

# Transportation Safety and System Security

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## 1.0 Introduction

Assuring safety and security are two primary directives for human existence. For a state and its communities, these are the overriding goals for all public agencies, and must be present to assure the sustainability of society. For transportation agencies, the safety and security of system users are the foundation of all investment and operating objectives. Quite simply, transportation engineering principles are driven by them, operational procedures are built around them, and travelers depend on them. IDOT has adopted safety and security policies to assure that safety principles are utilized in all elements of the agency's programs and operations. The IDOT mission statement points to the importance of safety:

"We provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity, and demonstrate respect for our environment."

Deaths and injuries resulting from traffic crashes have serious public health, quality of life, and economic consequences. A safer, more secure transportation system not only reduces the tragic human costs from the loss of lives or life altering injuries, it reduces significant economic losses. The economic costs of highway crashes include medical, insurance, emergency service, legal, lost wages, and personal property damage.

Federal requirements include four key emphasis areas for highway safety programs – engineering, enforcement, education, and emergency services (together known as the '4Es') – and have resulted in increased funding for these programs. Federal law requires each state to develop and implement a State Strategic Highway Safety Plan, which is a coordinated, integrated safety plan with a comprehensive framework for reducing highway fatalities and serious injuries. It also establishes statewide goals and objectives.

This report focuses on highway safety due to the fact that the overwhelming majority of incidents involve motor vehicle on roads.

## 2.0 Current Conditions

## 2.1 Key Accomplishments

Over the last decade, the State of Illinois has seen a continuing improvement in highway safety. This improvement is measured by a marked decrease in crash incidents on state roads, and more importantly, a significant decrease in the death rates due to vehicular use. Public outreach programs, traffic engineering solutions, and roadway asset management have increased awareness and reduced the vulnerability of the system users. Since 2002, roadway related crashes have decreased over 37 percent in Illinois. The success of programs related to impaired driving, at-grade rail crossings, large trucks, and speeding have shown dramatic impacts on the rate of incidents on the state roadway network. Highway safety is a critical element of transportation policy. Reducing highway-related fatalities and injuries improves the overall quality of life for all Illinois residents, workers, and visitors.

## 2.2 Crash Trends

## 2.2.1 Highway

In 2005, IDOT developed the Illinois Comprehensive Highway Safety Plan (CHSP), in response to the SAFETEA-LU requirements. In 2009, IDOT revised the CHSP to better address the interactions between the components of highway safety – drivers, vehicles, roadways, and the environment, creating the Illinois Strategic Highway Safety Plan (SHSP).

The original mission of the 2005 CHSP was to, "Reduce the number of traffic-related deaths from 1,454 in 2003 to 1,000 or fewer by 2008, a rate of 1.0 fatality per 100 million vehicle miles traveled (VMT)". In 2008, IDOT reached that goal and revised the mission for the newly developed SHSP to a new goal of "ZERO fatalities" on Illinois roadways in the long term.

In 2009, there were 911 fatalities in Illinois, a rate of 0.86 per hundred million miles of vehicle miles of travel, and a decline of nearly 27 percent from the 1,254 deaths in 2006.

Working with safety advocates, law enforcement officials, the medical community, and its transportation partners,

IDOT has researched and monitored how human behavior, evolving technology, improved communications, targeted enforcement, public education, highway design, and the weather affect highway safety. With this information, IDOT has implemented programs focused on driver education, traffic law enforcement, and improved highway design and operation.

Tables 2.1, 2.2, and 2.3 provide a summary of traffic crash statistics in Illinois between 2006 and 2010. When available, statistics from 2011 are included.

Table 2.1: Illinois Crash Statistics 2006-2010

	2006	2007	2008	2009	2010	2011	Percent Change	
Registered motor vehicles (millions)	10.08	10.21	10.15	10.0	10.0	N/A	-0.80% *	
Licensed drivers (millions)	8.62	8.67	8.73	8.77	8.80	N/A	+2.15% *	
Vehicle Miles Traveled (millions)	106.81	107.40	105.64	105.74	105.74	103.37	-3.22%	
Crashes (thousands)	408.67	422.78	408.26	292.11	289.26	N/A	-29.22% *	
Injuries(thousands)	106.92	103.16	94.02	89.09	88.94	N/A	-16.82%*	
Total Fatalities	1,254	1,248	1,043	911	927	918	-26.79%	
Fatality Rate (hundred million VMT)	1.17	1.16	0.99	0.86	0.88	0.89	-24.10%	

Sources: IDOT, National Highway Traffic Safety Administration (NHTSA), Illinois Secretary of State

Table 2.2: Fatality Trends, 2006-2011

					Fatalities with the		Unrestrained**			
			Total A			Highest BAC in		r Vehicle		Total
			Related F	atalities	the Crash	at .08+*	Fatalities		Total	Speeding
Crash	Total	VMT	Total	Total	Total	Total	Total	Total	Motorcyclist	Related
Year	Fatalities	(Millions)	Number	Percent	Number	Percent	Number	Percent	Fatalities	Fatalities
2006	1,254	106,813	600	48	446	36	494	39	132	556
2007	1,248	107,403	566	45	439	35	448	36	157	523
2008	1,043	105,636	473	45	356	34	369	35	135	386
2009	911	105,735	418	46	313	34	295	32	130	325
2010	927	105,742	405	44	298	32	298	32	131	437
2011	918	103,370	405	44	405	44	167	18	N/A	N/A

Source: IDOT and National Highway Traffic Safety Administration (NHTSA)

\* Based on the BAC of All Involved Drivers and Motorcycle Riders Only

Table 2.3: Trends in Fatalities 2006-2011

Fatality Counts	2006	2007	2008	2009	2010	2011
Total Fatalities	1,254	1248	1043	911	927	918
Alcohol-Related	446	439	356	313	298	405
Speeding Involved	556	523	386	325	437	N/A
Pedestrians	137	172	135	111	115	N/A
Pedal cyclists	24	18	27	20	24	N/A
Large Truck Involved	139	111	115	64	96	N/A
Light Truck/Van Occupants	255	N/A	N/A	N/A	N/A	N/A
Motorcyclist	132	157	135	116	131	N/A

Source: IDOT and National Highway Traffic Safety Administration (NHTSA)

Total vehicle miles of travel (VMT) on Illinois roadways have decreased by 3.2 percent since 2006: Prior to 2008, travel on Illinois roadways was increasing every year. Between 2006 and 2007, the total vehicle miles traveled on the roadway system had increased from 106.92 million VMT in 2006 to 107.40 million VMT in 2007. In 2008, there was a decline to 105.64 million VMT. The trends in 2009 and 2010 have shown slight increases to a VMT of 105.74 million. The VMT then dropped to 103.37 in 2011.

The total number of crashes on the roadway system has declined by 29.2 percent: While the VMT had been increasing prior to 2008, the total number of crashes, crash-related injuries, and fatalities on Illinois roadways have steadily declined during the five-year period. The total number of crashes

<sup>\*</sup>Percent change from 2006 to 2010 when 2011 data not available

<sup>\*\*</sup> For statistical analysis purposes, unknown restraint use was proportionally distributed across known restraint use

has shown a steady decrease from 408,670 crashes in year 2006 to 289,260 crashes in 2010. During this time, there was a change in reporting of crashes. In 2009, property damage only (PDO) crashes were reclassified to be damage in excess of \$1,500 (if both drivers are insured). This change in reporting reflected a significant drop in what was considered a crash. The number of reported crashes fell from 408,258 in 2008 to 292,106 under the new crash classification.

Injuries resulting from crashes have decreased by 16.8 percent: Crash injuries have shown a substantial decrease from 106,918 in 2006 to 88,937 in 2010.

Crash-related fatalities have declined by 26.8 percent: Fatalities from crashes on Illinois highways also have shown a steady decline from 1,254 fatalities in 2006 to 918 fatalities in 2011.

The fatality rate on Illinois roadways has decreased by 24.1 percent: Highway safety has improved steadily as indicated by the significant decline in roadway fatality rate (per 100 million VMT) from 1.17 in 2006 to 0.88 in 2010. While the fatalities continue to decline, the fatality rate showed a slight increase in 2011, due to a decrease in VMT. As shown in Table 2.1, the fatality rates in Illinois has steadily declined between 2006 and 2010.

In addition, the fatality rate on Illinois' roadway system has been significantly lower than the average highway fatality rate across the United States. As shown in Table 2.4, the 2010 Illinois highway fatality rate of 0.88 fatalities per 100 million VMT and 7.22 fatalities per 100,000 population is significantly lower than the corresponding average US highway fatality rates. Figure 2.1 compares the annual VMT to the fatality rate in Illinois from 2006 to 2011.

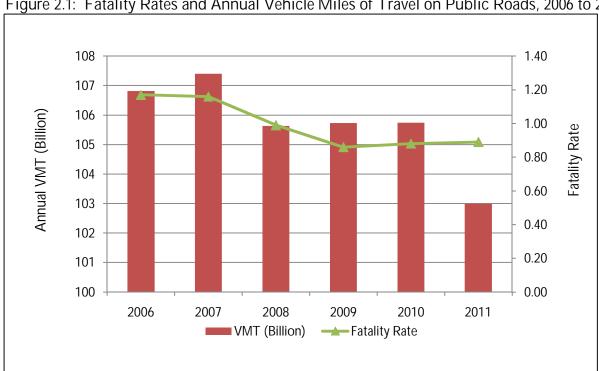


Figure 2.1: Fatality Rates and Annual Vehicle Miles of Travel on Public Roads, 2006 to 2011

Table 2.4: 2010 Fatality Rates for Illinois, US, and Best State

2010	Fatalities	Fatality Rate per 100M VMT	Fatality Rate per 100K Population
Illinois	927	0.88	7.22
US	32,885	1.11	10.63
Best State*		0.58	3.97

Source: IDOT and National Highway Traffic Safety Administration

\*Best Rates: Lowest Rates Attained Across All States

Alcohol-related fatalities have shown a decline of 33.2 percent: The influence of alcohol remains a big factor in many traffic crashes. The number of alcohol related fatalities has steadily decreased between 2006 and 2010. As shown in Table 2.2, 44 percent of the total fatalities on Illinois roadway system were alcohol related in 2010. The alcohol-related fatality rate per 100 million VMT in Illinois (0.28) is 6 percent lower than the average US fatality rate (0.34). As illustrated in Table 2.5, the trend for Illinois fatality rate is very similar to the national trend for alcohol related fatalities.

Table 2.5: 2010 Fatalities in Alcohol Related Crashes

			Rate per	Highest BAC in C	Crash was .08+**
2010	Number	Percent	100M VMT	Number	Percent
Illinois	739	44%	0.38	334	36%
US	24,924	41%	045	11,560	39%
Best State*	-	23%	0.21	-	18%

Source: IDOT and National Highway Traffic Safety Administration

Speeding-related fatalities have declined by 21.4 percent: Speeding remains a concern on Illinois roadways. After consistent reduction in speeding involved crashes, 2010 registered an increase in speeding-related fatalities.

<u>Unrestrained passenger vehicle fatalities have decreased by 21.0 percent:</u> Safety belt usage in Illinois has increased substantially over the last six years. As shown in Table 2.2, the fatalities resulting from non-usage of safety belts have

Speeding drivers are the primary cause of fatalities, followed by drivers who drive while drunk. Alcoholrelated fatalities have declined since 2006; speeding related fatalities were declining but rose in 2010.

declined significantly between 2006 and 2011. Table 2.6 presents the overall observed safety belt use and the belt use among the fatally injured vehicle occupants for 2010. As illustrated in Table 2.6, the overall observed seat belt use rate in Illinois (93 percent) is relatively higher than the national rate (85 percent). Since July 3, 2003, Illinois has had a primary safety belt law.

Table 2.6: Belt-Use Rates, Passenger Vehicle

	Occupant Restraint Use,	Occupant Restraint Use,
2010	Observed (Percent)**	Fatality (Percent)
Illinois	93%	63%
USA	85%	59%
Best State*	98%	100%

\*State with Highest Percent. Fatal Crash and Observed Percents can be different states.

<sup>\*</sup>State (or States) With Lowest Percents: Lowest Percents Could Be in Different States

<sup>\*\*</sup>Based on the BAC of All Involved Drivers and Motorcycle Riders (Operators) Only

<sup>\*\*</sup>Source: IDOT and National Highway Traffic Safety Administration

Motorcycle crash fatalities have increased by 0.8 percent between 2006 and 2010: As shown in Tables 2.2 and 2.3, despite an increase in motorcycle crash fatalities in 2007 and 2010, the motorcycle crash fatalities have been variable, from 135 fatalities in 2006 to 131 in 2010. Illinois does not have a motorcycle helmet law. Although several attempts have been made to pass a mandatory helmet law in the years since Illinois' law was repealed, none has been successful.

<u>Pedal cyclist (bicycle) crash fatalities have been variable between 2006 and 2010, but overall have not changed:</u> Bicycle crash fatalities have also shown a variable pattern of growth, but overall have remained unchanged from 2006.

<u>Pedestrian crash fatalities have shown a decline of 16.1 percent:</u> Pedestrian fatalities have shown an overall decrease from 137 fatalities in 2006 to 115 in 2010. There was an increase in pedestrian fatalities in 2007, but these have steadily been on the decline through 2010.

## 2.2.2 Aviation Safety

IDOT's Division of Aeronautics certifies commercial airports, restricted landing areas, heliports and balloon ports, and maintains a continuing inspection program to ensure adherence to minimum physical standards and safety criteria at all Illinois airports. The safety oversight mission is split between two components: aviation support services and the registration of pilots and aircraft. In addition, the Division conducts aviation safety seminars and supports activities of the Civil Air Patrol (CAP).

Specific actions the bureau performance indicators include:

- Inspecting all aviation facilities in Illinois
- Issuing aeronautical facility certifications
- Preparing and conducting statewide aviation seminars
- Supporting the Illinois wing of the Civil Air Patrol

In addition, the Division addresses the aviation support service mission by publishing an Illinois aviation newsletter, Illinois aeronautical charts, and other notification and aviation support materials.

## 2.2.3 Rail Safety

The Illinois Commerce Commission (ICC) works with the Federal Railroad Administration to ensure railroad safety. The Illinois Commercial Transportation Law (625 ILCS 5/Chapter 18C) establishes general safety requirements for track, facilities and equipment belonging to rail carriers within Illinois, and gives the ICC jurisdiction to administer and enforce those requirements.

Functions of the ICC include:

- Manage crossing safety projects paid, in part, by the Grade Crossing Protection Fund.
- Engineering oversight of all safety improvements and/or modifications to the State's public highway/rail crossings.
- Inspection of all railroad tracks in the state for defects that could cause train derailments.
- Oversight of all railroad hazardous material shipments through the State, including radioactive waste and spent nuclear fuel.
- Engineering oversight of all improvements/modifications to highway traffic signal systems interconnected with railroad warning devices.

- Implementation of Illinois' Operation Lifesaver public education campaign.
- Investigation of highway/rail collisions and other rail related incidents that occur in Illinois.

The ICC has the statutory responsibility to improve safety at public highway-rail crossings in the State. Currently, there are over 8,400 highway-rail grade crossings in Illinois: more than 800 are on state roads and more than 7,600 are on local roads. More than 2,700 bridges in the state are highway-rail grade-separated crossings. The more than 4,730 grade crossings on private property and the more than 160 private bridge structures are not under the jurisdiction of the state. There are nearly 400 rail-pedestrian grade crossings and 85 rail-pedestrian grade-separated crossings (bridges) in Illinois. Nationally, Illinois is second only to Texas in the total number of highway-rail crossings.

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. On state roads, IDOT pays the majority of the costs through the State Road Fund. For local roads, the Illinois General Assembly created the Grade Crossing Protection Fund (GCPF) to bear the majority of the costs of improvements.

The GCPF, appropriated to IDOT 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. Funding from the GCPF cannot be used for safety improvements at highway-rail crossings located on the state road or highway system, which must be paid for by IDOT. Each month, \$2.25 million in state motor fuel tax receipts is transferred from the Motor Fuel Tax (MFT) fund to the Grade Crossing Protection Fund. This amount provides the GCPF with \$27 million annually. The GCPF is typically used to help pay for the following types of projects:

<u>Warning device upgrades:</u> 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 only with automatic warning devices.

<u>New and reconstructed grade separations:</u> Construction, reconstruction, or repair of bridges carrying a local road or street over railroad tracks (overpass); construction, reconstruction, or repair of bridges carrying railroad tracks over a local road or street (subway).

<u>Vertical clearance improvements at grade separations</u>: Lowering the existing highway pavement surface under a railroad bridge to improve vertical clearance for motor vehicles.

<u>Pedestrian grade separations:</u> Construction of a bridge to carry pedestrian/bicycle traffic over or under railroad tracks.

<u>Interconnects</u>: 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.

<u>Highway approaches:</u> Improvements to the portion of the public roadway directly adjacent to the crossing surface.

<u>Connecting roads:</u> Construction of a roadway between a closed crossing and an adjacent open, improved crossing.

<u>Remote monitoring devices:</u> Sensor devices in the circuitry of grade crossing warning devices which immediately alert the railroad to any failures in warning device operations.

<u>Low cost improvements at un-signalized crossings:</u> Installation of new, more reflective crossbuck warning signs and YIELD signs at crossings that do not require automatic warning devices.

<u>Crossing closures:</u> Provide an incentive payment to local agencies for the voluntarily closure of public highway-rail grade crossings.

#### 2.2.4 Waterway Safety

Illinois lies within the 8<sup>th</sup> and 9<sup>th</sup> Districts of the US Coast Guard. These districts have administrative responsibilities for large multi-state regions that include Lake Michigan and the Illinois, Mississippi and Ohio Rivers. The Coast Guard's five main mission areas include maritime security, maritime safety, natural resources protection, maritime mobility, and national.<sup>1</sup>

A fundamental responsibility of the Coast Guard is to safeguard the lives and safety of its citizens. In partnership with other federal agencies, state, local, and tribal governments, marine industries, and individual mariners, the Coast Guard improves safety on the inland waterway system through complementary programs of mishap prevention, search and rescue, and accident investigation.

The Coast Guard's activities include the development of standards and regulations, various types of plan review and compliance inspections, and a variety of safety programs designed to protect mariners.

The Coast Guard mission includes:

- Enforcing safe and environmentally sound operation of U.S. flagged vessels throughout the world.
- Asserting authority over foreign vessels operating in U.S. port state controlled waters to enforce safe, secure, and environmentally sound operations in U.S. waters.
- Issuing licenses and documents to qualified mariners, and promote competency through a combination of training courses, requisite experience, and examinations.
- Conducting inspections of U.S. and foreign vessels, marine facilities, and review plans for vessel construction, alteration, equipment, and salvage.
- Developing and monitoring vessel construction and performance.

## 2.2.5 Public Transit Safety

Illinois has 64 transit districts in total. These districts manage the safety of systems that range from the very large, like the Chicago Transit Authority, to a very small one-vehicle district in a rural downstate county. Equally disparate are the types of transit vehicles used to address needs, including locomotives, light rail passenger cars, heavy rail passenger cars, commuter transit passenger cars, large city buses, vans and specialized paratransit vehicles. To address these various

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<sup>&</sup>lt;sup>1</sup> US Coast Guard, Missions - Maritime Safety. <u>www.uscg.mil/top/missions/MaritimeSafety.asp</u> . Accessed September 5, 2012.

types of equipment and passenger needs, each transit district develops a safety regiment to assure passenger and employee security and safety as well as vehicle operational safety. The rules and standards governing these safety programs are prescribed by federal, state and local government laws.

Under MAP-21, the US Department of Transportation (USDOT) will partner with the states to assure improved safety on transit vehicles. Under the new law, the Federal Transit Administration (FTA) will certify IDOT as a State Safety Oversight (SSO) agency and will establish requirement and standard that must be met to protect transit users. The guidelines for SSO will cover rail transit systems and adopt new safety provisions for bus-only transit operators. The FTA will consult with the transit providers, states and the USDOT Transit Rail Advisory Committee for Safety before implementing the new law.

As a fundamental premise, transit passenger and employee safety are the core concerns of transit districts. In Illinois, public transit authorities can be held liable for breaches in good safety practices. To address these potential concerns, districts implement proactive safety monitoring systems and training programs for staff and key safety professionals. The intent is to establish a "safety first" mentality among employees who either repair or operate transit vehicles.

## 2.2.5.1 Safety Training

Vehicle operation is a key component of the transit system service, and the safety of those operations is a primary concern. Liability claims due to vehicle accidents are the primary source of claims against transit districts. To address this issue, virtually all transit districts require vehicle operators to pass industry standard training programs to ensure that operating staff has met core levels of competency.

Additional training is provided to workers in repair shops. Through specific safety and operating plans, transit districts work very hard to ensure safe environments in fleet maintenance shops and at public facilities, such as bus stops, rail platforms, and transit centers. This work includes recognition of potentially harmful chemicals, equipment and repair procedures in operational plans for maintenance facilities.

#### 2.2.5.2 Safety Monitoring

In northeast Illinois, the Regional Transportation Authority (RTA) utilizes FTA's database for tracking the performance of its transit systems. The system, known as the National Transit Database (NTD), keeps records on crashes, casualties and crimes reported by all transit operators to the FTA.

In the RTA region, the number of combined major safety and security incidents has been declining. In 2008, the initial year of monitoring, there were 0.082 incidents per 100,000 trips taken, and that rate has declined in each of the two subsequent years. In 2010, the rate of major incidents was only 0.076 per 100,000 trips taken.<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Regional Transportation Authority, *Regional Performance Measures, 2010 Regional Peer Report Card.*<a href="https://www.rtachicago.com/images/stories/About\_the\_RTA/2010%20Regional%20Peer%20Report%20-%20FINAL.pdf">https://www.rtachicago.com/images/stories/About\_the\_RTA/2010%20Regional%20Peer%20Report%20-%20FINAL.pdf</a>. Accessed June 18, 2012.

# 3.0 Implementation Strategies and Programs

Opportunities to improve safety in IDOT's multimodal system can be broken into two basic components: behavioral and engineered opportunities. Behavioral opportunities to improve safety recognize how people act, analyze what factors lead to these behaviors, and apply countermeasures to improve or change the unwanted behavior. Countermeasures, or resolution to the behavioral side of safety, include training, education, and public outreach. The engineered side of safety identifies problem locations in the system by collecting data to determine where issues in the system are prevalent. Analysis of the data provides recommended design changes or best practices to improve conditions or compensate for deficiencies in the roadway network.

## 3.1 Safety through Partnering

IDOT takes a lead in assuring that system safety is accomplished in cooperation and coordination with numerous government and not-for-profit agencies. Using this approach, IDOT has created a partnership that includes the Illinois State Police and local law enforcement, the Secretary of State, the Illinois Department of Public Health, statewide and regional child passenger safety coordinators, Mothers Against Drunk Driving (MADD), Students Against Destructive Decisions (SADD), A Brotherhood Aimed Toward Education (A.B.A.T.E.), universities and the media. The success of the Illinois safety partnership is reflected in the national "bests" achieved in several key performance categories.

This commitment to partnering led to a significant multi-modal initiative to evaluate 302 railroad-highway grade crossings along the Chicago-St. Louis high-speed rail passenger corridor. Utilizing expertise from the IDOT's highway and rail engineering staff, the Illinois Commerce Commission and the Union Pacific Railroad, this ad hoc group was able to define specific safety design solutions for each grade crossing. The analysis also provided the Division of Highways with information concerning collateral impacts on local highways and roads resulting from the recommended changes. Working together, the highway and railroad programs are now better prepared to implement the full build out of 110-mph rail service in the corridor.

Other IDOT accomplishments in 2011 include:

- The third consecutive year in which motor vehicle fatalities totaled fewer than 1,000.
- Safety belt usage rate rose to 92.9 percent.
- Significant decrease in alcohol-related fatalities; Illinois has been designated as a low fatality rate state by the USDOT for two consecutive years and on target for the designation for 2012.
- Improved commercial vehicle data reporting; Illinois is one of few states considered a "green state" which reflects the efficiency of vehicle inspections, compliance reviews and safety audits.
- Illinois fatal crashes involving large trucks fell from 178 in 1999 to 85 in 2009 a decrease of 52.3%. Illinois' rate of decrease is the second best in the country when looking at data spanning 1999 through 2009.
- Enhancements to the External Safety Data Mart offered improved crash data availability and accessibility to numerous data users by providing information via online access.

- IDOT developed online report and mapping capabilities for "dooring" incidents to use in tracking the occurrence of bicyclists colliding with an opening or open door of a parked motor vehicle (data are available for 2010 to date).
- A crash outcome data evaluation system (CODES) project was established in Illinois (data linkage-crash-hospital-EMS-trauma registry).

It is essential that Illinois continue this team approach and assure that all key stakeholders have a role in developing long-term solutions that can be instituted and sustained. To this end, IDOT held its second statewide motorcycle conference in December 2011 that included most stakeholders and interest groups from the motorcycling community.

## 3.2 Comprehensive Highway Safety Program

## 3.2.1 Highway Safety Plans

In 2009, IDOT developed the Illinois Strategic Highway Safety Plan (SHSP). The goal of the SHSP is ZERO Fatalities on our state roads and highways in the long term. The SHSP is a statewide, coordinated, integrated, safety plan that focuses on the four Es of highway safety identified in SAFETEA-LU – engineering, enforcement, education and emergency services – and integrates them into the ten federal emphasis areas.

For each emphasis area, the SHSP reviews implemented tactics, lays out the primary challenges, and offers a set of proposed new strategies. The plan brings together safety organizations and state and local agencies to build upon existing resources, identify and implement performance driven strategies, and deliver a more focused and coordinated safety effort.

The ten targeted areas of emphasis are:

- Alcohol and other impaired driving
- Driver behavior and awareness
- Highway-railroad grade crossings
- Information systems for decision making
- Intersections
- Large trucks
- Roadway departure
- Safety belts/occupant protection
- Vulnerable users (pedestrians, bicyclists, and motorcyclists)
- Work zones

Through integrating the work of stakeholders, the SHSP defines a system, organization, and processes for managing the attributes of the road, driver, and vehicle to achieve the highest level of highway safety. To reduce the number of fatalities and life-altering injuries in Illinois, the stakeholders must commit resources (manpower, staff, time, and dollars) to develop, implement and maintain the SHSP.

The SHSP is re-evaluated and updated on a regular basis to reflect advances in knowledge, progress toward accomplishing individual emphasis area objectives, and to address emerging safety concerns within Illinois. Therefore, the SHSP is the umbrella under which all state, district, and local agency

safety programs and plans are developed. The following sections present the goals and strategies developed by IDOT in coordination with its safety partners for targeted areas of emphasis identified in the SHSP.

## 3.2.2 Public Involvement in Safety Planning

IDOT is engaged in a broad range of public involvement and outreach activities to inform the public and elicit input regarding the various safety programs and issues. To keep the public informed, IDOT issues several press releases every year to keep the public updated about various safety initiatives, campaigns, and mobilization programs. The safety information is also displayed on IDOT's safety website.<sup>3</sup> This website includes information regarding IDOT's Highway Safety Plans and Programs such as the Illinois Comprehensive Safety Plan, Highway Safety Plan, DTS's Evaluation of Highway Safety Program, Highway Safety Improvement Plan, and Safe Routes to School initiatives. IDOT's website also provides information regarding IDOT's safety partners, Illinois crash statistics and data analysis tools, work zone safety, child passenger safety initiatives, impaired driving program initiatives, Motorcycle Safety motorcycle safety and Training, and various safety publications and reports.

In addition to the aforementioned public outreach activities, IDOT also elicits input from the public and various stakeholders on highway safety planning. As part of the FY2007 Highway Safety Plan process, IDOT's Division of Traffic Safety (DTS) held eight public hearings on highway safety planning in Batavia, Carterville, Chicago, Fairview Heights, Loves Park, Orland Park, Pekin, and Springfield. The goal of these hearings was to receive information from grantees, law enforcement agencies and the public on highway safety issues, problem areas, and proposed countermeasures. These public hearings were held in April and May 2006. Local law enforcement leaders, grantee appointed managers, emergency medical services (EMS), fire departments, religious leaders, community leaders, legislators, and other traffic safety partners were invited to express their concerns about traffic safety in their communities. DTS also elicited input from over 200 people representing local police departments and grassroots organizations concerned with highway safety, and families of victims killed on Illinois roadways.

## 3.3 Alcohol and Impaired Driving

This program is designed to reduce the alcohol-related fatality rate (deaths per 100 million vehicle miles traveled) and to increase the awareness of the alcohol-related traffic safety slogan "You Drink & Drive. You Lose." Table 3.1 displays the goals for this program established by IDOT through the end of 2013.

Table 3.1: Impaired Driving Program Goals

		Target Year				
Goal	2008	2009	2010	2011*	2012*	2013*
Alcohol-related Fatalities	356	319	306	275	244	213
Reduction in the Number of Drivers 20 years or Younger involved in Fatal Crashes	149	121	117	92	66	41

Source: AER 2011: Highway Safety Program Annual Evaluation Report (\*projected figures)

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<sup>&</sup>lt;sup>3</sup> <u>www.dot.state.il.us/safety</u>

The strategies used by IDOT to achieve the impaired driving program goals include strict enforcement, public information and education, and mobilization programs as listed below.

- Continued to fund two Traffic Safety Resource Prosecutors who conducted training for prosecutors, law enforcement, and other traffic safety partners throughout the state.
- Conducted High-Visibility Enforcement Campaigns at numerous times throughout the fiscal year.
- Continued to fund the Impaired Driving Program Coordinator.
- Secured paid media and earned media during the national and selected impaired driving mobilizations and campaigns.
- Recognized accomplishments of DTS's Traffic Safety Partners (i.e. LEL Luncheons, TOP Cops, Impaired Driving Incentive Program).
- Continued to encourage law enforcement agencies throughout the state to participate in holiday impaired driving crackdowns as well as sustained year-long enforcement efforts.
- Judicial Training courses through the Administrative Office of Illinois Courts (AOIC), UIS-ILLAPS and DTS.
- Promoted DUI Courts with the criminal justice system, including judges, probation departments and state's attorneys.
- Continued to provide assistance with Illinois' effort to implement effectively new Illinois law requiring Ignition Interlocks for all DUI offenders.
- Continued to promote the DUI courts with judges.

## 3.4 Occupant Protection

The Occupant Protection Program is designed to increase the awareness and use of occupant seat restraint systems. The focus is on increasing statewide usage of safety belts and the correct installation of child safety seats. The intent is to reduce unbelted occupant fatalities and serious injuries. IDOT's program goals through the end of 2007 are shown in Table 3.2.

Table 3.2: Occupant Protection Program Goals

		Target Year					
Goal	2008	2009	2010	2011	2012*	2013*	
Observed Safety Belt Use; Front Seat	90.5	91.7	92.6	92.9	94.3	95.6	
Total Unrestrained Fatalities; All Seats	338	264	255*	215*	175	135	

Source: AER 2011: Highway Safety Program Annual Evaluation Report (\*projected figures)

The strategies to achieve the occupant protection program goals include the enforcement, driver education, public awareness, and mobilization programs as shown below.

- Continue to fund an Occupant Protection Coordinator to oversee all of DTS's occupant protection programs.
- Develop paid and earned media plans for the CIOT mobilizations.
- Support occupant restraint and child passenger safety educational efforts (traffic safety partners, statewide and regional child passenger safety coordinators).
- Utilize network of child passenger safety advocates.
- Continue to support state and national child passenger safety observances.
- Implement recommendations from the Occupant Protection Assessment.

• Conduct earned media and outreach activities for Child Passenger Safety Week

## 3.5 Motorcycle/Pedal Cycle/Pedestrian Program

This program is designed to reduce the percentage of crashes involving motorcycles and pedestrians that result in fatalities. Table 3.3 displays the goals for this program established by IDOT through the end of 2013.

Table 3.3: Motorcycle/Pedestrian Program Goals

	Target Year						
Goal	2008	2009	2010	2011	2012	2013	
Motorcycle Fatalities	133	130	131	124	119	114	
Motorcyclist Fatalities, No Helmet	96	91	107	94	90	87	
Pedestrian Fatalities	135	111	115	108	100	92	

Source: AER 2011: Highway Safety Program Annual Evaluation Report (\*projected figures)

The strategies used by IDOT to achieve these program goals include the following:

- Continue to implement recommendations from the Motorcycle Safety Program Assessment.
- Increase training opportunities for beginning motorcycle riders in Illinois through the Division of Traffic Safety's Cycle Rider Training Program.
- Continue to implement a public information and education campaign for motorcycle awareness.
- Conduct a paid media campaign for the motorcycle riding season.

## 3.6 Traffic Records Program

This program is designed to facilitate the smooth flow of crash-related data among agencies using the data. The goals of the Traffic Records Program are to:

- Provide better data that is essential to reducing the human and economic cost of motor vehicle crashes.
- Improve agency-specific data systems through identifying an information gathering process that includes interviews, technical group sessions and systems analysis.

IDOT's strategies for achieving these program goals include the following:

- Develop a strategic plan based on the Illinois Traffic Records Assessment Team.
- Continue the implementation of the Mobile Capture and Reporting (MCR) System with Illinois law enforcement agencies.

#### 3.7 Police Traffic Services

In 2011, Division of Traffic Safety (DTS) combined three local law enforcement projects into a single program entitled "Sustained Traffic Enforcement Program", or STEP. STEP provided a sustained yearlong emphasis on some key enforcement items including impaired driving and nighttime safety belt usages. This program is designed to facilitate the smooth flow of crash-related data among agencies using the data.

The goal of the Police Traffic Services is to:

• Reduce the statewide speed-related fatalities from the 2004 level of 591 to 152 by December 31, 2013. Table 3.4 lists the goals by year.

Table 3.4: Police Traffic Services Program Goals

	Target Year							
Goal	2008	2009	2010*	2011*	2012*	2013*		
Speed-related Fatalities	386	325	305	254	203	152		

Source: AER 2011: Highway Safety Program Annual Evaluation Report (\*projected figures)

IDOT's strategies for achieving these program goals include the following:

- Provide funding to conduct sustained and periodic enforcement/high-intensity publicity/awareness campaigns.
- Occupant Restraint Enforcement Project (OREP), Sustained Traffic Enforcement Program (STEP) and Local Alcohol Program (LAP).
- Continue with enforcement activities during all state and national campaigns.
- Continue to fund eight Law Enforcement Liaisons.
- Implement nighttime belt enforcement and impaired driving crackdowns focusing both enforcement and messaging on the deadly 11pm-6am timeframe.
- Provide specialized training to local law enforcement officers through the Illinois Law Enforcement Training and Standards Board (ILETSB) 16 mobile training units.
- Conduct high-visibility enforcement campaigns.

## 3.8 Work Zone Safety

In addition to the aforementioned programs, IDOT is also focused on reducing fatal and serious injury crashes in work zones. To facilitate this objective, IDOT's Work Zone Safety Committee was created by legislation in response to high-profile fatal crashes. In coordination with its safety partners such as the Illinois State Police (ISP) and the Illinois State Toll Highway Authority (ISTHA), IDOT has implemented several strategies to improve work zone safety.

Recently implemented strategies include the following:

- Revised legislation to clarify the definition of work zone speeding.
- Increased minimum fine for speeding to \$375 for the first offense and \$1000 for the second offense.
- Legislatively enabled photo speed enforcement in work zones.
- Increased the use of police authority in work zones.
- Revised highway standards to provide more consistent work zones on high-speed facilities.
- Enhanced use of stationary and portable changeable message signs in and near work zones.
- Implemented ISP hire back program and increased its funding.
- Implemented "Trooper in a Truck" program.
- Implemented "Scott's Law" regarding proper action in response to emergency vehicles in the roadway and added "Hit a Worker" signs to construction projects.
- Provided work zone training and information for public agencies and industry personnel.
- Redirected focus of the Work Zone Safety Committee.

- Initiated a plan for the Work Zone Public Relations Committee.
- Continued the Illinois Road and Transportation Builders Association (IRTBA) Safety Committee.
- Conducted work zone reviews with IDOT central office.
- FHWA staff continued implementation of IDOT's Comprehensive Highway Safety Plan initiatives.

## 3.9 Highway Safety Improvement Program

The Highway Safety Improvement Program (HSIP) is reserved for highway improvements at locations where known "substantive safety" problems exist as indicated by location-specific data on fatalities and serious injuries and where the specific project action can, with confidence, produce a measurable and significant reduction in such fatalities or serious injuries. To achieve the maximum benefit, the program focuses on cost-effective use of the funds allocated for safety improvements. Priority is given to projects/locations with a higher total number of fatalities and serious injuries. The program covers all roadways under the jurisdiction of IDOT as well as those owned and maintained by local governments. It also includes at-grade highway-railway crossings.

Figure 3.1 illustrates the funding allocation process for the federal HSIP program. The funds are apportioned to the state of Illinois through two programs: the Highway-Railway Crossing Program and the High-Risk Rural Roads Program, with set-aside funding provisions. The HSIP funds remaining after the set-asides are distributed between state and local roads. These programs and their funding provisions are described in the sections that follow.

To enhance this process, the Bureau of Safety engineering is working on a statewide safety performance rating system. This will enable the IDOT to develop programs with safety information on each segment of the state highway system. Similar to the Condition Rating Survey for pavements, there will be data collected that can be incorporated into system wide assessment, GIS analyses and then capital investment programs produced by the IDOT. With no performance history, the initial emphasis will be to bring higher risk highway segments into relative conformity with statewide averages. Once that objective is accomplished, improved safety performance for the entire system will become the priority. Over time, the IDOT expects this new analytical tool to provide marked improvement in the safety design quality of the highway system as a whole.

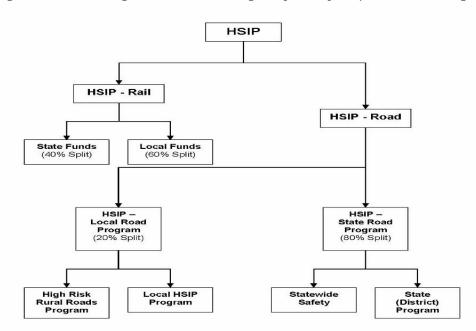


Figure 3.1: Funding Allocation for Highway Safety Improvement Program

## 3.9.1 Highway-Railway Crossing Program

The Highway-Railway Crossing Program is aimed at reducing the number of fatalities and serious injuries at public highway-railway crossings through the elimination of hazards and/or installation/upgrade of protective devices at crossings. The State of Illinois is required to conduct and systematically maintain an inventory of all highway-railway crossings that may require separation, relocation, or protective devices, and to establish and implement a schedule of projects for this purpose. The funds allocated to this program are distributed into components for the state and local programs. The state HSIP-Rail program funds are administered by IDOT's Bureau of Design and Environment (BDE) in conjunction with IDOT Districts and the Bureau of Safety Engineering (BSE). The Bureau of Local Roads and Streets (BLRS) administer local HSIP-Rail program funds in conjunction with the BSE.

IDOT uses the following strategies to achieve the program goals:

- Continue to support Operation Lifesaver efforts to educate motorists on the hazards of highway-railroad grade crossings and the motorists' responsibility to comply with existing rail-crossing laws.
- Continue enforcement activities through Illinois Operation Lifesaver and Public Education and Enforcement Study (PEERS) programs.
- Design and install state-of-the-art, four-quadrant gate systems equipped with trapped vehicle detection.
- Improve highway-railroad warning systems interconnected with highway traffic signal systems.
- Install electronic monitoring devices at grade crossings equipped with active warning devices, enabling immediate notification of signal malfunctions.
- Implement low-cost safety improvements at unsignalized grade crossings.

- Enforce compliance of state and federal signing, marking, signal, gate, and other warning device installation standards.
- Comprehensive review by Illinois Commerce Commission (ICC) to pursue closure of nonessential highway-railroad grade crossings.
- Perform comprehensive engineering grade-crossing reviews, including corridor-based studies.
- Continue implementation of the statewide project to upgrade all crossings marked with only
  passive crossbuck warning signs with reflectorized striping and a corresponding yield or stop
  sign.
- Distribute drivers' education packets to high schools and school bus companies.

#### 3.9.2 High-Risk Rural Roads Program

The High-Risk Rural Roads Program (HRRR) focuses on construction and operational safety improvements on high-risk rural roads. High-risk rural roads are defined as:

- Roads functionally classified as a rural major or minor collector.
- Rural roads with a fatal or serious Class A injury crash rate above the statewide average for the respective functional class of roadway.
- Roads likely to experience an increase in traffic volume that leads to a crash rate in excess of the statewide average rate.

The funds allocated to this program are administered by the BLRS in conjunction with the BSE.

#### 3.9.3 HSIP Road Program

The focus of this program is on project-related engineering, construction and operational safety improvements on state and local roads. The funds allocated to this program are split between HSIP-State Road Program and the HSIP-Local Road Program with a major portion (80 percent) of the funds apportioned to the state road program. The funds for the state road program are administered by the BSE. The funds for the local road program are administered by the BLRS in conjunction with the BSE.

#### 3.9.4 HSIP Project Implementation

HSIP project implementation is a collaborative, integrated, and data-driven process that emphasizes the reduction in fatal and serious injury crashes and the potential to reduce crash severity and/or frequency of severe crashes. Safety data from various sources is compiled and linked to identify high severity crash locations or corridors of interest in order to develop HSIP projects. This data includes crashes, fatalities, severe injuries (Class A), traffic volumes, and other relevant data. Since fatalities and severe injuries are infrequent compared to other crashes, five years of historic crash data is analyzed to establish crash patterns, identify problems, and determine contributing factors.

The Road Safety Assessments (RSA) tool developed by the Bureau of Safety Engineering is proving to be a key component of roadway design policy. The IDOT trains responders to directly access the RSA to enter crash scene data. Local engineers can then access the Road Safety Assessment elements of the crash scene. In doing so, the data used to design roadways is enhanced, allowing local agencies to more fully evaluate their road systems as a network.

Road Safety Assessments, crash reconstruction reports, police narrative analyses, site visits, and crash report evaluations are also used in the analyses of HSIP project locations. A range of engineering countermeasures, including some low cost safety improvements (LCSI) is then identified to address the safety problems. A benefit-to-cost analysis is performed for the countermeasures to select the most cost-effective and feasible solution to the safety problem.

IDOT's strategies to achieve the HSIP-Road program goals include the following:

- Improve highway signage and pavement markings
- Eliminate roadside obstacles
- Install guardrails, barriers, and crash attenuators
- Widen pavement and shoulders to remedy unsafe conditions
- Install rumble strips or other warning devices
- Complete realignment or reconstruction and lane additions
- Implement intersection safety improvements
- Install a skid-resistant surface
- Improve pedestrian or bicyclist safety
- Construct traffic calming features
- Improve crash data systems
- Install traffic control or other warning device at a severe crash location

Candidate projects on state roads, including those at rail crossings, are submitted to the BSE. Projects on rural roads, including those on high-risk rural roads and at railroad crossings on rural roads, are submitted to the BSE after an acceptability review by the BLRS. Submitted projects are then reviewed and approved by a central safety committee comprised of representatives from BSE, BDE, BLRS, and the FHWA.

The HSIP places special emphasis on effective LCSI. Focusing on lower cost solutions enables more HSIP sites and/or mileage to be treated with the available funds. A good example of an HSIP project involving a low cost safety improvement is the high-tension cable (HTC) guardrail installation on Illinois freeways. To reduce the occurrence of deadly head-on crashes on freeways, IDOT installed several miles of cable-guardrail systems at selected locations. This innovation came after years of crash data on interstates and expressways to identify and prioritize locations where a history of median crossover crashes exist. These cable-guardrail systems are nationally recognized as an extremely effective, low cost, and easily repaired method to optimize chances of avoiding a head-on collision caused by a vehicle crossing an expressway median. IDOT has continually monitored the performance of the various HTC systems installed, investigated crashes involving the new systems, and has used this information to improve its practices and procedures. This performance monitoring has shown that the HTC systems have been effective in preventing fatal crashes.

# 4.0 System Security

A sense of personal security is an essential component of a safe society. To that end, the national and state governments have initiated coordinated plans, programs and training exercises to assure their readiness to address human and naturally caused disasters. Whether confronted with a climatic event, a terrorist attack, or an industrial accident, Illinois has worked hard to assure its readiness to evacuate population centers and treat victims of these sudden and unexpected disaster events.

In the past year, IDOT's Transportation Infrastructure Security Section has worked with the Federal Emergency Management Agency (FEMA) on projects that include severe snowstorm impacts in February (\$4.1 million), flood damage and relief (\$8.3 million) and homeland security preparedness. Early in 2012, the IDOT team worked with the Secret Service in support of an international leadership event (NATO) that included representatives from 72 nations, including President Obama of the United States. These types of events do not occur every year in Illinois, but IDOT has prepared itself to meet the needs of any unexpected emergency.

In the coming decades, global climate change trends indicate more severe weather events are likely to occur. In Illinois, these events will likely result in extended dry periods punctuated by significantly heavier rain and snow events. For IDOT, the severity of flooding is the greatest concern. While these changes will likely result in new highway and bridge design standards, the security concern is making sure that evacuation plans for endangered populations are well designed. These plans will also need to assure that access for emergency response teams and equipment are also incorporated.

## 4.1 Public Transit Security Issues

Security for passengers and employees has long been a fundamental concern for transit operators due to potential crime and other threats. Since the beginning of the 21<sup>st</sup> Century, security issues have taken on an even greater emphasis since transit systems are one of the most visible targets for global terrorism.

Federal and state authorities have provided guidance to transit operators on logical steps to take to reduce the chances of terrorist attacks. In addition, federal funds are provided to each state to help implement and support counter terrorist actions. Unfortunately, it is impossible to fully assure that these preventive measures will ultimately succeed against every possible terrorist plot.

## 4.1.1 Planning and Training

Transit operators are participating in multi-jurisdictional exercises to respond to potential security events or threats. A key to security efforts is vigilance in identifying and planning for potential criminal or terrorist activities. For this reason, security and safety staff are provided training in both practical day-to-day procedures and advance state-of-the-art security techniques. In addition, transit operators are fully embracing facility site and system operational planning seeking to "engineer out" potential opportunities for criminal or terrorist acts. A key tool adopted by the transit industry is the process of *Crime Prevention through Environmental Design*. This process provided an approach to crime prevention that seeks to dissuade individuals by reducing the opportunity to commit criminal acts using engineering design.

## 4.1.2 Evacuation Planning

In many emergency plans, transit plays an important role in responding to public safety emergencies impacting communities. The Illinois Terrorism Task Force provides emergency multi-agency exercises aimed at helping prepare local operators and staff for potential emergencies that will require coordination with other emergency providers.

There is a great deal of value in preparing transit operators for catastrophic events. Transit systems can provide valuable resources to communities and first responders in emergencies when transit vehicles can be utilized to act as ambulances and transport supplies.

#### 4.2 Illinois Terrorism Task Force

The 2012 State Transportation Plan is consistent with all federal requirements in treating security as a unique, stand-alone goal. IDOT has significantly collaborated on security issues with the Illinois Terrorism Task Force (ITTF).

Sixteen committees currently serve the ITTF, and IDOT is the chair of the Transportation Committee. The Transportation Committee's mission statement, which serves as the basis for how the Committee operates, is as follows:

"The Transportation Committee, in partnership with private industry, will help maximize security of the Illinois transportation system for the movement of people and goods by ensuring that transportation professionals have available and utilize the tools, training, and methods jointly considered most effective to protect our citizens and the State's infrastructure investment."

The Transportation Committee has 52 member organizations, ranging from institutions and industry representatives to emergency responders and labor organizations. In addition, the Transportation Committee maintains an affiliation with more than 20 industry stakeholders and research organizations that provide significant knowledge and expertise.

#### Affiliated institutions include:

- Illinois Terrorism Task Force Training Committee
- Strategic National Stockpile Distribution Plan Committee
- State Emergency Operations Center Liaisons
- 24/7 Weigh Station Staffing Coordination with Illinois State Police
- Illinois Department of Public Health Laboratory Group
- Federal Highway Administration
- Transportation Security Administration (TSA)
- Transportation Research Board Member (TRB)
- American Association of Highway Transportation Officials (AASHTO)
- AASHTO Mississippi Valley Region (ten Midwestern states)
- Emergency Responder Credentialing Committee

<sup>&</sup>lt;sup>4</sup> Illinois Terrorism Task Force Transportation Annual Report 2011, Illinois Terrorism Task Force Transportation Committee. <a href="https://www.ready.illinois.gov/ittf/Publications/2011ITTFAnnualReport.pdf">www.ready.illinois.gov/ittf/Publications/2011ITTFAnnualReport.pdf</a>. Accessed August 7, 2012.

- Chicago Office of Emergency Management and Communication (OEM&C)
- Gary-Chicago-Milwaukee (GCM) Coalition
- Chicago Department of Transportation (CDOT)
- American Trucking Association (ATA)
- Illinois Trucking Association
- Midwest Trucking Association
- Multi-State Transportation Security Work Group (eight states)
- Border States Forum (seven states)
- Argonne National Laboratories
- University of Illinois Champaign
- University of Illinois Chicago<sup>5</sup>

### 4.2.1 Transportation Committee

The Transportation Committee uses subcommittees to provide guidance on specific topics and areas deemed to be of greatest priority. Most recently, this committee has had five working groups.

#### 4.2.1.1 Evacuation Implementation Subcommittee

The Evacuation Implementation Subcommittee implements proven plans and procedures from across the nation with the goal of creating an established action plan for evacuation in urban areas of Illinois. The subcommittee also conducts tabletop exercises to evaluate plans and to help train staff in the use of those plans.

## 4.2.1.2 Training Subcommittee

The Training Subcommittee develops a proficient practice for training personnel at the federal, state, county, local, and private industry levels in transportation infrastructure security. It also enhances awareness in the transportation community through response training, such as that needed in identifying possible signs and consequences of terrorist incidents for appropriate actions including the consideration of one's own safety. Lastly, this subcommittee implements outreach programs for the motorist, truckers, commuters, pilots, and boaters to contact officials when they see suspicious or unusual activity.

## 4.2.1.3 Downstate Public Transportation Subcommittee

The Downstate Public Transportation Subcommittee increases the safety and security efforts of downstate public transportation providers through building awareness, promoting linkages with first responders, coordinating training activities, and providing technical assistance. The technical assistance provided relates to vulnerability assessments, tabletop drills, policy formation, and other emergency and disaster response operations. The subcommittee also serves as a communications conduit, by linking the safety and security efforts of northeast and downstate public transit providers through sharing information, resources, and procedures. Lastly, the subcommittee provides a formal means for downstate transit providers to funnel needs and resources to the Transportation Committee.

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<sup>&</sup>lt;sup>5</sup> Illinois Terrorism Task Force Transportation Annual Report 2011, Illinois Terrorism Task Force Transportation Committee. <a href="https://www.ready.illinois.gov/ittf/Publications/2011ITTFAnnualReport.pdf">www.ready.illinois.gov/ittf/Publications/2011ITTFAnnualReport.pdf</a>. Accessed August 7, 2012.

## 4.2.1.4 Railroad Safety Subcommittee

This subcommittee focuses on areas of common interests within the railroad industry to address all aspects of railroad security. The workgroup strives to meet the common goal of making Illinois a leader in railroad security that other states will easily be able to adopt. This subcommittee looks to get maximum assistance from resources available through the Department of Homeland Security.

#### 4.2.1.5 Inland Waterways and Port Security Workgroup

One of the primary focuses for this group is vulnerability and risk assessment. Efforts are underway in several areas concerning security measures and assessment.<sup>6</sup>

## 4.3 Strategies and Programs

The ITTF Transportation Committee produces an Annual Plan, which identifies achievements and outlines goals and budgetary priorities for the year. This can effectively serve as an implementation plan for IDOT as it builds on the policies and goals developed for the new Transportation Plan.

In 2011, the ITTF Transportation Committee identified the following budgetary priorities:

- Intelligence gathering and distribution
- Communications interoperability
- Regional education for a coordinated incident response
- Resource management and situational awareness capability
- Reconstitution of critical infrastructure and deployment assets

In 2012, these priorities were used to select the following projects for security funding:

- Provide intelligence, resources, traffic management and coordination with IEMA and other State, Federal, County and Local officials in response to the G8/NATO Summit in Chicago in May 2012. IDOT will work with organizations to coordinate planning and response for enacted of the Traffic Management Plan for Evacuation of Chicago Central Business District via Regional Expressway System if warranted for this event.
- Provide intelligence, resources, traffic management and coordination with IEMA, ISP and other State, Federal, County and Local officials in response to the 39<sup>th</sup> Ryder Cup at Medinah Country Club in September 2012. IDOT will work with organizations to coordinate planning and response for enacted of a traffic management plan for this large event.
- Coordinate with the Catastrophic Response Planning Team (CRPT), City of Chicago, Cook County, State of Wisconsin and the State of Indiana on evacuation planning for a catastrophic event.
- Provide training for transportation officials for the Strategic National Stockpile (SNS) Distribution Plan.
- Participate in tabletop, functional and full-scale exercise of the SNS Distribution Plan.
- Provide training for transportation officials for radiation safety during utilization of the Vehicle and Cargo Inspections Systems in field deployment.

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<sup>&</sup>lt;sup>6</sup> Illinois Terrorism Task Force Transportation Annual Report 2011, Illinois Terrorism Task Force Transportation Committee. <a href="https://www.ready.illinois.gov/ittf/Publications/2011ITTFAnnualReport.pdf">www.ready.illinois.gov/ittf/Publications/2011ITTFAnnualReport.pdf</a>. Accessed August 7, 2012.

- Host an annual exercise that integrates the missions of local, county, state and federal transportation resources.
- The Transportation Committee, using input from the public and private sectors, will develop traffic management plans for catastrophic incidents for Illinois' urban areas, including the following:
  - \* Implement the evacuation plan for the Chicago Central Business District.
  - \* Establish and coordinate with East St. Louis Metro area representatives and Southern Illinois representatives on evacuation planning and implementation.
  - \* Continue to develop and implement an evacuation plan for O'Hare International Airport and Midway Airport.
  - \* Install a ramp gate system at designated locations in the Chicago area for outbound movement of the motoring public and inbound movement of response vehicles.
- Continue implementation of the bridge security program in Illinois.
- Continue to equip the bridge security program with barriers, fencing, lighting, signage and other equipment.
- Conduct an ongoing analysis of a broad-based transportation vulnerability assessment identifying weaknesses and probable consequences.
- Continue the camera-sharing project with IDOT, the City of Chicago, Cook County and the Illinois Tollway to share images and information across a system that integrates the latest video technology for response to critical incidents on the expressway system in the Chicago land area.
- Utilize communications and surveillance equipment for IDOT Division of Aeronautics, in coordination with Illinois State Police communications for use on state aircraft.
- Continue to implement the Metra Immediate Stop Evacuation Plan and the Metra Station Stop Evacuation Plan, which were developed by the Metra Police Department in coordination with Illinois State Police, Illinois Law Enforcement Alarm System, Mutual Aid Box Alarm System, Illinois Terrorism Task Force and IDOT.
- Implement safety and security efforts for downstate public transportation for providers through building awareness, promoting linkages with first responders, coordinating training activities, and providing technical assistance.
- Focus on areas of common interest within the railroad industry to address all aspects of railroad security.
- Continue of coordination with mass transit partners throughout the state on securing their infrastructure through training, exercising and installation of security equipment.

The actions of the Transportation Committee resulted in an extensive list of accomplishments in 2011. The most notable include:

- Meeting each month since inception to fulfill the Committee's role in preparing and responding to threats and incidents of terrorism within the State's transportation infrastructure.
- Defined goals for each of the Sub-Committees of the Transportation Committee, to ensure that all critical modes of transportation throughout the State of Illinois are secured.
- Continued implementation of the National Incident Management System (NIMS) training in all IDOT Districts. More than 2,700 IDOT field personnel have been trained in IS100, IS200, IS300, IS400, IS700 and IS800 courses.

- Utilized two mobile Vehicle and Cargo Inspection Systems (VACIS) in conjunction with the Illinois State Police.
- Continued coordination with the public works mutual aid system. The Illinois Public Works
  Mutual Aid Network (IPWMAN) is a statewide network of public works agencies organized
  to respond in an emergency when a community's or regions resources have been exhausted.
- Continued the implementation of the traffic management evacuation plan for the city of Chicago and the East St. Louis Metro area.
- Continued implementation of the Vulnerability Assessment Plan for hardening transportation infrastructure.
- Continued implementation of the Security Gate System for use on inbound ramps on the Chicago expressway system for Homeland Security initiatives.
- Coordinated with railroad representatives on disaster response planning for railways throughout Illinois.
- Purchased and installed the rMetrix system on rail infrastructure in Illinoisto improve railroad track safety within Illinois. The information gathered from this program will be to roadmap the significant areas of concern.
- Implemented a bridge security project on the I-39 Abraham Lincoln Bridge in LaSalle County.
- Implemented a bridge security project on the I-74 Murray Baker Bridge and the I-474 Shade-Lohman Bridges in the Peoria area.
- Implemented a bridge security project on the Clark Bridge in Alton, Illinois.
- Provided thermal imaging cameras to the Illinois Department of Natural Resources Homeland Security Boats. Permanent mounted thermal imaging night vision camera allows the boat operators to clearly see objects in the water at night.
- Provided global positioning (GPS) handheld systems for IDOT and IDNR staff to be used to accurately identify locations of hazards, damages and threats to the transportation systems.
- Placed the IDNR Homeland Security Sonar Boat into operation on the Ohio and Mississippi River Basins. IDNR technicians installed star-com radios, sonar and additional electronics to complete the enhancement of this state of the art watercraft.
- Secured the IDOT Aeronautics Facility in Springfield with a Gate Security System and Surveillance Camera System for protection of critical infrastructure and staff.
- Continued installation of the communications systems in the IDOT Command and Communications trailers in each district. The Districts have completed extensive work on the Mobile Emergency Operations Centers that will be utilized for emergency response field operations.
- Continued implementation of the Metra Immediate Stop Evacuation Plan and the Metra Station Stop Evacuation Plan.
- Coordinated with mass transit agencies to implement security initiatives throughout Illinois.
- Continued and coordinated the implementation of the Strategic National Stockpile
  Distribution Plan with the Illinois Department of Public Health, Illinois Emergency
  Management Agency, Illinois State Police, Illinois National Guard, Illinois Department of
  Corrections, Central Management Services and the Illinois Department of Human
  Resources.

- Researched, developed and delivered the Highway Incident Management Training Program.
  Research included surveying multiple response agencies, identifying safety trends and
  training needs of jurisdictions. A program was developed and pilot training classes were
  presented to highway departments, law enforcement, fire departments, emergency medical
  personnel, 911 Centers and tow/recovery operators. Over 150 responders were trained in
  2011.
- Participated in several Improvised Nuclear Device (IND) Workshops with Argonne National Lab, federal, state and private partners to enhance response procedures and determine gaps, in response to a 10 Kiloton nuclear device that could be detonated in the Chicago land area. The information that was gathered will be provided to other large metropolitan theaters for their planning purposes.
- Participated in the State Level Exercise for Catastrophic Earthquake Preparedness, Response and Recovery Plan for the New Madrid and Wabash Valley Fault Zones.

As part of its coordination with the Transportation Committee, Pace, the metropolitan Chicago region's suburban bus provider, continued to build and maintain relationships with local police and fire departments by conducting bus familiarization training and participating in SWAT training. The training and exercises are designed to better prepare first responders in the event of a terrorist threat or other life-threatening incident. In 2011, Pace conducted bus familiarization training and exercises with the following:

5th District SWAT
Burbank Police
Chicago Police SWAT
Cook County Sheriff SWAT
Crystal Lake Police SWAT
Elgin Police SWAT
FIAT SWAT Team
Gurnee Police Department
Hanover Park Police SWAT
Illinois State Police SWAT
Joliet Police SWAT
Kane County Sheriff SWAT

Kendall County Sheriff SWAT
Lake County Sheriff SWAT
Milton Township CERT
Naperville Police SWAT
Romeoville Fire Department
Skokie Police SWAT
South Suburban Emergency Response Team
Southwest Unified Fire District
Unites States Postal Service Bedford Park
United States Postal Service Carol Stream
Wheaton Police SWAT
Wheeling Police SWAT

Other Transportation Committee accomplishments related to public transportation include the following:

- The Rural Transit Assistance Center, as a Transportation Committee member, trained approximately 2,000 drivers and support personnel through 108 training sessions in the topics of emergency procedures, defensive driving, health and family services and passenger assistance.
- The Downstate Public Transportation Workgroup continues the implementation of the vulnerability assessment tools to be used in assisting downstate urban and rural systems in evaluating their safety and security procedures.

The Transportation Committee has advanced a significant number of initiatives for 2012 that are consistent with the policy and goals contained in the 2012 Plan. Throughout 2012, the ITTF Transportation Committee will seek to address the following key goals:

- Ensure that the industry leaders are involved in the planning, development, resource allocation, and implementation of all initiatives.
- Assess current statutes, rules, ordinances and policies at the federal, state, and local levels to ensure that strategies chosen by the Committee will be effective, legal, and coordinated. The Transportation Committee will propose changes in legislation or policy to the Illinois Terrorism Task Force to enhance the security of the transportation system, if necessary.
- Provide training, education, and reference materials to all public safety, public works, municipalities, private entities, secondary response personnel, and other responders to assist in prevention, preemption, intelligence fusion, and personal safety to include:
  - \* Validate training, response capabilities, and equipment resources through annual practical, tabletop, hands-on, scenario-based exercises.
  - \* Use input from the public and private sectors to develop an evacuation plan for Illinois urban areas.
  - \* Educate and provide training to Illinois stakeholders through outreach to deliver the message that security begins with the individuals using transportation systems.
  - \* Maximize the transportation system in Illinois by providing recommendations and proposals on transportation safety and emergency preparedness to the ITTF.

While not enough resources are available to guarantee the security of the entire state transportation system, significant steps are being taken to address security and emergency responses, including assessment, prevention, preparedness, response, and recovery.