



**Illinois Department
of Transportation**

TECHNICAL REPORT

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Child Safety Seat Usage in Illinois

July/August 2015 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., Sustained Traffic Enforcement Program & Local Alcohol Program) 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/August 2015 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, 1340 North Grand Avenue East, Springfield, Illinois 62702.

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Executive Summary

Using a multi-stage random sampling technique, a total of 3,048 children were observed in 2,187 passenger cars and pickup trucks in Illinois in 2015. There were a total of 119 randomly selected survey locations: 40 day care centers, 11 health care centers, 36 McDonald's restaurants, and 32 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/August 2015, a total of 3,048 children were observed in 2,187 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 91.4 percent. When only including the observations where the safety seat was used properly, the usage rate drops to 55.0 percent.
3. The collar counties had the highest percentage of child restraint use at 93.4 percent. The child safety seat usage rate in the downstate counties and Cook County was 87.2 percent and 91.4 percent respectively. Cook County had the highest percentage of properly restrained children at 58.6 percent. The percentage of properly restrained children in the collar counties and downstate counties was 55.3 percent and 42.3 percent respectively.
4. Day care centers had the highest percentage of children who were restrained at 92.5 percent. The child safety seat usage rate at health care centers was 91.7 percent. The child safety seat usage rate at shopping malls and McDonald's restaurants was 91.4 percent and 90.5 percent respectively. Based on proper child safety seat use, health care centers had the highest percentage of properly restrained children at 58.7 percent. The child safety seat usage rate at shopping malls and day care centers was 55.3 percent and 54.8 percent respectively. McDonald's restaurants had the lowest percentage of properly restrained children at 53.5 percent.
5. Vans had the highest percentage of children who were restrained and properly restrained at 97.0 percent and 60.5 percent respectively. In automobiles, the percentage of children who were restrained and properly restrained was 91.02 percent and 55.1 percent respectively. The child safety seat usage rate for pickup trucks was 82.6 percent. When excluding incorrect use, the child safety seat usage rate in pickup trucks was 42.5 percent.
6. When a female was driving, 92.5 percent of children were restrained and 57.0 percent of children were properly restrained. When a male was driving, 89.6 percent of children were restrained and only 52.2 percent of children were properly restrained.
7. When a driver was wearing their safety belt, 95.6 percent of children were restrained. When excluding incorrect use, 62.4 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 69.6 percent of children were restrained. When excluding incorrect use, only 19.2 percent of these children were properly restrained.

8. The total usage rate from 2001 thru 2015 increased significantly by 13.4 percentage points from 78.0 percent in 2001 to 91.4 percent in 2015. The rate of increase ranges from 11.7 percent for vehicles with one child to 39.4 percent for vehicles with four 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 (2006-2014) to the years prior to 2006. The correct usage rate of restrained children increased by 1.1 percentage points from 53.9 percent in 2006 to 55.0 percent in 2015.

Observational Survey

Using a multi-stage random sampling technique, a total of 3,048 children were observed in 2,187 passenger cars and pickup trucks in Illinois in 2015. There were a total of 119 randomly selected survey locations: 40 day care centers, 11 health care centers, 36 McDonald's restaurants, and 32 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 2015.

Table 1 shows that the overall child restraint usage rate in Illinois is 91.4 percent. After excluding total number of observations in which the child restraint is used incorrectly, the usage rate is reduced to 55.0 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 92.7 percent and 55.0 percent respectively. On the other hand, these percentages are lower for Child 3 at 74.7 percent and 40.0 percent respectively.

Table 1: 2015 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	159	826	1,202	2,187	92.7%	55.0%
Child 2	80	254	437	771	89.6%	56.7%
Child 3	19	26	30	75	74.7%	40.0%
Child 4	5	3	7	15	66.7%	46.7%
Total	263	1,109	1,676	3,048	91.4%	55.0%

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 (77.3 percent). The percentage of vans and trucks observed were 14.9 percent and 7.8 percent respectively. Based on driver's gender, 65.8 percent of the drivers observed were female, while only 34.2 percent of the observations were male. Based on driver's belt status, 84.9 percent of drivers were observed wearing their seat belts, while the remaining 15.1 percent were unbelted. Based on location type, the largest percentage of vehicles was observed at shopping malls (38.0 percent). More than 23 percent of the vehicles were observed at McDonald's restaurants and 30.3

percent were observed at day care centers. The smallest percentage of vehicles was observed at health care centers (8.3 percent).

Table 2: Frequency and Percentage Distributions of Selected Demographics for the 2015 Child Safety Seat Survey

Type of Vehicle		
	Frequency	Percentage
Automobile	1,677	77.3%
Truck	169	7.8%
Van	323	14.9%
TOTAL	2,169	100.0%
Driver's Gender		
	Frequency	Percentage
Female	1,401	65.8%
Male	729	34.2%
TOTAL	2,130	100.0%
Driver's Belt Status		
	Frequency	Percentage
Belted	1,792	84.9%
Not Belted	318	15.1%
TOTAL	2,110	100.0%
Total Vehicles Observed by Location Type		
	Frequency	Percentage
Daycare	662	30.3%
Health Center	182	8.3%
McDonald's	513	23.5%
Shopping Mall	830	38.0%
TOTAL	2,187	100.0%
TOTAL	2,187	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 93.4 percent. The child safety seat usage rate in the downstate counties and Cook County was 87.2 percent and 91.4 percent respectively. Cook county had the highest percentage of properly restrained children at 58.6 percent. The percentage of properly restrained children in the collar counties was 55.3 percent. The downstate counties had the lowest percentage of properly restrained children at 42.3 percent.

**Table 3: Analysis of the 2015 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	503	55.3%	938	58.6%	212	42.3%	1,653	56.3%
Incorrectly Restrained	347	38.1%	525	32.8%	225	44.9%	1,097	37.4%
Total Restrained*	850	93.4%	1,463	91.4%	437	87.2%	2,750	93.7%
Not Restrained	60	6.6%	138	8.6%	64	12.8%	262	8.9%
<i>Column Totals</i>	910	100.0%	1,601	100.0%	501	100.0%	2,935	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. Day care centers had the highest percentage of children who were restrained at 92.5 percent. The child safety seat usage rate at health care centers was 91.7 percent. The child safety seat usage rate at shopping malls and McDonald's restaurants was 91.4 percent and 90.5 percent respectively. Based on proper child safety seat use, health care centers had the highest percentage of properly restrained children at 58.7 percent. The percentage of properly restrained children at shopping malls and day care centers was 55.3 percent and 54.8 percent respectively. McDonald's restaurants had the lowest percentage of properly restrained children at 53.5 percent.

**Table 4: Analysis of the 2015 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	484	54.8%	135	58.7%	390	53.5%	667	55.3%	1,676	55.0%
Incorrectly Restrained	333	37.7%	71	30.9%	270	37.0%	435	36.1%	1,109	36.4%
Total Restrained*	817	92.5%	211	91.7%	660	90.5%	1,102	91.4%	2,790	91.5%
Not Restrained	66	7.5%	24	10.4%	69	9.5%	104	8.6%	263	8.6%
<i>Column Totals</i>	883	100.0%	230	100.0%	729	100.0%	1,206	100.0%	3,048	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 97.0 percent and 60.5 percent respectively. Ninety-one (91.0) percent of children in automobiles were restrained. When excluding incorrect use, the child safety seat usage rate in automobiles was 55.1 percent. The child safety seat usage rate for pickup trucks was 82.6 percent. When excluding incorrect use, the child safety seat usage rate in pickup trucks was 42.5 percent.

**Table 5: Analysis of the 2015 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	1,238	55.1%	90	42.5%	338	60.5%	1,666	55.1%
Incorrectly Restrained	808	35.9%	85	40.1%	204	36.5%	1,097	34.3%
Total Restrained*	2,046	91.0%	175	82.6%	542	97.0%	2,763	89.4%
Not Restrained	202	9.0%	37	17.5%	17	3.0%	256	10.6%
<i>Column Totals</i>	2,248	100.0%	212	100.0%	559	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 total does not equal 3048 cases due to missing data.

Table 6 shows that male and female drivers have similar child safety seat usage rates. When a female was driving, 92.5 percent of children were restrained and only 57.0 percent of children were properly restrained. When a male was driving, only 89.6 percent of children were restrained and only 52.2 percent of children were properly restrained.

**Table 6: Analysis of the 2015 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	534	52.2%	1,105	57.0%	1,639	55.4%
Incorrectly Restrained	383	37.4%	686	35.4%	1,069	36.1%
Total Restrained*	933	89.6%	1,791	92.5%	2,708	91.5%
Not Restrained	106	10.4%	146	7.5%	252	8.5%
<i>Column Totals</i>	1,023	100.0%	1,937	100.0%	2,960	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 3048 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**), almost 85 percent of all drivers observed with children in their vehicles were wearing their safety belts (1,888 belted drivers divided by 2,079 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, over 95 percent of children were restrained. When excluding incorrect use, only 62.4 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 69.6 percent of children were restrained. When excluding incorrect use, only 19.2 percent of these children were properly restrained.

**Table 7: Analysis of the 2015 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	1,530	62.4%	92	19.2%	1,622	55.3%
Incorrectly Restrained	815	33.2%	242	50.4%	1,057	36.0%
Total Restrained*	2,345	95.6%	334	69.6%	2,679	91.3%
Not Restrained	108	4.4%	146	30.4%	254	8.7%
<i>Column Totals</i>	2,453	100.0%	480	100.0%	2,933	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 3048 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 2015. As shown in this table, the total usage rate increased significantly by 13.4 percentage points from 78.0 percent in 2001 to 91.4 percent in 2015. The rate of increase ranges from 11.7 percent for vehicle with one child to 39.4 percent for vehicles with four children. In 2010, the total usage rate peaked at 92.8 percent.

Table 9 provides information about the correct usage rate of restrained children for only 2006 thru 2015 eliminating years prior to 2006. As indicated earlier, since IDOT revised the definition of correct child safety seat use in 2006, it would be incorrect to compare the usage rate during the current years (2006-2015) to the years prior to 2006. As shown in this table, the correct usage rate of restrained children decreased by 0.3 percentage point for one child, but it increased by 1.7 percentage points for three children, 5.0 percentage points for two children, and 10.3 percentage points for four children.

Table 10 shows comparative analyses of child safety seat usage rates for 2001 through 2015. 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 2015 usage rates.

Figure 1 shows the total usage rate of restrained children by the selected regions in Illinois. From 2001 to 2015, all regions noticed increases in child safety seat use. From 2010 to 2013, there was a slight decrease in the usage rate across the different regions, but, during 2014 and 2015, this rate has increased. The child safety seat usage rate in the collar counties increased from 71.5 percent in 2001 to 93.4 percent in 2015. In the downstate counties, the child safety seat usage rates increased from 77.2 percent in 2001 to 87.2 percent in 2015. In Cook County, the child safety seat usage rate increased from 81.2 percent in 2001 to 93.4 percent in 2015.

Figure 2 shows the total child safety seat usage rate by location type in Illinois. From 2001 to 2010, the total usage rate of restrained children increased at all location types. From 2010 to 2014, there was a slight decrease in the usage rates across all location types, but the usage

rate increased in 2015. The total usage rate at McDonald's increased from 67.6 percent in 2001 to 90.5 percent in 2015. The total usage rate at health care centers increased from 74.3 percent in 2001 to 91.7 percent in 2015. The total usage rate for shopping malls increased from 81.8 percent in 2001 to 91.4 percent in 2015. The total usage rate at day care centers increased from 83.7 percent in 2001 to 92.5 percent in 2015.

Figure 3 shows the total usage rate of restrained children by vehicle type in Illinois. From 2001 to 2014, the total usage rate increased in automobiles and vans. While the total usage rate increased in pickup trucks from 2001 through 2010, from 2010 through 2015, the usage rates in pickup trucks has fluctuated greatly. In automobiles, the total usage rate of restrained children increased by 15.0 percentage points (an increase from 76.0 percent in 2001 to 91.0 percent in 2014). In vans, the total usage rate of restrained children increased from 82.0 percent in 2001 to 97.0 percent in 2015. In pickup trucks, the total usage rate of restrained children increased by 1.8 percentage points (from 80.8 percent in 2001 to 82.6 percent in 2015). From 2011 through 2014, due to significantly low observations of pickup trucks, the total usage rate of restrained children has fluctuated greatly.

Figure 4 shows the total usage rate of restrained children by driver's gender in Illinois. From 2001 to 2014, the total usage rate of restrained children for male drivers increased by 16.1 percentage points and for female drivers it increased by 12.1 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. The child safety seat usage rate for belted drivers slightly increased by 4.4 percentage points from 2001 through 2015. The total child safety seat usage rate for unbelted drivers gradually has fluctuated over the years. In 2001, it was 51.8 percent, but, in 2015, it increased to 69.6 percent. The usage rates for unbelted drivers should be approached with caution due to the low number of observations of vehicles with unbelted drivers. This would also attribute to the variability of it from year to year.

TABLE 8
Total Child Safety Seat Usage Rates in Illinois
(2001-2015)

Child Number	Total Usage Rate of Restrained Children													Percent Change* (2001-2015)
	Total Use (2001)	Total Use (2003)	Total Use (2005)	Total Use (2006)	Total Use (2007)	Total Use (2008)	Total Use (2009)	Total Use (2010)	Total Use (2011)	Total Use (2012)	Total Use (2013)	Total Use (2014)	Total Use (2015)	
Statewide	78.0%	83.0%	87.7%	85.4%	87.2%	87.7%	90.7%	92.8%	90.2%	90.5%	86.5%	89.2%	91.4%	13.4%
Child #														
Child 1	81.0%	85.3%	89.4%	87.4%	88.8%	90.5%	92.1%	93.1%	90.5%	91.5%	87.9%	90.9%	92.7%	11.7%
Child 2	74.5%	80.0%	85.3%	79.7%	84.2%	84.7%	88.3%	93.1%	89.9%	89.7%	86.0%	86.2%	89.6%	15.1%
Child 3	51.1%	64.9%	75.0%	76.5%	75.8%	63.0%	78.4%	82.8%	83.9%	76.3%	80.2%	76.3%	74.7%	23.6%
Child 4	27.3%	50.0%	60.0%	72.7%	60.0%	50.0%	45.5%	71.4%	100.0%	53.8%	33.3%	63.6%	66.7%	39.4%

* Percent change was calculated by subtracting the 2001 Total Usage Rate from the 2015 Total Usage Rate.

TABLE 9
Correct Child Safety Seat Usage Rates in Illinois
(2006-2015)

Child Number	Correct Usage Rate of Restrained Children (excludes Incorrect Use)											Percent Change* (2006-2015)
	Proper Use (2006)	Proper Use (2007)	Proper Use (2008)	Proper Use (2009)	Proper Use (2010)	Proper Use (2011)	Proper Use (2012)	Proper Use (2013)	Proper Use (2014)	Proper Use (2015)		
Statewide	53.9%	53.6%	56.4%	47.7%	44.9%	48.2%	59.5%	50.2%	54.7%	55.0%	1.1%	
Child #												
Child 1	55.3%	54.2%	56.9%	47.7%	43.5%	48.4%	60.4%	50.8%	56.4%	55.0%	-0.3%	
Child 2	51.7%	54.1%	58.6%	50.0%	52.6%	48.8%	58.3%	50.6%	51.1%	56.7%	5.0%	
Child 3	38.3%	37.4%	38.0%	35.2%	20.4%	41.1%	47.5%	47.0%	43.3%	40.0%	1.7%	
Child 4	36.4%	33.3%	32.1%	0.0%	0.0%	0.0%	38.5%	23.8%	45.5%	46.7%	10.3%	

* Percent change was calculated by subtracting the 2006 Proper Usage Rate from the 2015 Proper Usage Rate.

Table 10
Total Child Safety Seat Usage Rates in Illinois
by Selected Characteristics
(2001-2015)

	Total Usage Rate of Restrained Children													
	Usage Rate 2001	Usage Rate 2003	Usage Rate 2005	Usage Rate 2006	Usage Rate 2007	Usage Rate 2008	Usage Rate 2009	Usage Rate 2010	Usage Rate 2011	Usage Rate 2012	Usage Rate 2013	Usage Rate 2014	Usage Rate 2015	Percent Change*
	78.0%	83.0%	87.7%	85.4%	87.2%	87.7%	90.7%	92.8%	90.2%	90.5%	86.5%	89.2%	91.5%	13.5%
Statewide														
Region														
Cook County	81.2%	85.2%	90.3%	82.4%	84.1%	85.2%	90.6%	90.9%	87.9%	88.8%	88.2%	84.9%	91.4%	10.2%
Collar Counties	71.5%	82.4%	87.3%	88.0%	93.4%	94.4%	93.5%	96.9%	94.1%	96.2%	88.6%	92.3%	93.4%	21.9%
Downstate Counties	77.2%	78.9%	81.5%	86.7%	86.9%	85.5%	87.3%	90.4%	91.1%	85.7%	79.7%	84.9%	87.2%	10.0%
Location														
Day Care Center	83.7%	87.0%	94.1%	85.5%	86.6%	88.4%	89.5%	90.7%	90.6%	89.6%	85.6%	89.5%	92.5%	8.8%
Health Center	74.3%	79.2%	84.2%	82.5%	90.7%	88.3%	85.2%	92.8%	90.8%	88.9%	81.9%	89.4%	91.7%	17.4%
McDonald's	67.6%	79.2%	83.9%	80.1%	83.1%	83.5%	87.9%	90.6%	85.6%	87.7%	82.4%	84.4%	90.5%	22.9%
Shopping Mall	81.8%	83.2%	86.6%	89.4%	90.7%	90.7%	94.8%	96.2%	93.2%	93.6%	90.7%	93.4%	91.4%	9.6%
Vehicle Type														
Automobile	76.0%	82.9%	88.0%	84.6%	87.2%	86.8%	90.5%	92.8%	91.2%	90.5%	84.2%	89.9%	91.0%	15.0%
Truck	80.8%	75.7%	87.1%	79.4%	79.4%	84.2%	88.2%	90.9%	65.7%	81.0%	89.1%	77.0%	82.6%	1.8%
Van	82.0%	85.4%	92.2%	88.8%	88.6%	92.3%	93.0%	94.5%	91.2%	93.5%	92.3%	91.3%	97.0%	15.0%
Gender														
Male	73.5%	81.8%	86.3%	80.0%	86.4%	85.9%	90.5%	92.2%	87.3%	88.1%	84.0%	87.9%	89.6%	16.1%
Female	80.4%	83.7%	88.6%	87.6%	87.6%	88.7%	90.9%	93.1%	91.7%	91.6%	87.3%	90.1%	92.5%	12.1%
Driver's Belt Status														
Belted	91.2%	94.0%	95.9%	91.6%	92.2%	92.7%	95.1%	94.6%	94.3%	94.7%	91.8%	94.2%	95.6%	4.4%
Unbelted	51.8%	57.1%	62.6%	62.4%	68.1%	66.8%	65.7%	81.9%	56.0%	55.3%	62.7%	48.2%	69.6%	17.8%

* Percent Change is calculated by subtracting the 2001 usage rates from the 2015 usage rates.

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

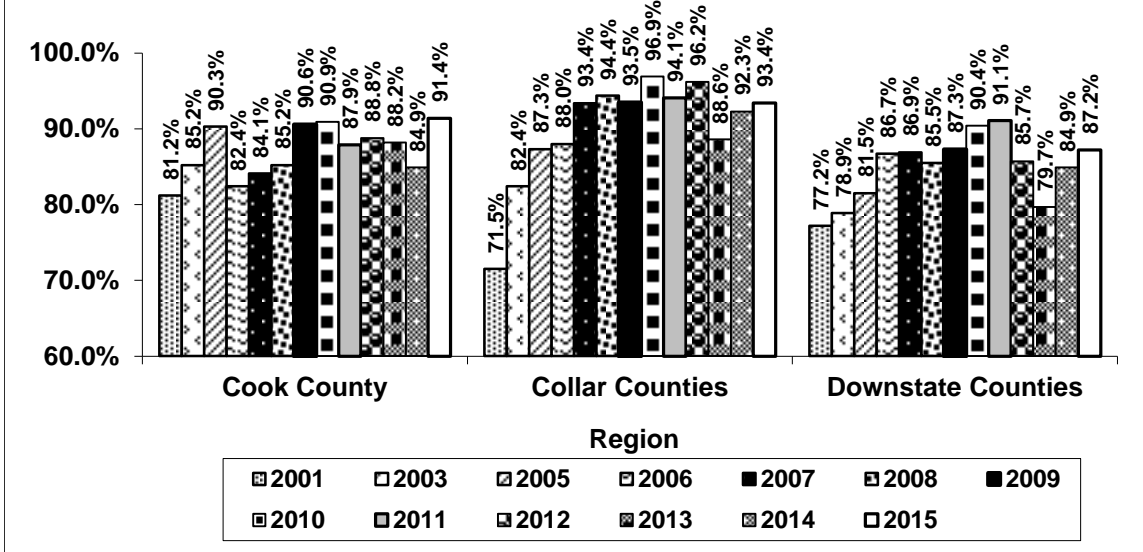


Figure 2: Total Child Safety Seat Usage Rates by Location Type in Illinois Across Selected Years

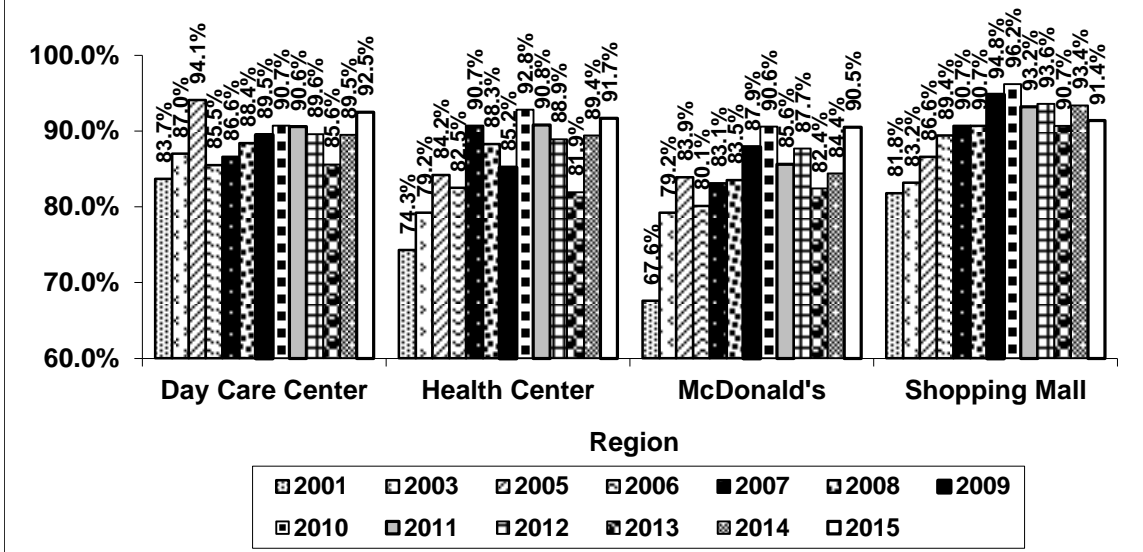


Figure 3: Total Child Safety Seat Usage Rates by Vehicle Type in Illinois Across Selected Years

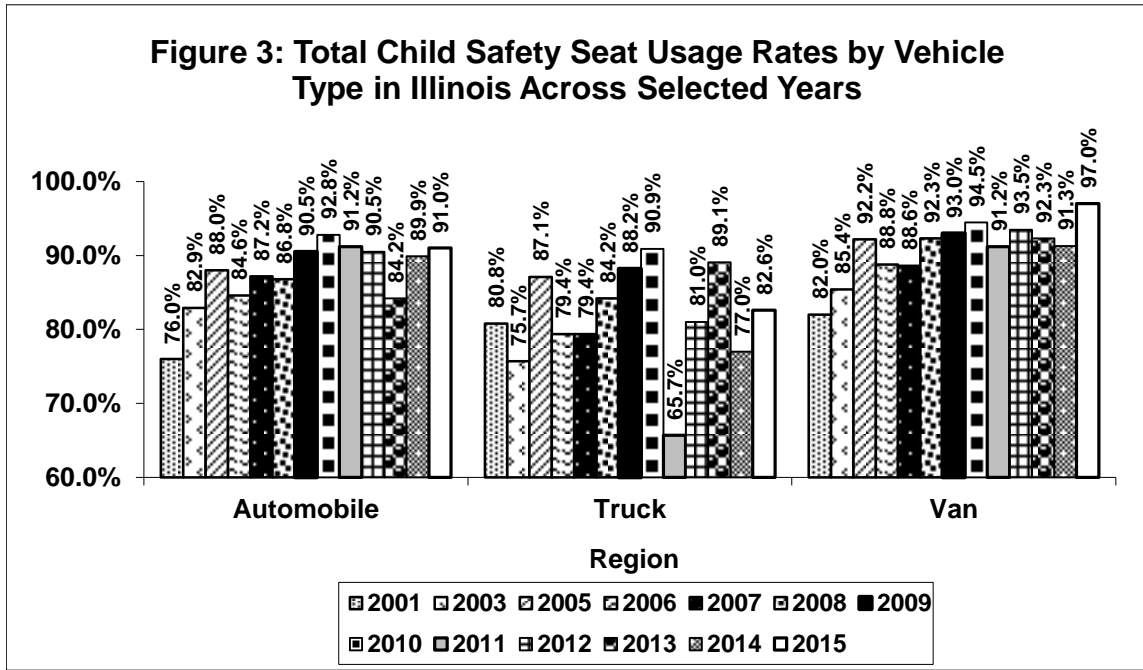


Figure 4: Total Child Safety Seat Usage Rates by Driver's Gender in Illinois Across Selected Years

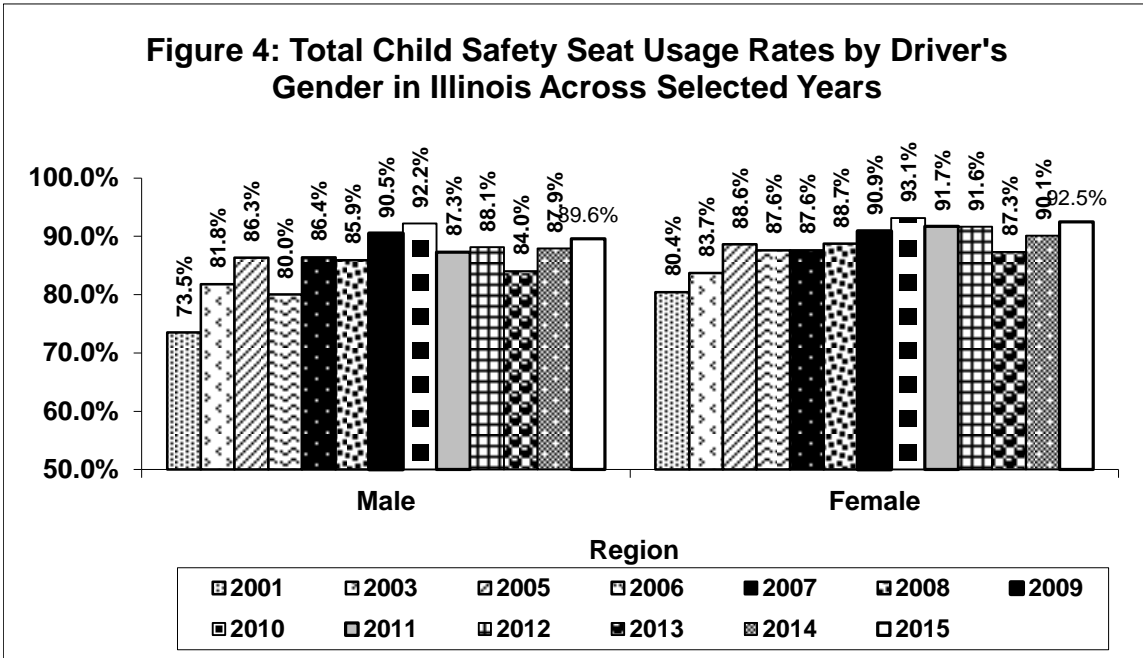


Figure 5: Total Child Safety Seat Usage Rates by Driver's Belt Status in Illinois Across Selected Years

