	0.1%	1
TPW	167	2.0%	1,174,428	0.2%	19	1.2%	15	0.9%	-4
TRRA	43	0.5%	2,592,432	0.5%	9	0.6%	10	0.6%	1
TZPR	67	0.8%	439,306	0.1%	7	0.5%	2	0.1%	-5
UP	1,652	20.0%	115,289,319	22.8%	378	23.5%	376	23.1%	-2
VRRC	5	0.1%	21,300	0.0%	1	0.0%	0	0.0%	-1
WC	73	0.9%	20,207,273	4.0%	30	1.9%	27	1.7%	-3
WCRY	3	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WSOR	13	0.2%	45,100	0.0%	1	0.0%	1	0.1%	0
XCTA	25	0.3%	33,189,637	6.6%	14	0.9%	0	0.0%	-14
<b>Total</b>	<b>8,271</b>	<b>100.0%</b>	<b>504,644,822</b>	<b>100.0%</b>	<b>1,606</b>	<b>100.0%</b>	<b>1,630</b>	<b>100.0%</b>	<b>24</b>

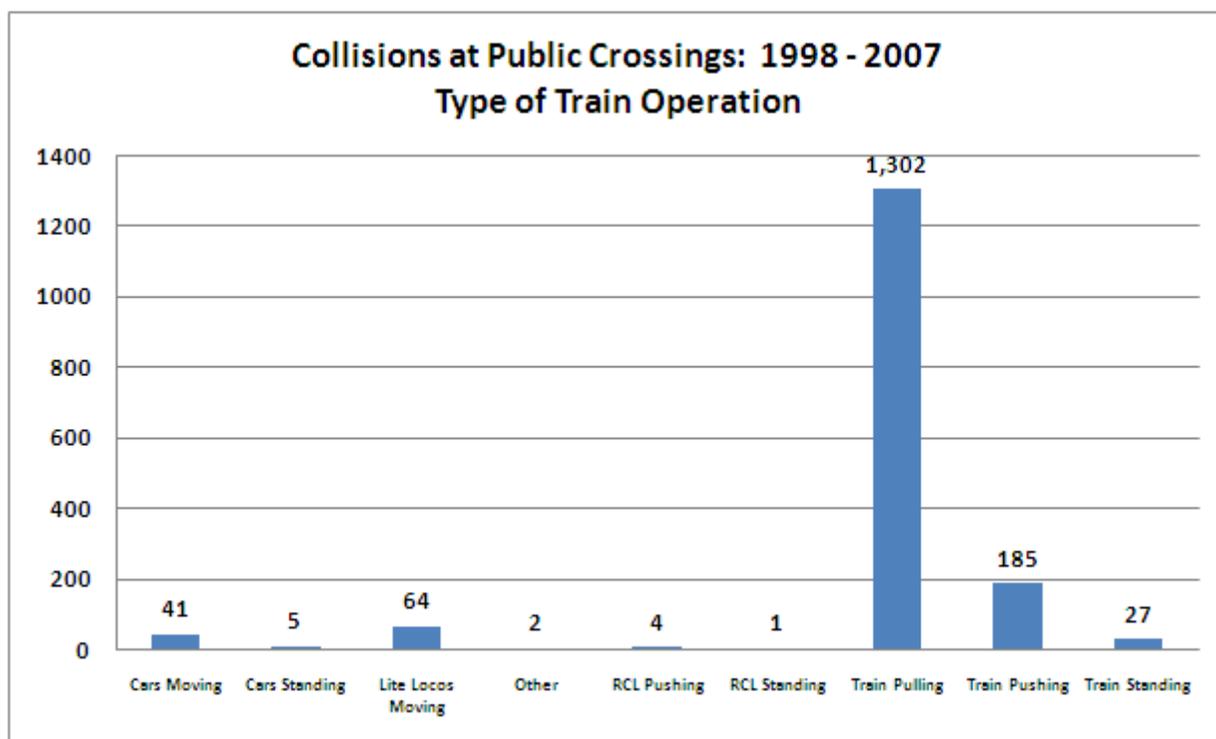
## Type of Railroad Equipment

Rail Equipment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	Percent
Freight	124	105	132	116	93	88	111	94	103	83	1,049	64.3%
Switching	12	15	11	11	14	14	5	11	6	10	109	6.7%
Lite Locos	5	5	7	15	5	5	6	4	8	5	65	4.0%
Work Train	0	1	0	0	2	1	1	0	0	0	5	0.3%
MOW Car	4	3	7	4	4	4	2	3	7	7	45	2.8%
Single Car	0	0	0	0	0	0	1	0	0	0	1	0.1%
Cut of Cars	0	0	0	1	1	0	0	0	0	1	3	0.2%
Amtrak-BNSF	1	5	1	2	2	4	2	3	1	2	23	1.4%
Amtrak-CP	1	0	1	1	1	0	0	3	1	3	11	0.7%
Amtrak-GTW	0	0	1	0	0	0	0	0	0	0	1	0.1%
Amtrak-IC	0	2	2	1	3	1	2	0	1	2	14	0.9%
Amtrak-TRRA	1	0	0	0	0	1	0	0	0	0	2	0.1%
Amtrak-Terminal	0	0	0	0	0	1	0	0	0	0	1	0.1%
Amtrak-UP	11	3	8	5	6	3	5	4	2	3	50	3.1%
Amtrak-UP-East	0	1	0	0	0	1	0	1	1	0	4	0.2%
Metra-BNSF	1	4	2	3	1	2	2	2	2	3	22	1.3%
Metra-Bluelisland	1	1	1	1	0	2	0	0	0	0	6	0.4%
Metra-HC	0	0	0	1	0	0	0	0	0	0	1	0.1%
Metra-MILW-North	4	9	1	4	3	3	2	0	1	2	29	1.8%
Metra-MILW-West	2	3	5	6	2	2	5	3	2	3	33	2.0%
Metra-NCS	1	0	0	0	3	0	1	1	0	1	7	0.4%
Metra-ROCK-Bev	0	3	2	3	1	3	1	0	0	0	13	0.8%
Metra-ROCK-Main	1	1	3	2	3	2	4	3	3	1	23	1.4%
Metra-SWS	0	0	3	1	0	1	0	0	0	0	5	0.3%
Metra-SouthChicago	2	3	1	4	6	5	4	2	3	3	33	2.0%
Metra-UP-North	1	2	0	1	1	0	2	1	1	1	10	0.6%
Metra-UP-Nwest	3	8	8	3	3	5	3	7	7	0	47	2.9%
Metra-UP-West	3	4	2	2	1	2	0	2	3	0	19	1.2%
<b>Total</b>	<b>178</b>	<b>178</b>	<b>198</b>	<b>187</b>	<b>155</b>	<b>150</b>	<b>159</b>	<b>144</b>	<b>152</b>	<b>130</b>	<b>1,631</b>	<b>100.0%</b>

Rail Equipment	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	Percent
Freight Operations	145	129	157	147	119	112	126	112	124	106	1,277	78.3%
Amtrak Operations	14	11	13	9	12	11	9	11	6	10	106	6.5%
Metra Operations	19	38	28	31	24	27	24	21	22	14	248	15.2%
<b>Total</b>	<b>178</b>	<b>178</b>	<b>198</b>	<b>187</b>	<b>155</b>	<b>150</b>	<b>159</b>	<b>144</b>	<b>152</b>	<b>130</b>	<b>1,631</b>	<b>100.0%</b>

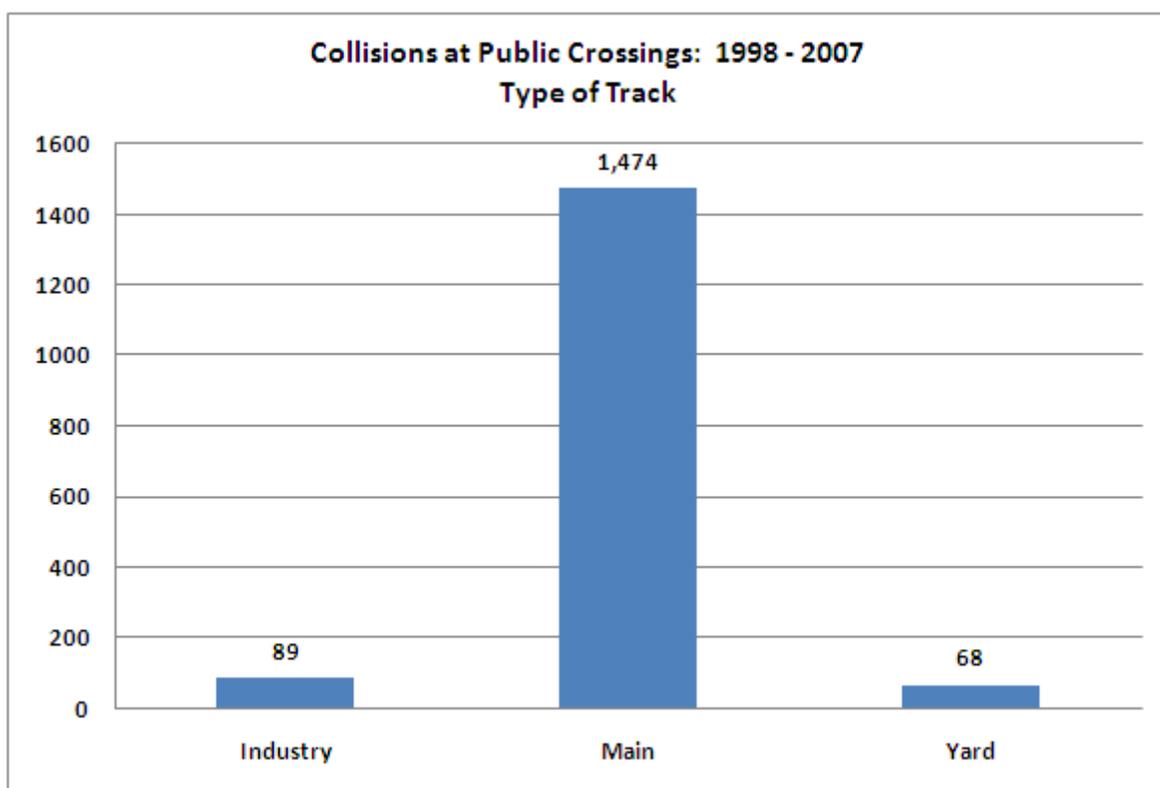
## Type of Railroad Operation

Year	Cars Moving	Cars Standing	Lite Locos Moving	Other	RCL Pushing	RCL Standing	Train Pulling	Train Pushing	Train Standing	Total
1998	4	0	5	0	0	0	152	15	2	178
1999	2	0	5	1	0	0	142	23	5	178
2000	5	2	7	0	0	0	156	26	2	198
2001	4	1	15	0	0	0	142	22	3	187
2002	4	1	5	0	0	0	122	21	2	155
2003	4	0	5	0	1	0	117	22	1	150
2004	3	0	6	0	1	1	135	9	4	159
2005	3	0	4	0	1	0	115	18	3	144
2006	7	0	7	0	1	0	116	16	5	152
2007	5	1	5	1	0	0	105	13	0	130
<b>Total</b>	<b>41</b>	<b>5</b>	<b>64</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1,302</b>	<b>185</b>	<b>27</b>	<b>1,631</b>
<b>Percent</b>	<b>2.5%</b>	<b>0.3%</b>	<b>3.9%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>79.8%</b>	<b>11.3%</b>	<b>1.7%</b>	<b>100.0%</b>



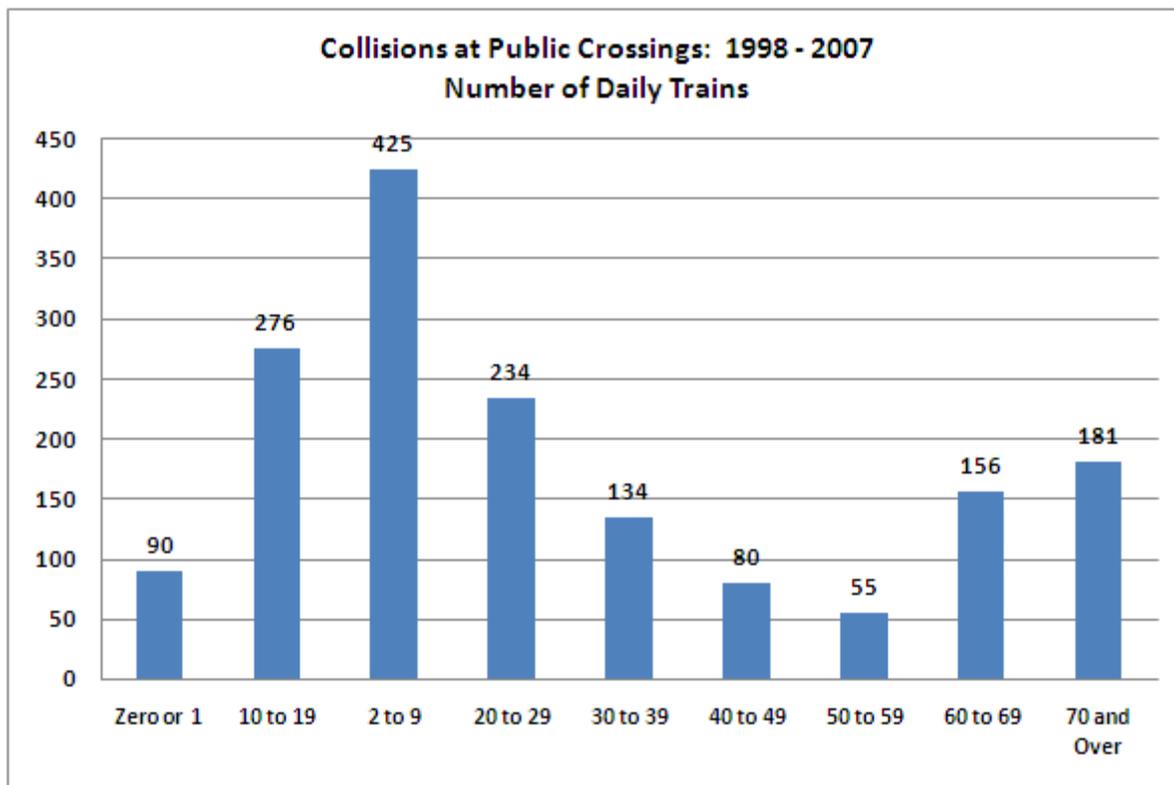
## Type of Track

Year	Industry	Main	Yard	Total
1998	5	161	12	178
1999	10	163	5	178
2000	9	182	7	198
2001	14	167	6	187
2002	8	139	8	155
2003	9	136	5	150
2004	7	147	5	159
2005	7	131	6	144
2006	11	133	8	152
2007	9	115	6	130
<b>Total</b>	<b>89</b>	<b>1,474</b>	<b>68</b>	<b>1,631</b>
<b>Percent</b>	<b>5.5%</b>	<b>90.4%</b>	<b>4.2%</b>	<b>100.0%</b>



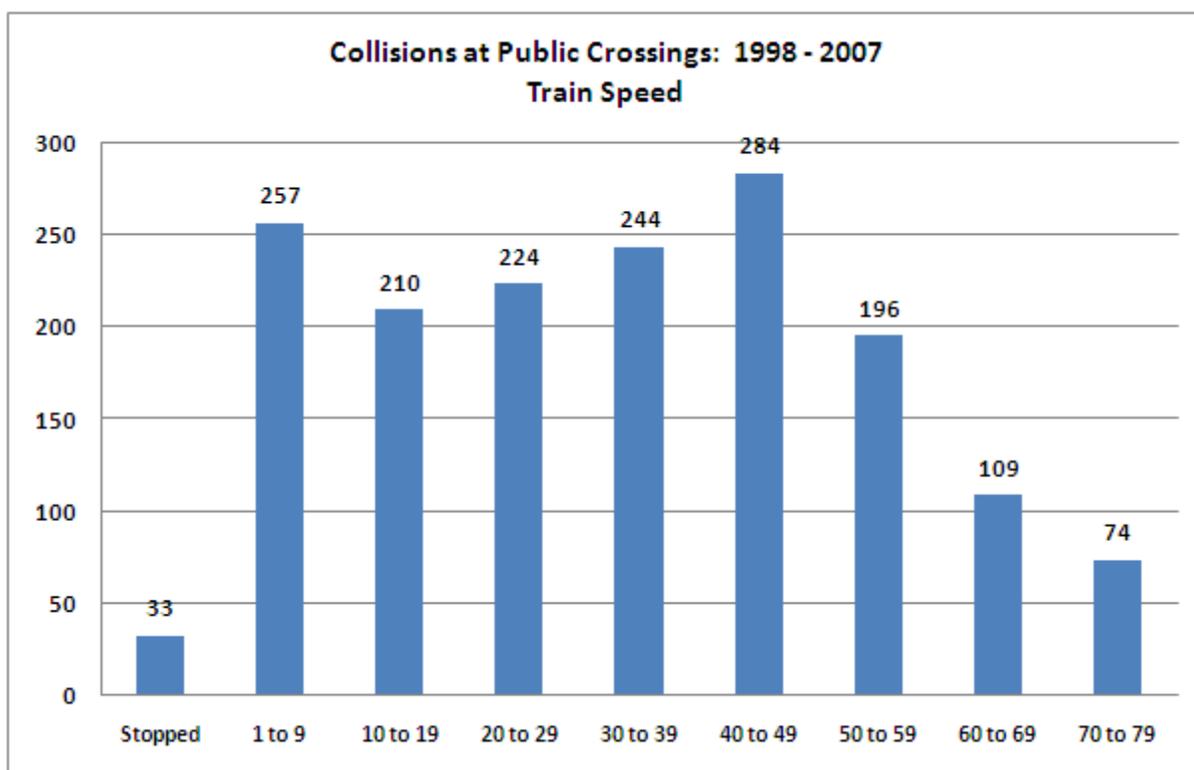
## Number of Daily Trains that Operate Over the Crossing Where Collision Occurred

Year	Zero or 1	10 to 19	2 to 9	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 and Over	Total
1998	9	31	50	23	21	8	5	13	18	178
1999	11	31	43	33	10	9	6	9	26	178
2000	13	33	49	25	17	9	13	16	23	198
2001	9	29	54	31	16	9	5	16	18	187
2002	12	23	39	23	16	8	3	14	17	155
2003	11	25	36	22	10	12	4	15	15	150
2004	5	34	37	21	11	10	3	19	19	159
2005	6	22	39	21	10	3	6	21	16	144
2006	7	22	44	16	14	8	8	21	12	152
2007	7	26	34	19	9	4	2	12	17	130
<b>Total</b>	<b>90</b>	<b>276</b>	<b>425</b>	<b>234</b>	<b>134</b>	<b>80</b>	<b>55</b>	<b>156</b>	<b>181</b>	<b>1,631</b>
<b>Percent</b>	<b>5.5%</b>	<b>16.9%</b>	<b>26.1%</b>	<b>14.3%</b>	<b>8.2%</b>	<b>4.9%</b>	<b>3.4%</b>	<b>9.6%</b>	<b>11.1%</b>	<b>100.0%</b>



## Speed of Train When Collision Occurred

Year	Stopped	1 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	Total
1998	2	26	10	32	28	38	24	7	11	178
1999	5	25	32	14	22	35	26	11	8	178
2000	4	34	25	25	23	36	26	15	10	198
2001	4	35	22	31	27	30	23	9	6	187
2002	3	27	20	20	22	20	20	15	8	155
2003	1	22	25	21	23	23	19	13	3	150
2004	5	19	22	21	33	28	14	12	5	159
2005	3	21	19	18	18	24	16	16	9	144
2006	5	25	17	25	24	21	19	8	8	152
2007	1	23	18	17	24	29	9	3	6	130
<b>Total</b>	<b>33</b>	<b>257</b>	<b>210</b>	<b>224</b>	<b>244</b>	<b>284</b>	<b>196</b>	<b>109</b>	<b>74</b>	<b>1,631</b>
<b>Percent</b>	<b>2.0%</b>	<b>15.8%</b>	<b>12.9%</b>	<b>13.7%</b>	<b>15.0%</b>	<b>17.4%</b>	<b>12.0%</b>	<b>6.7%</b>	<b>4.5%</b>	<b>100.0%</b>



## The “Average” Collision at a Public Highway-Rail Crossing

The preceding tables and graphs provide a large amount of information pertaining to collisions at public highway-rail grade crossing that occurred over the ten-year period of 1998 - 2007. In order to reduce the information down to a meaningful summary, below is description of the “average” collision that occurred in Illinois.

- The collision occurred when a freight train struck an automobile at a highway-rail crossing in a large metropolitan area. The highway vehicle, most likely an automobile, was driven by a male between the ages 20 and 29. The driver ignored the warning provided at the grade crossing and was moving over the crossing surface when struck by the train at a highway-rail crossing equipped with gates.
- The collision occurred in December between 3:00 p.m. and 5:59 p.m. on a clear day on a local road that is not part of the state maintained system of highways. The auto was traveling at a slow rate of speed (less than 10 miles per hour) on a roadway with annual averaged daily traffic volume of less than one thousand vehicles per day.
- The auto was struck by a freight train operating on a main track owned by a railroad where two to nine trains operate daily. The train was traveling between 40 and 49 miles per hour at the time of collision. The driver of the highway vehicle was injured in the collision.