



**Illinois Department of Transportation**

Division of Traffic Safety  
3215 Executive Park Drive / P.O. Box 19245 / Springfield, Illinois / 62794-9245

**TECHNICAL REPORT**

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**October 2008**

# **Child Safety Seat Usage In Illinois**

## **July 2008 Observational Survey Results**

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# Illinois Department of Transportation

## Division of Traffic Safety

### Evaluation Unit

The Evaluation Unit, within the Division of Traffic Safety in the Illinois Department of Transportation, focuses on evaluation and monitoring of various highway safety projects and programs in Illinois. The Evaluation Unit conducts research and analyses that enhance the safety and efficiency of transportation by understanding the human factors that are important to transportation programs in Illinois. The main functions of the Unit include the following:

1. Develop an in-depth analysis of motor vehicle-related fatalities and injuries in Illinois using several crash-related databases (crash data, FARS, Trauma Registry, hospital data, and state and local police data).
2. Develop measurable long-term and short-term goals and objectives for the Highway Safety Program in Illinois using historical crash-related databases.
3. Evaluate each highway safety project with enforcement components (e.g., Traffic Law Enforcement Program, Local Alcohol Program, IMAge projects) using crash and citation data provided by local and state police departments.
4. Evaluate several highway safety programs (e.g., Occupant Protection and Alcohol). This involves evaluating the effects of public policy and intervention programs that promote safe driving.
5. Design and conduct annual observational safety belt and child safety seat surveys for Illinois. The safety belt survey is based on a multi-stage random selection of Interstate Highways, US/IL Highways, and several local and residential streets.
6. Provide results of research and evaluation as well as annual enforcement activities to the National Highway Traffic Safety Administration (NHTSA) as part of the Federal Requirements of State Highway Safety Program in Illinois.
7. Provide statistical consultation to other Sections at the Division of Traffic Safety and other Divisions at IDOT.
8. Publish results of all research and evaluation at the Division and place them as PDF files at IDOT's Website.

**This report provides a descriptive analysis of child safety seat usage in Illinois. The survey was an observational survey conducted statewide during July 2008 at selected survey locations which included day care centers, health care centers, McDonald's restaurants, and shopping malls. This survey provided a statistically representative sample of child safety seat usage in the state of Illinois.**

The report was compiled and prepared by the Evaluation staff. Comments or questions may be addressed to Mehdi Nassirpour, Ph.D., Chief of Evaluation Unit, Bureau of Administrative Services, Division of Traffic Safety, Illinois Department of Transportation, 3215 Executive Park Drive, Springfield, Illinois 62794-9245.

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# Executive Summary

Using a multi-stage random sampling technique, a total of 3,019 children were observed in 2,145 passenger cars and pickup trucks in Illinois in 2008. There were a total of 118 randomly selected survey locations: 39 day care centers, 11 health care centers, 32 McDonald's restaurants, and 36 shopping malls within 12 selected counties. The counties were grouped into three different regions which included Cook County, the collar counties (DuPage, Kane, Lake, McHenry, and Will), and the downstate counties (Champaign, Macon, Montgomery, Peoria, Rock Island, and St. Clair).

It should be noted that in 2006, IDOT revised the definition of incorrect child restraint use. An incorrect child restraint use includes seat faces wrong way, harness loose or not used, retainer clip below armpit level, seat not secured, belt across face, and safety belt under arm. As result of this change, the correct restraint usage rate declined significantly. Therefore, comparing the current usage rates to the rates in previous years would not be valid. Here are the findings:

1. During July 2008, a total of 3,019 children were observed in 2,145 passenger cars, pickup trucks, and vans at selected day care centers, McDonald's restaurants, health care centers, and shopping malls across Illinois.
2. The total observed safety seat usage rate was 87.7 percent. When only including the observations where the safety seat was used properly, the usage rate drops to 56.4 percent.
3. The collar counties had the highest percentage of child restraint use at 94.4 percent; the downstate counties had a child restraint usage rate of 85.5 percent; and Cook County had a child restraint usage rate of 85.2 percent. The collar counties had the highest usage rate of properly restrained children at 63.0 percent. The percentage of properly restrained children in the downstate counties was 55.4 percent. The percentage of properly restrained children in Cook County was 53.5 percent.
4. Shopping malls had the highest percentage of children who were restrained at 90.7 percent. The child safety seat usage rate at day care centers and health care centers was 88.4 percent and 88.3 percent respectively. McDonald's restaurants had the lowest percentage of restrained children at 83.5 percent. Based on proper child safety seat use, day care centers and shopping malls had the highest percentage of properly restrained children at 57.9 percent and 57.7 percent respectively. The percentage of properly restrained children at McDonald's restaurants was 55.6 percent. The percentage of properly restrained children at health care centers was 46.3 percent.
5. Vans had the highest percentage of children who were restrained and properly restrained at 92.3 percent and 67.0 percent respectively. Automobiles had almost 87 percent of children restrained. When excluding incorrect use, the child safety seat usage rate in automobiles was 54.1 percent. The child safety seat usage rate for pickup trucks was 84.2 percent. When excluding incorrect use, the child safety seat usage rate in pickup trucks was 47.0 percent.
6. Based on gender, when a female was driving, more than 88 percent of children were restrained, while only 53.2 percent of those children were properly restrained. On the other hand, when a male was driving, only 85.9 percent of children were restrained, while only 53.2 percent of those children were properly restrained.

7. When a driver was wearing their safety belt, more than 92 percent of children were restrained. When excluding incorrect use, only 64.4 percent of these children were properly restrained. On the other hand, unbelted drivers tend to have significantly lower child restraint usage rates than belted drivers. When a driver was not wearing their safety belt, only 66.8 percent of children were restrained. When excluding incorrect use, only 22.0 percent of these children were properly restrained.
8. The total usage rate from 2001 thru 2008 increased significantly by 9.7 percentage points from 78.0 percent in 2001 to 87.7 percent in 2008. The rate of increase ranges from 9.5 percent for vehicles with one child to 22.7 percent for vehicles with 4 or more children.
9. Since IDOT revised the definition of correct child safety seat use in 2006, it would not be valid to compare the usage rate during the current years (2006-2008) to the years prior to 2006. The correct usage rate of restrained children increased by 2.5 percentage points from 53.9 percent in 2006 to 56.4 percent in 2008. The rate of increase was consistent across vehicles that were transporting two or fewer children (1.6 percent for vehicles with one child and 6.9 for vehicles with two children). Contrary to our expectation, the correct usage rate decreased among vehicles that were transporting three or more children. This probably is due to the small sample size of those vehicles transporting three or more children.

## Observational Survey

Using a multi-stage random sampling technique, a total of 3,019 children were observed in 2,145 passenger cars and pickup trucks in Illinois in 2008. There were a total of 118 randomly selected survey locations: 39 day care centers, 11 health care centers, 32 McDonald's restaurants, and 36 shopping malls within 12 selected counties. The counties were grouped into three different regions which included Cook County, the collar counties (DuPage, Kane, Lake, McHenry, and Will), and the downstate counties (Champaign, Macon, Montgomery, Peoria, Rock Island, and St. Clair). The survey design had four characteristics:

1. The survey was conducted between 6:30 a.m. and 6:00 p.m. when the light was adequate for observation.
2. The survey was restricted to a total of 30 observations or an hour of observation per site.
3. The survey was conducted at the exit/entrance of selected locations.
4. The survey included the following common misuses of child safety seats:
  - seat faces wrong way,
  - harness loose or not used,
  - retainer clip below armpit level,
  - seat not secured,
  - belt across face, and
  - safety belt under arm.

It should be noted that in 2006, IDOT revised the definition of an incorrect child restraint use. As result of this change, the correct restraint usage rate declined significantly. Therefore comparing the current usage rates to the rates prior to 2006 would not be valid.

For more information on the design of the survey refer to "Design of the Child Safety Seat Survey", Division of Traffic Safety, Illinois Department of Transportation (IDOT), June 1996.

## Results of Child Safety Seat Survey in Illinois

Tables 1 through 7 provide descriptive information on the child safety seat usage rate and its correlates, such as gender of driver, belt status of driver, location type, region, and vehicle type in 2008.

Table 1 shows that the overall child restraint usage rate in Illinois is 87.7 percent. After excluding total number of observations in which the child restraint is used incorrectly, the usage rate is reduced to 56.4 percent. As was expected, child safety restraint usage rates are inversely related to the number of children in the car. It is likely to see usage rates decrease as the number of children in the vehicle increase. The usage rate and correct usage rate for Child 1 are 90.5 percent and 56.9 percent respectively. On the other hand, these percentages are lower for Child 3 at 63.0 percent and 38.0 percent respectively.

**Table 1: 2008 Child Safety Seat Usage Rate in Illinois**

Seating Position	No Restraint	Incorrect Use	Correct Use	Total Observed	Usage Rate Total	Usage Rate (excludes incorrect use)
Child 1	204	722	1,223	2,149	90.5%	56.9%
Child 2	112	192	430	734	84.7%	58.6%
Child 3	40	27	41	108	63.0%	38.0%
Child 4	14	5	9	28	50.0%	32.1%
<b>Total</b>	<b>370</b>	<b>946</b>	<b>1,703</b>	<b>3,019</b>	<b>87.7%</b>	<b>56.4%</b>

Note: Common misuses of child safety seats include seat faces wrong way, harness loose or not used, retainer clip below armpit level, seat not secured, belt across face, and safety belt under arm.

Table 2 presents frequency and percentage distributions for selected demographics, including type of vehicle, driver's gender, driver's belt status, and total vehicles observed by site type. As expected, the largest percentage of vehicles observed were automobiles (68.0 percent); the second largest percentage of vehicles observed were vans (21.4 percent); and the lowest percentage of vehicles observed were pickup trucks (10.6 percent). Based on driver's gender, more than 63 percent (63.6 percent) of the drivers observed were female, while only 36.4 percent of the observations were male. Based on driver's belt status, more than 82 percent (82.4 percent) of drivers were observed wearing their seat belts, while the remaining 17.7 percent were unbelted. Based on location type, the largest percentage of vehicles was



observed at shopping malls (36.9 percent). More than 28 percent of the vehicles were observed at McDonald's restaurants and 28 percent were observed at day care centers. The smallest percentage of vehicles was observed at health care centers (6.5 percent).

**Table 2: Frequency and Percentage Distributions of Selected Demographics for the 2008 Child Safety Seat Survey**

<b>Type of Vehicle</b>		
	Frequency	Percentage
<b>Automobile</b>	1,459	68.0%
<b>Truck</b>	227	10.6%
<b>Van</b>	459	21.4%
<b>TOTAL</b>	2,145	100.0%
<b>Driver's Gender</b>		
	Frequency	Percentage
<b>Female</b>	1,362	63.6%
<b>Male</b>	782	36.4%
<b>TOTAL</b>	2,144	100.0%
<b>Driver's Belt Status</b>		
	Frequency	Percentage
<b>Belted</b>	1,759	82.4%
<b>Not Belted</b>	377	17.7%
<b>TOTAL</b>	2,136	100.0%
<b>Total Vehicles Observed by Location Type</b>		
	Frequency	Percentage
<b>Daycare</b>	600	28.0%
<b>Health Center</b>	139	6.5%
<b>McDonald's</b>	617	28.7%
<b>Shopping Mall</b>	793	36.9%
<b>TOTAL</b>	2,149	100.0%
<b>TOTAL</b>	2,149	100.0%

\*Note: The Totals are different for each demographic due to missing values. Due to rounding error, percentages may not equal 100 percent.

**Table 3** shows frequency and percentage distributions of child restraint use by selected regions of Illinois (collar counties, Cook County, and downstate counties). The collar counties had the highest percentage of child restraint use at 94.4 percent. The child safety seat usage rate in the downstate counties and Cook County was 85.5 percent and 85.2 percent respectively. The collar counties had the highest percentage of properly restrained children at 63.0 percent. The percentage of properly restrained children in the downstate counties and Cook County was 55.4 percent and 53.5 percent respectively.

**Table 3: Analysis of the 2008 Child Safety Seat Survey  
Child Restraint Status by Region**

Child Restraint Status	Region						Totals	
	Collar Counties**		Cook County		Downstate Counties***			
	N	%	N	%	N	%	N	%
Properly Restrained	509	63.0%	851	53.5%	343	55.4%	1,703	56.4%
Incorrectly Restrained	254	31.4%	506	31.8%	186	30.1%	946	31.3%
<b>Total Restrained*</b>	<b>763</b>	<b>94.4%</b>	<b>1,357</b>	<b>85.2%</b>	<b>529</b>	<b>85.5%</b>	<b>2,649</b>	<b>87.7%</b>
Not Restrained	45	5.6%	235	14.8%	90	14.5%	370	12.3%
<i>Column Totals</i>	808	100.0%	1,592	100.0%	619	100.0%	3,019	100.0%

\* The row 'Total Restrained' is the sum of the cases from the rows 'Properly Restrained' and 'Incorrectly Restrained'

\*\* The collar counties are comprised of DuPage, Kane, Lake, McHenry, & Will

\*\*\* The downstate counties are comprised of Champaign, Macon, Montgomery, Peoria, Rock Island, & St. Clair

**Table 4** provides information on child restraint usage rates by location type. The location types included day care centers, health care centers, McDonald's restaurants, and shopping malls. Shopping malls had the highest percentage of children who were restrained at 90.7 percent. The child safety seat usage rate at day care centers and health care centers was 88.4 percent and 88.3 percent respectively. Child safety seat use was the lowest at McDonald's restaurants at 83.5 percent. Based on proper child safety seat use, day care centers and shopping malls had the highest percentage of properly restrained children at 57.9 percent and 57.7 percent respectively. The percentage of properly restrained children at McDonald's restaurants was 55.6 percent. The location type which had the lowest percentage of properly restrained children was health care centers at 46.3 percent.

**Table 4: Analysis of the 2008 Child Safety Seat Survey  
Child Restraint Status by Location Type**

Child Restraint Status	Location Type								Totals	
	Day Care Center		Health Care Center		McDonald's		Shopping Mall			
	N	%	N	%	N	%	N	%	N	%
Properly Restrained	495	57.9%	87	46.3%	506	55.6%	615	57.7%	1,703	56.4%
Incorrectly Restrained	261	30.5%	79	42.0%	254	27.9%	352	33.0%	946	31.3%
<b>Total Restrained*</b>	756	88.4%	166	88.3%	760	83.5%	967	90.7%	2,649	87.7%
Not Restrained	99	11.6%	22	11.7%	150	16.5%	99	9.3%	370	12.3%
<i>Column Totals</i>	855	100.0%	188	100.0%	910	100.0%	1,066	100.0%	3,019	100.0%

\* The row 'Total Restrained' is the sum of the cases from the rows 'Properly Restrained' and 'Incorrectly Restrained'

**Table 5** shows child restraint use by vehicle type, including automobiles, pickup trucks, and vans. Vans had the highest percentage of children who were restrained and properly restrained at 92.3 percent and 67.0 percent respectively. More than 86 percent of children in automobiles were restrained. When excluding incorrect use, the child safety seat usage rate in automobiles was 54.1 percent. The child safety seat usage rate for pickup trucks was 84.2 percent. When excluding incorrect use, the child safety seat usage rate in pickup trucks was 47.0 percent.

**Table 5: Analysis of the 2008 Child Safety Seat Survey  
Child Restraint Status by Vehicle Type**

Child Restraint Status	Vehicle Type						Totals**	
	Automobile		Truck		Van			
	N	%	N	%	N	%	N	%
Properly Restrained	1,077	54.1%	140	47.0%	485	67.0%	1,702	56.5%
Incorrectly Restrained	650	32.7%	111	37.2%	183	25.3%	944	31.3%
<b>Total Restrained*</b>	1,727	86.8%	251	84.2%	668	92.3%	2,646	87.8%
Not Restrained	263	13.2%	47	15.8%	56	7.7%	366	12.2%
<i>Column Totals</i>	1,990	100.0%	298	100.0%	724	100.0%	3,012	100.0%

\* The row 'Total Restrained' is the sum of the cases from the rows 'Properly Restrained' and 'Incorrectly Restrained'

\*\* The total does not equal 3,019 cases due to missing data.

**Table 6** shows that female drivers tended to have higher child safety seat usage rates. When a female was driving, almost 89 percent of children were restrained and only 58.3 percent of children were properly restrained. When a male was driving, only 85.9 percent of children were restrained and only 53.2 percent of children were properly restrained.

**Table 6: Analysis of the 2008 Child Safety Seat Survey  
Child Restraint Status by Driver's Gender**

Child Restraint Status	Driver's Gender				Totals**	
	Male		Female		N	%
	N	%	N	%		
Properly Restrained	573	53.2%	1,128	58.3%	1,701	56.5%
Incorrectly Restrained	353	32.7%	589	30.4%	942	31.3%
<b>Total Restrained*</b>	926	85.9%	1,717	88.7%	2,643	87.7%
Not Restrained	152	14.1%	218	11.3%	370	12.3%
<i>Column Totals</i>	1,078	100.0%	1,935	100.0%	3,013	100.0%

\* The row 'Total Restrained' is the sum of the cases from the rows 'Properly Restrained' and 'Incorrectly Restrained'

\*\* The total does not equal 3,019 cases due to missing data.

**Table 7** shows frequency and percentage distributions of child restraint use by driver's belt status. As indicated earlier (see **Table 2**), more than 82 percent of all drivers observed with children in their vehicles were wearing their safety belts (1,759 belted drivers divided by 2,136 total observations multiplied by 100 percent). Belted drivers have significantly higher child safety seat usage rates and proper child safety seat usage rates than unbelted drivers. When a driver was wearing their safety belt, more than 92 percent of children were restrained. When excluding incorrect use, only 64.4 percent of these children were properly restrained. On the other hand, unbelted drivers tend to have significantly lower child restraint usage rates than belted drivers. When a driver was not wearing their safety belt, only 66.8 percent of children were restrained. When excluding incorrect use, twenty-two percent of these children were properly restrained.

**Table 7: Analysis of the 2008 Child Safety Seat Survey  
Child Restraint Status by Driver's Belt Status**

Child Restraint Status	Driver's Belt Status				Totals**	
	Driver Belted		Driver Unbelted		N	%
	N	%	N	%		
Properly Restrained	1,560	64.4%	126	22.0%	1,686	56.3%
Incorrectly Restrained	684	28.3%	256	44.8%	940	31.4%
<b>Total Restrained*</b>	2,244	92.7%	382	66.8%	2,626	87.7%
Not Restrained	177	7.3%	190	33.2%	367	12.3%
<i>Column Totals</i>	2,421	100.0%	572	100.0%	2,993	100.0%

\* The row 'Total Restrained' is the sum of the cases from the rows 'Properly Restrained' and 'Incorrectly Restrained'

\*\* The total does not equal 3,019 cases due to missing data.

## Historical Trends of Child Safety Seat Use

**Tables 8 and 9** show historical trends on child safety usage rates. **Table 8** provides information about total child restraint usage rates for 2001 thru 2008. As shown in this table, the total usage rate increased significantly by 9.7 percentage points from 78.0 percent in 2001 to 87.7 percent in 2008. The rate of increase ranges from 9.5 percent for vehicle with one child to 22.7 percent for vehicles with four or more children.

**Table 9** provides information about the correct usage rate of restrained children for only 2006 thru 2008 eliminating years prior to 2006. As indicated earlier, since IDOT revised definition of correct child safety seat use in 2006, it would be incorrect to compare the usage rate during the current years (2006-2008) to the years prior to 2006. As shown in this table, the correct usage rate of restrained children increased by 2.5 percentage points from 53.9 percent in 2006 to 56.4 percent in 2008. The rate of increase was consistent across vehicles that were transporting two or fewer children (1.6 percent for vehicles with one child and 6.9 for vehicles with two children). Contrary to our expectation, the correct usage rate decreased among vehicles that were transporting three or more children. This probably is due to the small sample size of those vehicles transporting three or more children.

**Table 10** shows comparative analyses of child safety seat usage rates for 2001, 2003, 2005, 2006, 2007, and 2008. The data was analyzed by selected demographics including region, location, vehicle type, driver's gender, and driver's belt status. The information in **Table 10** is displayed in graphic presentations of child safety seat usage rates by selected demographics in **Figures 1 through 5**. The percent change in **Table 10** is calculated by subtracting the 2001 usage rates from the 2008 usage rates.

**Figure 1** shows the total usage rate of restrained children by the selected regions in Illinois. From 2001 to 2008, all regions noticed increases in child safety seat use. The child safety seat usage rate in the collar counties increased from 71.5 percent in 2001 to 94.4 percent in 2008. In the downstate counties the child safety seat usage rates increased from 77.2 percent in 2001 to 85.5 percent in 2008. In Cook County, the child safety seat usage rate increased from 81.2 percent in 2001 to 85.2 percent in 2008.

**Figure 2** shows the total child safety seat usage rate by location type in Illinois. From 2001 to 2008, the total usage rate of restrained children increased at all location types. The total usage rate at McDonald's increased from 67.6 percent in 2001 to 83.5 percent in 2008. The total usage rate at health care centers increased from 74.3 percent in 2001 to 88.3 percent in 2008. The total usage rate for day care centers increased from 83.7 percent in 2001 to 88.4 percent in 2008. The total usage rate at shopping malls increased from 81.8 percent in 2001 to 90.7 percent in 2008.

**Figure 3** shows the total usage rate of restrained children by vehicle type in Illinois. From 2001 to 2008, the total usage rate increased across all vehicles. In automobiles, the total usage rate of restrained children increased by 10.8 percentage points (an increase from 76.0 percent in 2001 to 86.8 percent in 2008). In pickup trucks, the total usage rate of restrained children increased from 80.8 percent in 2001 to 84.2 percent in 2008. In vans, the total usage rate of restrained children increased by 10.3 percentage points (an increase from 82.0 percent in 2001 to 92.3 percent in 2008).

**Figure 4** shows the total usage rate of restrained children by driver's gender in Illinois. From 2001 to 2008, the total usage rate of restrained children for male drivers increased by 12.4 percentage points and for female drivers it increased by 8.3 percentage points.

**Figure 5** shows the total usage rate of restrained children by the driver's belt status across selected years in Illinois. As was expected, the usage rates of child seats were significantly higher for belted drivers than for unbelted drivers. Although the total child safety seat usage rate for belted drivers did not change from 2001 through 2008, the total child safety seat usage rate for unbelted drivers increased by 15.0 percentage points.

**TABLE 8**  
**Total Child Safety Seat Usage Rates in Illinois**  
**(2001-2008)**

Child Number	Total Usage Rate of Restrained Children						Percent Change* (2001-2008)
	Total Use (2001)	Total Use (2003)	Total Use (2005)	Total Use (2006)	Total Use (2007)	Total Use (2008)	
<b>Statewide</b>	<b>78.0%</b>	<b>83.0%</b>	<b>87.7%</b>	<b>85.4%</b>	<b>87.2%</b>	<b>87.7%</b>	<b>9.7%</b>
Child #							
Child 1	81.0%	85.3%	89.4%	87.4%	88.8%	90.5%	9.5%
Child 2	74.5%	80.0%	85.3%	79.7%	84.2%	84.7%	10.2%
Child 3	51.1%	64.9%	75.0%	76.5%	75.8%	63.0%	11.9%
Child 4	27.3%	50.0%	60.0%	72.7%	60.0%	50.0%	22.7%

\* Percent change was calculated by subtracting the 2001 Total Usage Rate from the 2008 Total Usage Rate.

**TABLE 9**  
**Correct Child Safety Seat Usage Rates in Illinois**  
**(2006-2008)**

Child Number	Correct Usage Rate of Restrained Children (excludes Incorrect Use)			Percent Change* (2006-2008)
	Proper Use (2006)	Proper Use (2007)	Proper Use (2008)	
<b>Statewide</b>	<b>53.9%</b>	<b>53.6%</b>	<b>56.4%</b>	<b>2.5%</b>
Child #				
Child 1	55.3%	54.2%	56.9%	1.6%
Child 2	51.7%	54.1%	58.6%	6.9%
Child 3	38.3%	37.4%	38.0%	-0.3%
Child 4	36.4%	33.3%	32.1%	-4.3%

\* Percent change was calculated by subtracting the 2006 Proper Usage Rate from the 2008 Proper Usage Rate.

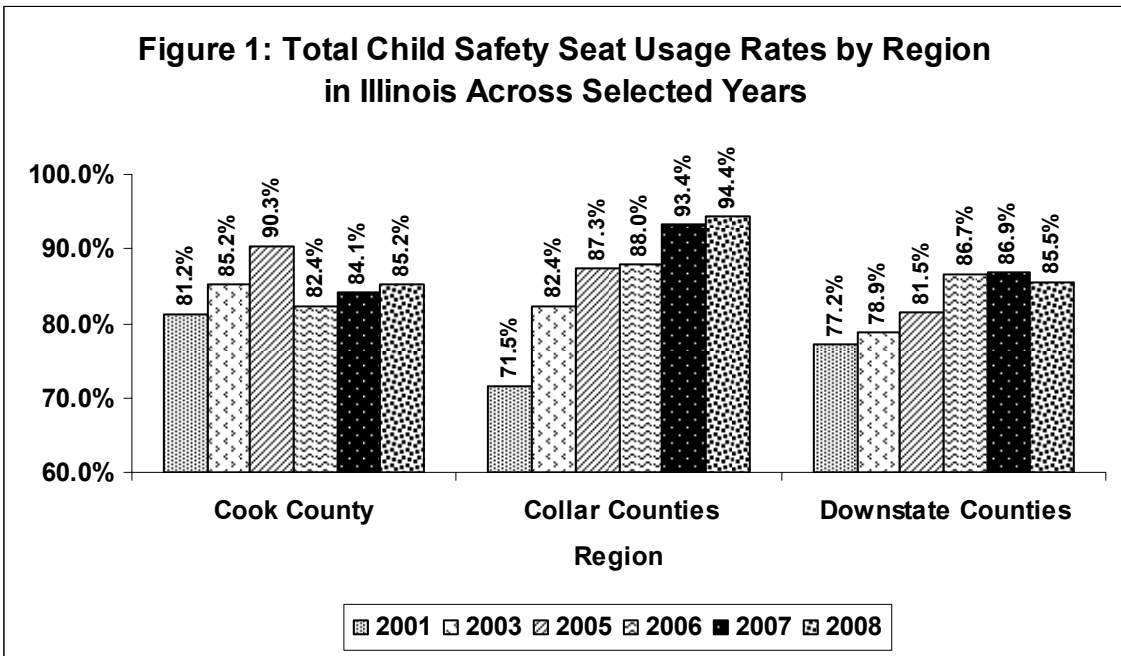
**Table 10**  
**Child Safety Seat Usage Rates in Illinois**  
**by Selected Characteristics**  
**2001-2008**

	Total Usage Rate of Restrained Children						
	2001	2003	2005	2006	2007	2008	Percent Change*
<b>Statewide</b>	<b>78.0%</b>	<b>83.0%</b>	<b>87.7%</b>	<b>85.4%</b>	<b>87.2%</b>	<b>87.7%</b>	<b>9.7%</b>
<b>Region</b>							
Cook County	81.2%	85.2%	90.3%	82.4%	84.1%	85.2%	4.0%
Collar Counties	71.5%	82.4%	87.3%	88.0%	93.4%	94.4%	22.9%
Downstate Counties	77.2%	78.9%	81.5%	86.7%	86.9%	85.5%	8.3%
<b>Location</b>							
Day Care Center	83.7%	87.0%	94.1%	85.5%	86.6%	88.4%	4.7%
Health Center	74.3%	79.2%	84.2%	82.5%	90.7%	88.3%	14.0%
McDonald's	67.6%	79.2%	83.9%	80.1%	83.1%	83.5%	15.9%
Shopping Mall	81.8%	83.2%	86.6%	89.4%	90.7%	90.7%	8.9%
<b>Vehicle Type</b>							
Automobile	76.0%	82.9%	88.0%	84.6%	87.2%	86.8%	10.8%
Truck	80.8%	75.7%	87.1%	79.4%	79.4%	84.2%	3.4%
Van	82.0%	85.4%	92.2%	88.8%	88.6%	92.3%	10.3%
<b>Gender</b>							
Male	73.5%	81.8%	86.3%	80.0%	86.4%	85.9%	12.4%
Female	80.4%	83.7%	88.6%	87.6%	87.6%	88.7%	8.3%
<b>Driver's Belt Status</b>							
Belted	91.2%	94.0%	95.9%	91.6%	92.2%	92.7%	1.5%
Unbelted	51.8%	57.1%	62.6%	62.4%	68.1%	66.8%	15.0%

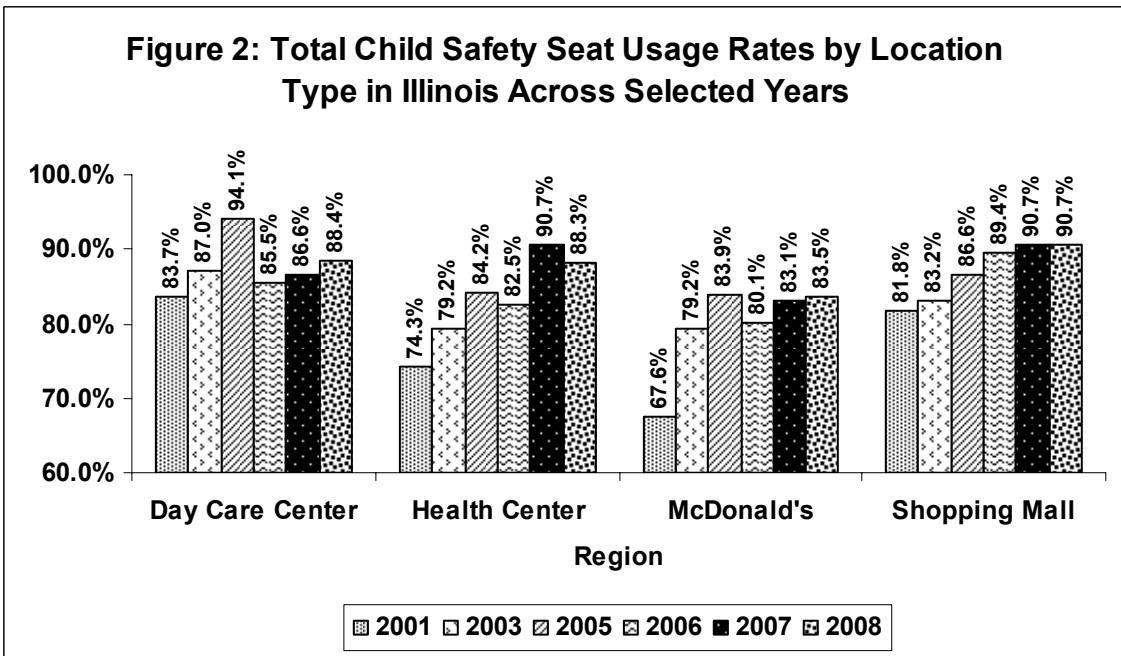
\* Percent change is calculated by subtracted the 2001 usage rates from the 2008 usage rates.



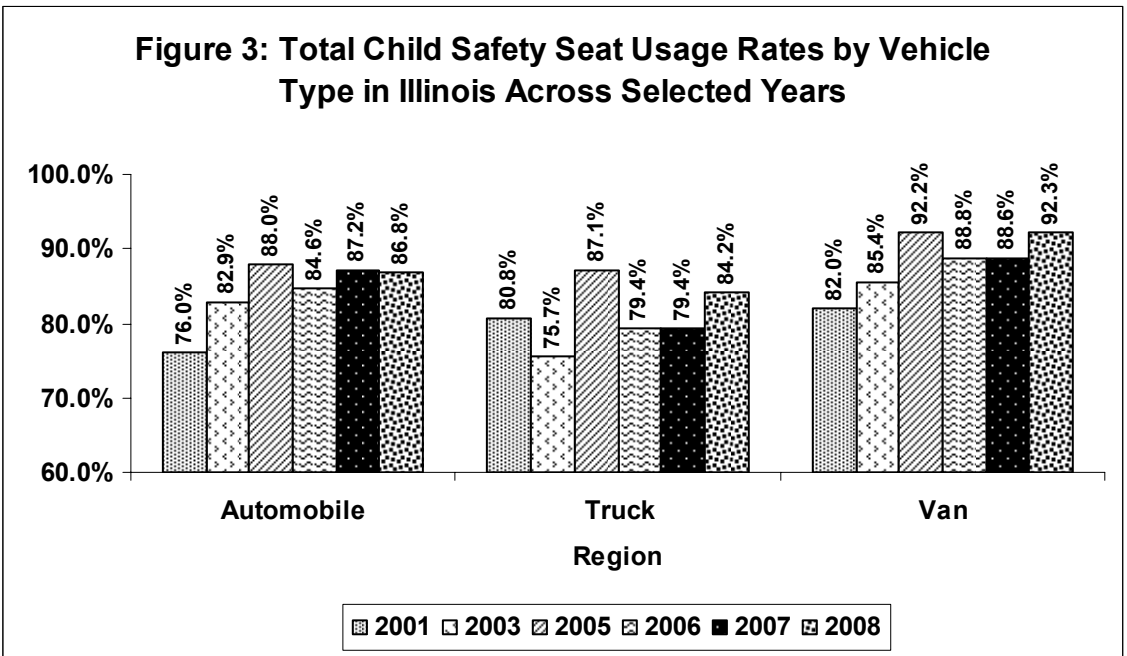
**Figure 1: Total Child Safety Seat Usage Rates by Region in Illinois Across Selected Years**



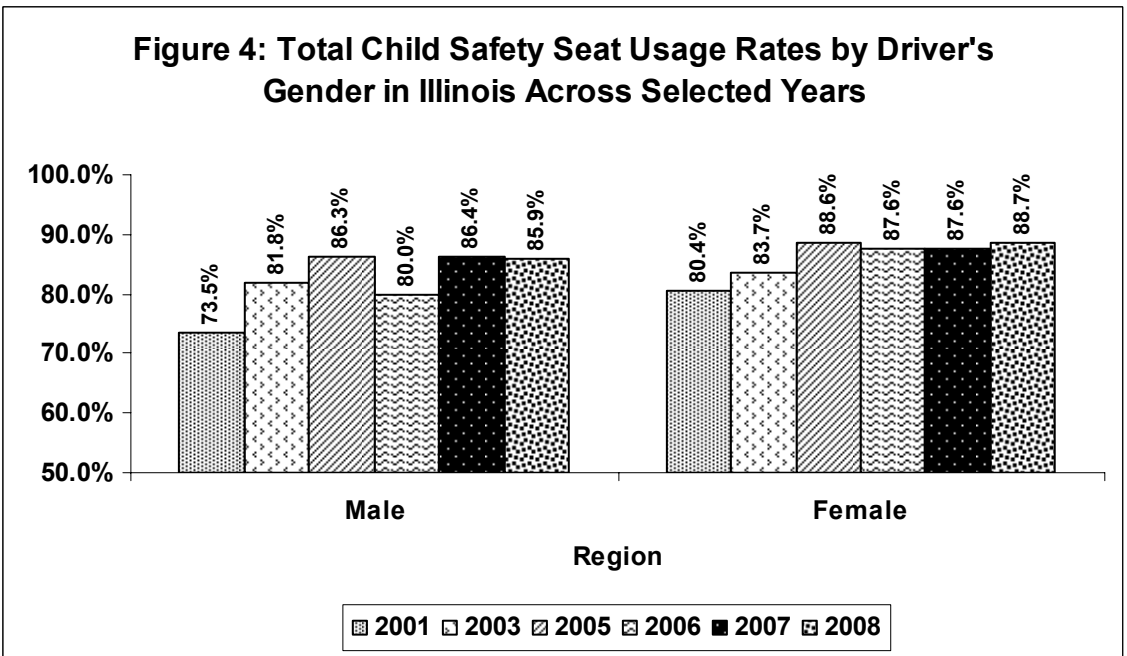
**Figure 2: Total Child Safety Seat Usage Rates by Location Type in Illinois Across Selected Years**



**Figure 3: Total Child Safety Seat Usage Rates by Vehicle Type in Illinois Across Selected Years**



**Figure 4: Total Child Safety Seat Usage Rates by Driver's Gender in Illinois Across Selected Years**



**Figure 5: Total Child Safety Seat Usage Rates by Driver's Belt Status in Illinois Across Selected Years**

