

2017 LOUISIANA CHILD RESTRAINT OBSERVATION SURVEY RESULTS
LHSC Project No. 2017-20-10



Prepared for:

LOUISIANA HIGHWAY SAFETY COMMISSION
Dr. Katara Williams, Executive Director
Post Office Box 66336
Baton Rouge, LA 70896

Prepared by:

PREUSSER RESEARCH GROUP, INC.
7100 Main Street
Trumbull, CT 06611

DR. HELMUT SCHNEIDER
Louisiana State University, ISDS Department
Baton Rouge, LA 70803

This document is a product of Preusser Research Group, Inc. under contract with The Louisiana Highway Safety Commission. The work presented here was completed under LHSC Project Number 2017-20-10.



TABLE OF CONTENTS

| | |
|---|----|
| INTRODUCTION | 1 |
| METHODOLOGY | 2 |
| Observation Site Selection | 2 |
| Scheduling | 3 |
| Data Collection Protocol and Procedures | 3 |
| FINDINGS | 4 |
| Usage by Age Category | 4 |
| Usage by Region | 5 |
| Usage by Louisiana State Police Troop Area | 6 |
| Front versus Back Seat Usage | 6 |
| Trends in Child Restraint Usage | 7 |
| CONCLUSIONS | 10 |
| Appendix A. Child Restraint Survey Observation Sites | |
| Appendix B. Child Restraint Survey Data Collection Form | |

INTRODUCTION

BACKGROUND

Child safety seats have been shown to reduce fatal injury by 71 percent for infants (under 1-year old) and by 54 percent for toddlers (1-to-4 years old) in passenger cars. The corresponding reductions in light trucks are 58 percent and 59 percent respectively. Among children under 5 years old, an estimated 252 lives were saved nationwide in 2014 by restraint use (NHTSA, 2014). Older children and adults, are far more likely to survive a severe crash with less injury when wearing a safety belt (CDC, 2017).

LOUISIANA CHILD PASSENGER LAWS

Louisiana law (R.S. 32:295) states that children under the age of 6 years or less than 60 pounds must be in a child restraint system or booster seat that is age and size appropriate, in accordance with manufacturers recommendations. Children 6 to 12 years of age must be restrained by a lap belt, shoulder harness, or an age / size appropriate child safety or booster seat.

TYPES OF RESTRAINT

Child safety experts recommend that children aged 12 and under should ride properly buckled in the back seat. Airbags can kill young children riding in the front seat. Never place a rear-facing car seat in the front seat or in front of an airbag.

Type of restraint is determined based on age, weight, and height of the child. The device manufacturer provides directions that should be followed. Car seat inspection stations are located throughout Louisiana.

Information on types of restraint and experts who can help answer questions on proper seats and correct installation can be located at the Louisiana Highway Safety Commission web portal:

http://webdev01.dps.louisiana.gov/dps_redesign/hac/child.html

2017 CHILD RESTRAINT SURVEY

Preusser Research Group, Inc. (PRG), under contract with the Louisiana Highway Safety Commission (LHSC), conducted an observational survey in May 2017 to determine child restraint use rates across the State of Louisiana. LHSC sponsored this survey to determine compliance with the state's Child Passenger Safety Law.

The 2017 Child Restraint Survey in Louisiana followed a design prepared by Dr. Helmut Schneider. Dr. Schneider is the Ourso Family Distinguished Professor of Information Systems and Chairman of Information Systems and Decision Sciences at Louisiana State University, Baton Rouge, Louisiana. The Schneider design provided for data to be collected at specified locations throughout eight regions comprising the State of Louisiana.

The 2017 survey was the 30th child restraint usage survey (statewide survey) conducted in Louisiana. This was the fourth year Preusser Research Group was responsible for the observational data collection. The findings from the 2017 survey are presented in this report.

METHODOLOGY

Observation Site Selection

Observations took place at the same 69 site locations used since year 2011. These locations were spread among 8 regions (Figure 1) to provide statewide representation. See Appendix A for a complete listing of the observation sites.

PRG provided each observer a site location list and a schedule that included the day of week and times of day to observe. PRG observers used site maps made by observers in 2013 in order to replicate the location to stand while observing and the flow of traffic to observe at each site. The same observers from 2015 went to their same locations for 2017.

Data collectors observed from locations at or near traffic control devices or entrances/exits of businesses. In some cases, more than one lane of traffic and direction of travel was observed. PRG instructed observers to carefully position themselves to allow for a safe and unobstructed view inside vehicles while not disturbing the flow of passing traffic.

FIGURE 1: LOUISIANA SURVEY REGIONS



Scheduling

Observations took place on the same days of week and times of day as in previous survey efforts. The Louisiana Child Restraint survey was conducted by Applied Technology prior to 2013. PRG discussed details of scheduling with Applied Technology to help develop the 2013 observation schedule and observational protocol in order to closely replicate prior surveys. The 2017 survey was completed using the same survey schedule developed and used in 2013, 2014, and 2015.

Data Collection Protocol and Procedures





Each observation period lasted one hour (60 minutes). Observers wore reflective safety vests at all times during data collection activities. Each observer also carried a letter of identification stating that the Louisiana Highway Safety Commission commissioned the survey. The letter indicated the purpose of the survey and provided details about the survey dates and times.

Observers determined a child occupant's approximate age, placement in the vehicle (including seat position), and use of a safety restraint device. Observers were provided an explanation of the current child passenger safety law (Table 1) to be knowledgeable under what conditions children are to be restrained in Louisiana. Observers first determined the approximate age group of the child occupant and circled the corresponding age group on the data form (Appendix B). If the child appeared restrained, "Yes" was circled in the "Restrained" column on the data collection form. If a

child appeared unrestrained, observers recorded “No” in the “Restrained” column on the form. If a partial determination was made, the observation was recorded as “Undetermined.”

Multiple children were often observed in a vehicle. When that was the case, restraint use for the youngest child was recorded first, then information for any additional child occupants was recorded as time/visibility allowed.

TABLE 1. LOUISIANA CHILD RESTRAINT REQUIREMENTS

| Age Group | Ages | Weight | Facing | Restraint Device |
|-----------|------------------------|-------------------|-----------------|--|
| Infant | < 1 | < 20 pounds | rear-facing | infant seat  |
| 1 - 3 | 1, 2, 3 | 20-39 pounds | forward-facing | child safety seat (with internal harness)  |
| 4 - 5 | 4, 5 | 40-59 pounds | (not specified) | belt positioning booster seat (backless or high-backed)  |
| 6 - 12 | 6, 7, 8, 9, 10, 11, 12 | 60 or more pounds | (not specified) | child booster seat or safety belt  |

Child Occupant Seatbelt ([R.S. 32:295](#)) - Children under the age of 6 years or less than 60 lbs. must be in a child restraint system or booster seat that is age and size appropriate, in accordance with manufacturers recommendations. Children 6 to 12 years of age must be restrained by a lap belt, shoulder harness, or an age / size appropriate child safety or booster seat.

FINDINGS

PRG observers collected the survey data between May 5th and May 13th, 2017. Ultimately, the survey included data on 1,941 children under the age of 13. Table 2 displays the number of children observed by age and by region across all 69 observation sites.

TABLE 2. NUMBER OF OBSERVATIONS MADE AND SITES WORKED BY REGION (2017)

| Regions | Number of Sites | Total Observations | Age Unk. | Age <1 | Age 1 - 3 | Age 4 - 5 | Age 6 - 12 |
|-----------------------------|-----------------|--------------------|----------|--------|-----------|-----------|------------|
| 1. New Orleans vicinity | 15 | 450 | | 60 | 72 | 87 | 231 |
| 2. Baton Rouge vicinity | 10 | 307 | | 40 | 46 | 42 | 179 |
| 3. Houma/Thibodaux vicinity | 7 | 208 | | 25 | 55 | 70 | 58 |
| 4. Lafayette vicinity | 10 | 197 | | 35 | 47 | 32 | 83 |
| 5. Lake Charles vicinity | 5 | 144 | | 23 | 41 | 26 | 54 |
| 6. Alexandria vicinity | 7 | 174 | | 22 | 44 | 30 | 78 |
| 7. Shreveport vicinity | 9 | 314 | 1 | 23 | 88 | 123 | 79 |
| 8. Monroe vicinity | 6 | 147 | | 20 | 63 | 39 | 25 |
| Total | 69 | 1,941 | 1 | 248 | 456 | 449 | 787 |

Usage by Age Category

Slightly less than four out of five (78.0%) of all children included in the survey were restrained (Table 3). The sample error for this estimate was 1.3 percentage points.

Survey data indicated that nearly every child less than one-year old was riding in a child safety seat (95.3%). Usage was 100% in three of eight Louisiana regions (New Orleans, Baton Rouge, and Alexandria) and ranged from a low of 76.7% (Shreveport) to 98.2% (Lafayette) in the other five regions (Table 3).

The survey data indicated that 89.0% of children ages one through three were restrained. Usage among this age group varied across the regions of the State. Child restraint usage ranged from a low of 57.4% in the Monroe Region to a high of 100% in the Baton Rouge Region.

Four and five-year old children were restrained least often (74.1%) compared to both younger and older children (statewide). Survey results by region indicated vast differences between the regions. Survey data indicated the highest observed usage for four and five-year old children in the Baton Rouge Region (90.5%) and lowest observed usage in the Lafayette Region (43.8%). However, it must be noted that sample sizes by regions and age groups are too small to draw reliable conclusions regarding differences between regions by age group.

The restraint usage rate in Louisiana for children under age six was 84.4% with a standard error of 1.0%. Survey data also indicated that 74.2% of children ages six through twelve were restrained with a standard error of 1.9%.

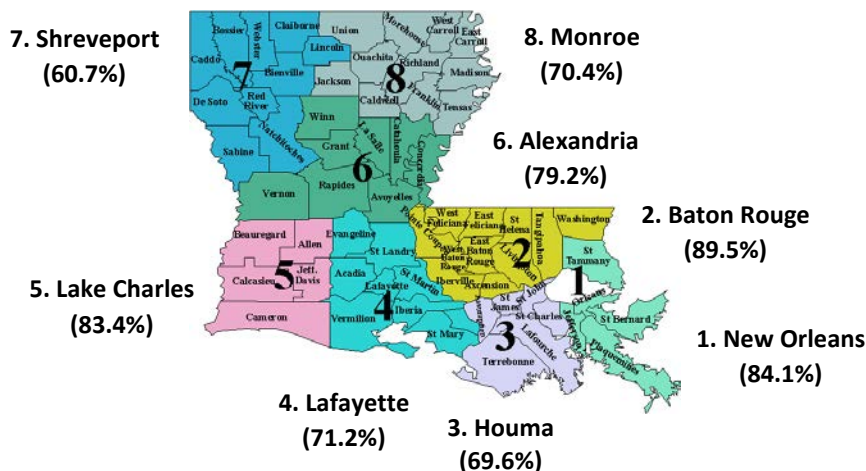
TABLE 3: CHILD RESTRAINT USAGE ESTIMATES (PERCENT RESTRAINED) AND ASSOCIATED SAMPLE ERROR BY REGION AND AGE CATEGORY (2017) — WEIGHTED DATA.

| Regions | Age < 1 | Age 1 - 3 | Age 4 - 5 | Age 6 - 12 | Age <6 | Age <13 | Error Age <6 | Error Age <13 |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 1. New Orleans | 100.0% | 98.9% | 88.6% | 77.9% | 95.0% | 84.1% | 1.7% | 2.3% |
| 2. Baton Rouge | 100.0% | 100.0% | 90.5% | 85.5% | 96.2% | 89.5% | 1.8% | 1.8% |
| 3. Houma/Thibodaux | 91.8% | 69.2% | 72.8% | 66.6% | 75.0% | 69.6% | 3.5% | 4.6% |
| 4. Lafayette | 98.2% | 90.1% | 43.8% | 69.8% | 73.6% | 71.2% | 3.2% | 4.0% |
| 5. Lake Charles | 96.3% | 100.0% | 83.3% | 78.0% | 92.6% | 83.4% | 2.8% | 3.2% |
| 6. Alexandria | 100.0% | 94.9% | 63.6% | 76.2% | 83.9% | 79.2% | 3.3% | 3.6% |
| 7. Shreveport | 76.7% | 71.1% | 65.7% | 55.3% | 70.1% | 60.7% | 3.9% | 5.2% |
| 8. Monroe | 89.2% | 57.4% | 53.4% | 75.1% | 62.1% | 70.4% | 4.0% | 5.9% |
| Statewide | 95.3% | 89.0% | 74.1% | 74.2% | 84.4% | 78.0% | 1.0% | 1.3% |
| Error | 1.1% | 1.2% | 2.1% | 1.9% | 1.0% | 1.3% | | |

Usage by Region

Figure 2 shows that child restraint usage for all ages was highest in the Baton Rouge Region (89.5%) followed by the New Orleans Region (84.1%), Lake Charles (83.4%), Alexandria Region (79.2%) and then the Lafayette Region (71.2%). In comparison, the child restraint usage rate was lower in the Monroe and Houma/Thibodaux Regions (70.4% and 69.6%, respectively) and much lower in the Shreveport Region (60.7%). However, since the standard errors range from 1.7 percentage points in New Orleans to 4.0 percentage points in Monroe, some differences may be due to chance.

FIGURE 2: CHILD RESTRAINT USAGE (AGE < 13) PER REGION



Usage by Louisiana State Police Troop Area

Child restraint usage varied by Louisiana State Police Troop Area (Table 4). Children under six years of age used restraints most often in the areas covered by Troops A (95.5%) and B (93.0%) and noticeably less in Troop F (62.1%). Troop A also had the highest restraint use (85.2%) among the older children ages six through twelve, while Troops G (55.3%) and C (65.5%) had noticeably lower usage.

TABLE 4: CHILD RESTRAINT USAGE ESTIMATES (PERCENT RESTRAINED) AND ASSOCIATED SAMPLE ERROR BY TROOP AND AGE CATEGORY (2017) — WEIGHTED DATA.

| Troop Region | Age < 1 | Age 1 - 3 | Age 4 - 5 | Age 6 - 12 | Age < 6 | Age < 13 | Standard Error Age <6 | Standard Error Age <13 |
|------------------|---------|-----------|-----------|------------|---------|----------|-----------------------|------------------------|
| A (Baton Rouge) | 100.0% | 98.6% | 90.2% | 85.2% | 95.5% | 89.1% | 1.7% | 2.3% |
| B (New Orleans) | 99.0% | 95.0% | 87.8% | 77.1% | 93.0% | 82.9% | 1.8% | 1.8% |
| C (Houma) | 93.8% | 81.5% | 71.7% | 65.5% | 79.9% | 70.7% | 3.5% | 4.6% |
| D (Lake Charles) | 96.3% | 100.0% | 83.3% | 78.0% | 92.6% | 83.4% | 3.2% | 4.0% |
| E (Alexandria) | 100.0% | 94.9% | 63.6% | 76.2% | 83.9% | 79.2% | 2.8% | 3.2% |
| F (Monroe) | 89.2% | 57.4% | 53.4% | 75.1% | 62.1% | 70.4% | 3.3% | 3.6% |
| G (Shreveport) | 76.7% | 71.1% | 65.7% | 55.3% | 70.1% | 60.7% | 3.9% | 5.2% |
| I (Lafayette) | 98.2% | 90.1% | 43.8% | 69.8% | 73.6% | 71.2% | 4.0% | 5.9% |
| L (Hammond) | 100.0% | 100.0% | 89.4% | 81.1% | 95.6% | 86.3% | 4.0% | 5.9% |
| Standard Error | 1.1% | 1.2% | 2.1% | 1.9% | 1.0% | 1.3% | | |

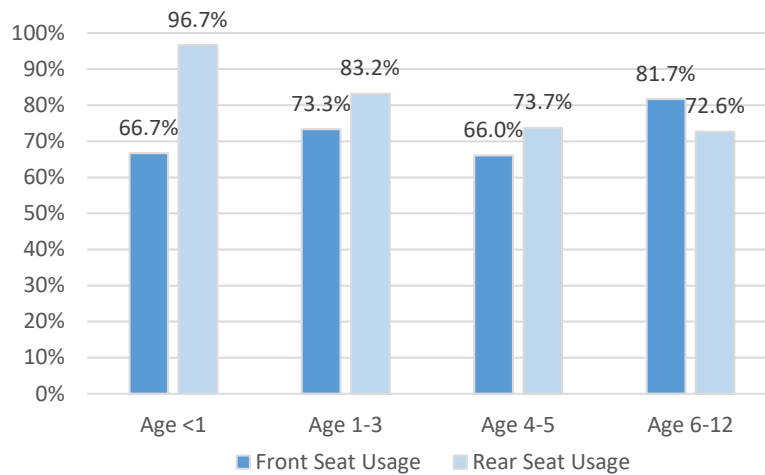
Front Versus Back Seat Usage

The 2017 survey results by seating position show that child restraint use for infants and toddlers in front seating positions was very low, 66.7% and 73.3%, respectively (Table 5 and Figure 3). However, it should be noted that there were only 9 infants and 15 toddlers observed in the front seating position. While this is only about 4% of all infants and 3% of all toddlers observed, these cases show that there is a small minority of drivers who have small children in the front seat positions not using a restraint device.

TABLE 5: CHILD RESTRAINT USAGE ESTIMATES (PERCENT RESTRAINED) AND SAMPLE SIZE

| | Age < 1 | Age 1 - 3 | Age 4 - 5 | Age 6 - 12 |
|------------------|---------|-----------|-----------|------------|
| Front Seat Usage | 66.7% | 73.3% | 66.0% | 81.7% |
| Rear Seat Usage | 96.7% | 83.2% | 73.7% | 72.6% |
| Front (N) | 9 | 15 | 53 | 338 |
| Rear (N) | 239 | 441 | 396 | 449 |
| Total | 248 | 456 | 449 | 787 |
| Front % | 3.6% | 3.3% | 11.8% | 42.9% |
| Rear % | 96.4% | 96.7% | 88.2% | 57.1% |

FIGURE 3: CHILD RESTRAINT USAGE BY AGE AND SEATING POSITION



Trends in Child Restraint Usage

PRG observers recorded data for 1,941 children in the 2017 survey. This is lower than the number of observations made for the previous two surveys (2,494 and 2,429 respectively), but still higher than the 1,697 observations made at the same 69 sites during the 2011 survey.

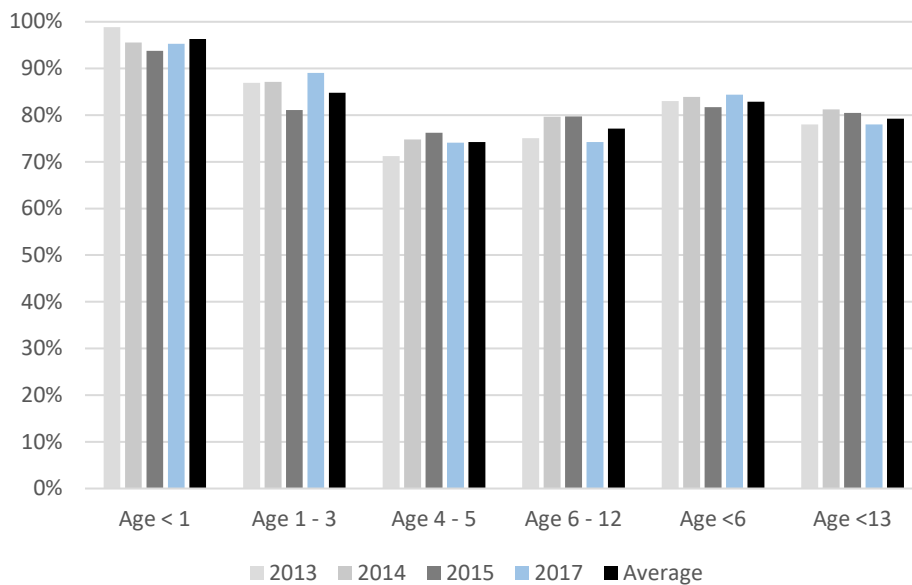
Comparing the 2017 survey with the 2015 survey found that child safety restraint use for children (less than thirteen years of age) was 2.5 percentage points lower measure to measure. This decrease is statistically significant at $p = .01$. However, the estimate for children ages five and younger was 2.7 percentage points higher than the 2015 estimate (statistically significant at $p = 0.02$), mainly due to a 7.9 percentage point increase in restraint use among children ages one through three (a statistically significant finding in itself at $p = .001$). Child restraint usage among four and five-year-old children was 2.1 percentage points lower from 2015 to 2017, however this finding was not significant. Restraint use for children ages five and younger declined in some regions while it increased in others, but none of the changes were statistically significant. The restraint usage rate in Louisiana for children ages six through twelve was 74.2% in 2017 compared to 79.7% in 2015, a decrease of 5.5 percentage points (statistically significant at $p = .01$).

Below is an overview of trends over the last four surveys. It should be noted that the 7.9 percentage point increase for toddlers in 2017 over 2015 is because 2015 was so low (Table 6 and Figure 4). Compared to 2013 & 2014 there was still an increase, but it is smaller and showing a slight upward trend, indicating that 2015 was probably an outlier. The same is true for ages Below 6. The 5.5 percentage points decrease for ages 6-12 is low compared to 2014 and 2015 but close to 2013. So, we are not sure if this is a permanent decline. However, it suggests it may be worthwhile making more efforts to assure that children age 4-12 years old children are buckled up in all seats, front and back.

TABLE 6: 2013-2017 CHILD RESTRAINT USAGE ESTIMATES BY AGE GROUP

| Year | Age < 1 | Age 1 - 3 | Age 4 - 5 | Age 6 - 12 | Age < 6 | Age < 13 |
|-------------------------|---------|-----------|-----------|------------|---------|----------|
| 2013 | 98.9% | 86.9% | 71.2% | 75.1% | 83.0% | 78.0% |
| 2014 | 95.6% | 87.1% | 74.8% | 79.6% | 83.9% | 81.2% |
| 2015 | 93.8% | 81.1% | 76.2% | 79.7% | 81.7% | 80.5% |
| 2017 | 95.3% | 89.0% | 74.1% | 74.2% | 84.4% | 78.0% |
| Average 2013–2017 | 96.3% | 84.8% | 74.2% | 77.1% | 82.9% | 79.3% |
| Standard Error | 0.6% | 0.8% | 1.1% | 0.8% | 0.6% | 0.5% |
| Difference 2015 to 2017 | -1.5 | +7.9 | -2.1 | -5.5 | +2.7 | -2.5 |

FIGURE 4: 2013-2017 CHILD RESTRAINT USAGE ESTIMATES BY AGE GROUP



Regionally, the results are less stable when looking at particular age groups year to year, so we should not make too much about those changes by region at the age level. We believe the 4-year average (Table 7) is probably the best indicator of what is going on in the regions by age group. However, there may be variation not captured by the standard error we use - such as ongoing enforcement, time of day, day of week, and different populations of people present.

TABLE 7: FOUR-YEAR AVERAGE CHILD RESTRAINT USAGE ESTIMATES BY AGE GROUP BY REGION

| <i>REGION</i> | Age < 1 | Age 1 - 3 | Age 4 - 5 | Age 6 - 12 | Age < 6 | Age < 13 | <i>STD Error (Age <6)</i> | <i>STD Error (Age 6-12)</i> |
|--------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|------------------------|----------------------------------|---------------------------------|
| 1. New Orleans | 99.5% | 94.7% | 86.4% | 82.2% | 92.3% | 85.9% | 1.2% | 1.2% |
| 2. Baton Rouge | 100.0% | 96.1% | 83.0% | 84.1% | 91.7% | 86.9% | 0.9% | 0.9% |
| 3. Houma/Thibodaux | 91.7% | 77.2% | 73.5% | 68.9% | 78.5% | 72.3% | 2.2% | 2.2% |
| 4. Lafayette | 97.2% | 79.2% | 58.6% | 72.4% | 74.8% | 73.3% | 1.7% | 1.5% |
| 5. Lake Charles | 98.5% | 88.4% | 76.0% | 78.8% | 85.6% | 81.3% | 1.7% | 1.5% |
| 6. Alexandria | 98.0% | 87.0% | 71.3% | 75.6% | 83.3% | 78.6% | 1.5% | 1.4% |
| 7. Shreveport | 87.0% | 66.1% | 64.0% | 68.6% | 69.4% | 68.9% | 1.7% | 1.7% |
| 8. Monroe | 89.4% | 64.2% | 55.4% | 72.7% | 65.7% | 70.1% | 1.8% | 1.7% |
| Average 2013–2017 | 96.3% | 84.8% | 74.2% | 77.1% | 82.9% | 79.3% | 0.6% | 0.5% |
| Standard Error | 0.6% | 0.8% | 1.1% | 0.8% | 0.6% | 0.5% | | |

CONCLUSIONS

Preusser Research Group carried out the 2017 child restraint survey. It was the fourth time PRG was tasked to conduct the survey. The 2017 survey results were more consistent with the recent survey than with the results of the 2011 survey, which was not conducted by Preusser Research Group.

The results of the 2017 survey indicate that a very high percentage of infants travelling in Louisiana are riding in child restraint (95.3%). Restraint use is somewhat lower for children ages one through three (89.0%). Four and five-year old children were observed least often in a restraint (74.1%). Older children, ages 6 through 12, were using a seat belt 74.2% of the time. Examining the four-year trend data is also recommended for a more reinforced current landscape of child restraint use, especially at the regional level.

Children are more likely to ride in the front seat as they grow older and front seat restraint use was higher among older age children. The reverse was true in the rear seat, where younger children were more likely using a restraint in the rear seat. There is still room for improvement in child restraint use in both the front and rear seating positions and this is especially true among children ages four and older.

APPENDIX A. CHILD RESTRAINT SURVEY OBSERVATION SITES

CHILD RESTRAINT OBSERVATION SITES

| REGION 1- New Orleans | Address | Description | Day of Week | Time |
|----------------------------------|---|--|----------------|---------------|
| | 300 W Esplanade Ave. Kenner LA | Wal-Mart Supercenter | Th | 3:50 - 4:50 |
| | 2104 Williams Blvd. Kenner LA | Winn-Dixie Marketplace | Th | 2:35 - 3:35 |
| | Veterans Memorial Blvd. Metairie LA | Lakeside Mall--Main Entrance Side | W | 3:00 - 4:00 |
| | 4500 Veterans Memorial Blvd. Metairie LA | Target | W | 5:30 - 6:30 |
| | 5901 Airline Highway Metairie LA | Winn-Dixie Marketplace | Tues | 5:00 - 6:00 |
| | Veterans Memorial Blvd. Metairie LA | Toys R Us | W | 4:10 - 5:10 |
| | 5110 Jefferson Highway Harahan LA | Wal-Mart Supercenter | Tues | 3:30 - 4:30 |
| | 1901 Tchoupitoulas St. New Orleans LA | Wal-Mart Supercenter | Sun | 5:00 - 6:00 |
| | 5400 Tchoupitoulas St. New Orleans LA | Winn-Dixie Marketplace--Riverside Market | Th | 1:00 - 2:00 |
| | Highway 23 Belle Chasse LA | McDonalds | Sun | 2:00 - 3:00 |
| | 150 Northshore Blvd. Slidell LA | North Shore Square | Mon | 1:00 - 2:00 |
| | 2985 Gause Blvd. Slidell LA | Winn-Dixie Marketplace | Mon | 6:15 - 7:15 |
| | 167 Northshore Blvd. Slidell LA | Wal-Mart Supercenter | Mon | 2:10 - 3:10 |
| | 109 Northpark Blvd. Covington LA | Causeway Place Shopping Center | Mon | 3:45 - 4:45 |
| | 3414 Highway 190 Mandeville LA | Bed Bath & Beyond | Mon | 4:50 - 5:50 |
| REGION 2- Baton Rouge | | | | |
| | 2410 Tanger Blvd. Gonzales LA | Tanger Outlet Center | Sat | 10:00 - 11:00 |
| | 308 N Airline Highway Gonzales LA | Wal-Mart Supercenter | Sat | 11:15 - 12:15 |
| | 9401 Cortana Pl. Baton Rouge LA | Mall at Cortana -- Shopping | Sat | 12:40 - 1:40 |
| | 6401 Bluebonnet Blvd. Baton Rouge LA | Mall of Louisiana -- Shopping | Sat | 3:00 - 4:00 |
| | 10606 North Mall Drive Baton Rouge LA | Wal-Mart Supercenter | Sat | 5:15 - 6:15 |
| | 2001 Millerville Road Baton Rouge LA | Target | Sat | 6:30 - 7:30 |
| | 904 South Range Road Denham Springs LA | Wal-Mart Supercenter | Fri | 5:20 - 6:20 |
| | 2000 SW Railroad Ave. Ste. 103 Hammond LA | Hammond Square Shopping Mall | Fri | 2:30 - 3:30 |
| | 2799 West Thomas St. Hammond LA | Wal-Mart Supercenter | Fri | 3:40 - 4:40 |
| | 3255 LA 1 South Port Allen LA | Wal-Mart Store | Sun | 10:20 - 11:20 |

**REGION 3-
Houma**

| | | | |
|---------------------------------|--------------------------------|-----|---------------|
| 401 N Canal Blvd. Thibodaux LA | Wal-Mart Supercenter | Sat | 12:20 -1:20 |
| Highway 308 Thibodaux LA | Rouse's -- Grocery | Sat | 11:15 - 12:15 |
| 13001 Highway 90 Boutte LA | Wal-Mart Supercenter | Sat | 4:00 - 5:00 |
| 1803 Louisiana 3125 Gramercy LA | Winn-Dixie | Sat | 2:15 - 3:15 |
| 5953 W. Park Ave. Houma LA | Southland Mall Shopping Center | Sun | 11:40 - 12:40 |
| MLK Drive Houma LA | Wal-Mart Supercenter | Sun | 10:30 - 11:30 |
| 933 Grand Caillou Road Houma LA | Wal-Mart Supercenter | Sat | 9:45 - 10:45 |

**REGION 4-
Lafayette**

| | | | |
|--------------------------------------|------------------------|------|--------------|
| 729 Oddfellows Rd. Crowley LA | Wal-Mart Supercenter | Th | 2:30 - 3:30 |
| 1205 E. Admiral Doyle New Iberia LA | Wal-Mart Supercenter | Fri | 3:50 - 4:50 |
| E. Admiral Doyle New Iberia LA | Big K-Mart | Fri | 1:45 - 2:45 |
| 5725 Johnston St. Lafayette LA | Acadiana Mall | Th | 3:45 - 4:45 |
| 3142 Ambassador Caffery Lafayette LA | Wal-Mart Supercenter | Wed | 6:10 - 7:10 |
| 2240 Ambassador Caffery Lafayette LA | Winn-Dixie Marketplace | Wed | 4:50 - 5:50 |
| 4313 Ambassador Caffery Lafayette LA | Super Target | Th | 5:00 - 6:00 |
| 1629 Creswell Ln. Opelousas LA | Wal-Mart Supercenter | Sat? | 12:40 - 1:40 |
| 1400 Rees St. Breaux Bridge LA | Wal-Mart Supercenter | Wed | 3:30 - 4:30 |
| 3005 Charity St. Abbeville LA | Wal-Mart Supercenter | Fri | 12:30 - 1:30 |

**REGION 5-
Lake Charles**

| | | | |
|---------------------------------------|----------------------|-----|---------------|
| 1125 North Pine Deridder LA | Wal-Mart Supercenter | Fri | 4:30 - 5:30 |
| 4060 Ryan St. South Lake Charles LA | Albertsons | Sat | 10:00 - 11:00 |
| 3415 Highway 14 Lake Charles LA | Wal-Mart Supercenter | Sat | 1:45 - 2:45 |
| 496 W. Prien Lake Rd. Lake Charles LA | Prien Lake Mall | Sat | 11:15 - 12:15 |
| 303 Interstate Dr. Jennings LA | Wal-Mart Supercenter | Sat | 3:40 - 4:40 |

**REGION 6-
Alexandria**

| | | | |
|------------------------------|----------------------|-----|-------------|
| 7162 Highway 1 Marksville LA | Wal-Mart Supercenter | Mon | 3:00 - 4:00 |
| 940 Highway 167 Dry Prong LA | Dollar General Store | Sun | 3:30 - 4:30 |

| | | | |
|---------------------------------------|------------------------------|-----|---------------|
| 3437 Masonic Drive Alexandria LA | Alexandria Mall--J.C. Penney | Sun | 1:30 - 2:30 |
| 2671 S. MacArthur Dr. Alexandria LA | Old Navy | Sun | 10:00 -11:00 |
| 2050 North Mall Blvd. Alexandria LA | Wal-Mart Supercenter | Sun | 12:25 - 1:25 |
| 2265 S. MacArthur Drive Alexandria LA | Albertson's | Sun | 11:15 - 12:15 |
| 2204 South 5th St. Leesville LA | Wal-Mart Supercenter | Fri | 3:00 -4:00 |

**REGION 7 -
Shreveport**

| | | | |
|--------------------------------------|------------------------------------|------|--------------|
| 2536 Airline Highway Bossier City LA | Wal-Mart Supercenter | Tues | 3:15 - 4:15 |
| 2950 E. Texas St. Bossier City LA | Pierre Bossier Mall | Fri | 4:35 - 5:35 |
| 390 Plaza Loop Bossier City LA | Louisiana Boardwalk (weekend only) | Sat | 12:00 - 1:00 |
| 9550 Mansfield Rd Shreveport LA | Wal-Mart Supercenter | Fri | 3:00 - 4:00 |
| 8400 Millicent Way Shreveport LA | Cinemark Tinseltown | Sat | 1:30 - 2:30 |
| 1133 St. Vincent St. Shreveport LA | Mall St. Vincent | Fri | 4:15 - 5:15 |
| 7110 Youree Dr. Shreveport LA | Shreveport Super Target | Fri | 5:30 - 6:30 |
| 1024 Cut Off Rd. Coushatta LA | Rivertown Market/Dollar General | Tues | 3:05 - 4:05 |
| 1379 Homer Road Minden LA | Wal-Mart Supercenter | Tues | 1:30 - 2:30 |

**REGION 8-
Monroe**

| | | | |
|------------------------------------|----------------------|-------|-------------|
| 184 Old Winnfield Rd. Jonesboro LA | Wal-Mart Supercenter | Mon | 3:00 -4:00 |
| 6091 Mer Rouge Rd Bastrop LA | Wal-Mart Supercenter | Wed | 3:00 - 4:00 |
| 1025 Glenwood Dr. West Monroe LA | Wal-Mart | Thurs | 3:00 - 4:00 |
| 4103 Pecanland Mall Dr. Monroe LA | Monroe Target | Wed | 4:45 - 5:45 |
| 4700 Milhaven Rd. Monroe LA | Pecanland Mall | Thurs | 4:30 - 5:30 |
| 1350 Pecanland Plaza Monroe LA | Toys R Us | Thurs | 5:40 - 6:40 |

APPENDIX B. CHILD RESTRAINT SURVEY DATA COLLECTION FORM

CHILD RESTRAINT OBSERVATION DATA COLLECTION FORM

CHILD RESTRAINT OBSERVATION FORM

LOCATION: _____ Cluster #: _____ Site #: _____

DATE: _____ DAY: SU M T W TH F SA

START TIME: _____ AM PM END TIME: _____ AM PM

OBSERVER: _____

| | APPROXIMATE AGE | | | | RESTRAINED | | | SEAT POSITION | |
|----|-----------------|-----|-----|------|------------|---|---|---------------|---|
| | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 1 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 2 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 3 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 4 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 5 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 6 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 7 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 8 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 9 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 10 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 11 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 12 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 13 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 14 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 15 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 16 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 17 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 18 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 19 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 20 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |

| | APPROXIMATE AGE | | | | RESTRAINED | | | SEAT POSITION | |
|----|-----------------|-----|-----|------|------------|---|---|---------------|---|
| | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 21 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 22 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 23 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 24 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 25 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 26 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 27 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 28 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 29 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 30 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 31 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 32 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 33 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 34 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 35 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 36 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 37 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 38 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 39 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |
| 40 | <1 | 1-3 | 4-5 | 6-12 | Y | N | U | F | R |

Page _____ of _____

CHILD RESTRAINT OBSERVATION FORM (back)

Cluster #: _____ Site #: _____

Location: _____
(Street) (Cross Street or other landmark)

Notes: _____

Diagram:

