

2008 Mississippi Child Restraint Survey

Prepared for:

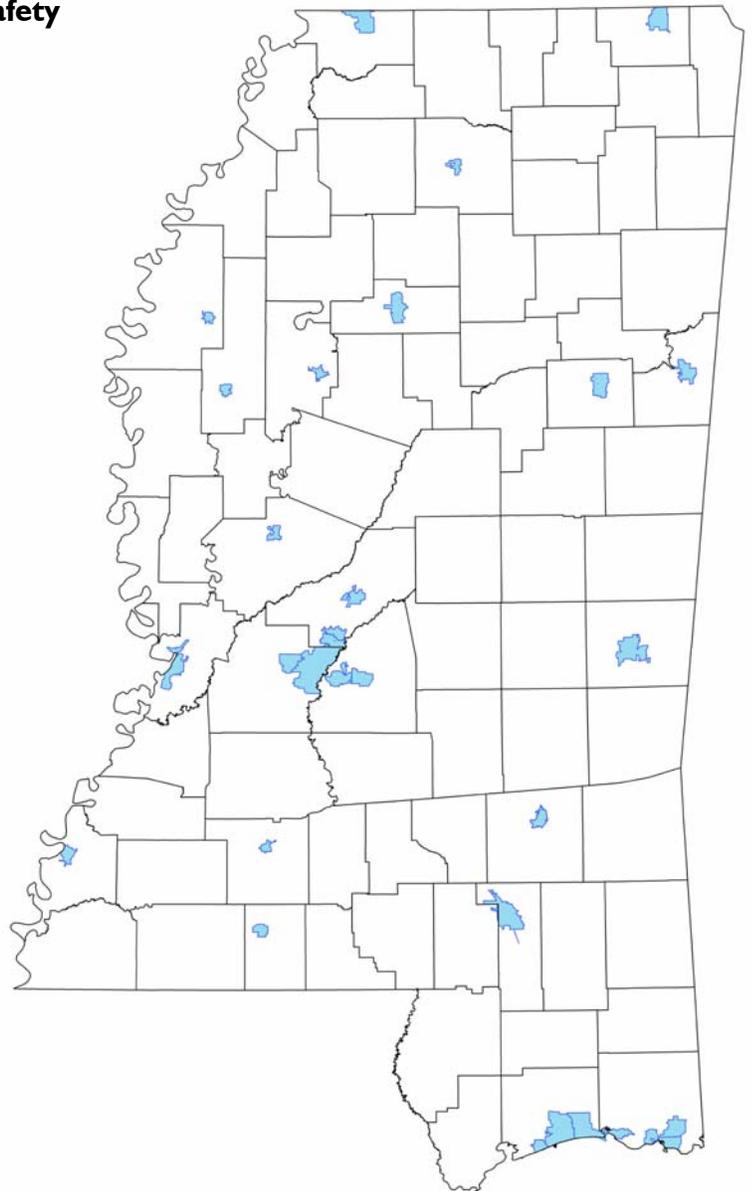
The Office of Highway Safety
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INTRODUCTION

In 2008, highway safety continues to be a major health problem for children in Mississippi. Each year citizens, governmental agencies and private advocacy groups participate in a major effort to combat this needless death and injury to our children. Tickets are written to those who violate the child restraint law. Large numbers of child restraint clinics staffed by highly trained child restraint technicians are provided at no cost to the public. A sizable amount of time, effort and money are devoted to increasing child restraint use. These efforts included media campaigns, brochures, programs, providing free child restraint seats to those who cannot afford them, etc. In order to help evaluate the effect of these programs, child restraint surveys are conducted in cities in every geographical area of Mississippi (See Figure 1). The surveys are not truly scientific, but do provide an overall raw analysis on child restraint use in Mississippi. Since these surveys are only observational they do not provide a measure of the proper use of child restraints, except in a very general way; i.e., incorrectly placing children in rear-facing seats on the front seat, in front of airbags.

These efforts have had gratifying results in that child restraint use in Mississippi has continued to rise over time. However, in comparison to other states, child restraint use in Mississippi continues to be

low and proper restraint use even lower. Perhaps a way to increase the use of child restraints is further education and training. More emphasis placed on the training of health department staffs and human resource people could result in a positive impact in the correct use of child restraint systems in vehicles.

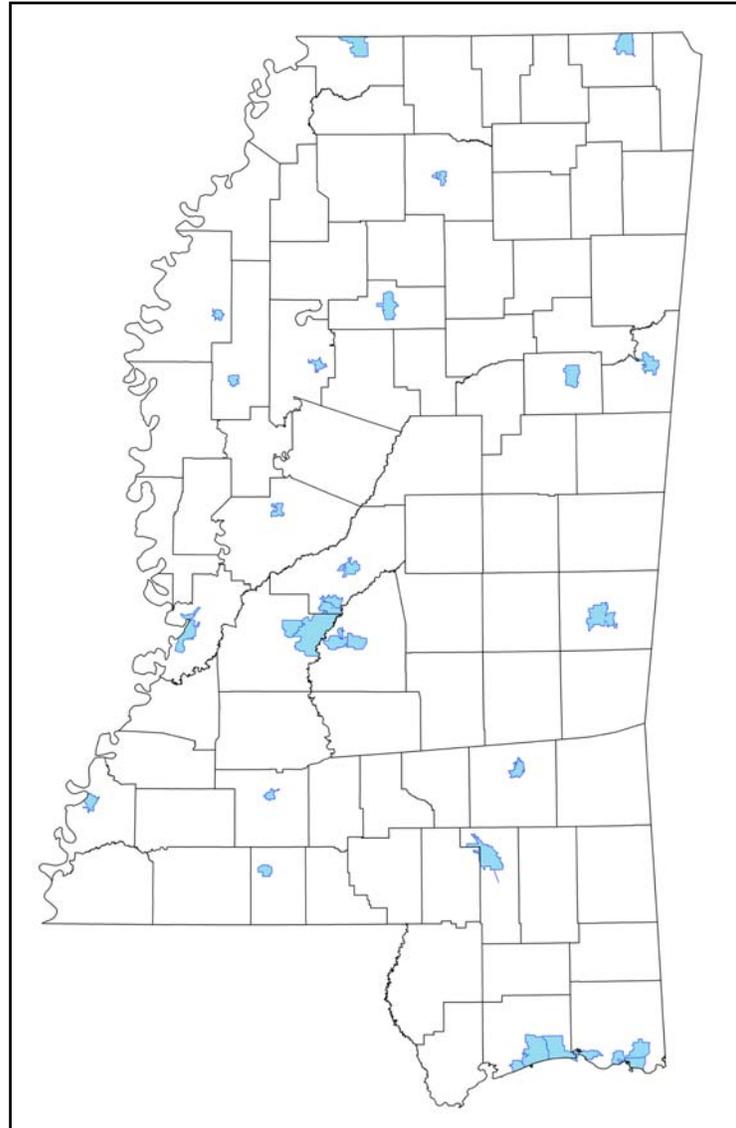


Figure 1: Surveyed city locations in Mississippi shows observational surveys conducted in every portion of the state



SURVEY METHODOLOGY

The current child restraint survey was conducted in 31 Mississippi municipalities, at 268 observation sites, covering every region in the state of Mississippi. Table 1 provides a list of the sample cities, the number of unique locations, the total number of vehicles observed, percent of observations with regard to the total number of observations, and the populations of the various cities.

Table 1: Survey Cities, Number of Locations, Number of Observations

City	Number of Locations	Total Number Of Vehicles Observed	Percent of Total Observations (%)	City Population (2007 Estimate*)
1. Biloxi	8	126	2.4	44,292
2. Brandon	8	248	4.8	20,584
3. Brookhaven	8	94	1.8	9,979
4. Canton	8	258	5.0	12,519
5. Cleveland	8	128	2.5	12,447
6. Clinton	8	215	4.1	26,405
7. Columbus	8	111	2.1	24,025
8. Corinth	8	105	2.0	14,288
9. Gautier	8	84	1.6	16,096
10. Greenwood	8	113	2.2	16,151
11. Grenada	8	163	3.1	14,682
12. Gulfport	8	139	2.7	66,271
13. Hattiesburg	8	70	1.4	50,233
14. Indianola	8	84	1.6	10,924
15. Jackson	28	758	14.6	175,710
16. Laurel	8	49	0.9	18,405
17. Long Beach	8	78	1.5	15,404
18. Madison	8	264	5.1	17,483
19. McComb	8	90	1.7	13,557
20. Meridian	8	79	1.5	38,314
21. Moss Point	8	79	1.5	14,199
22. Natchez	8	118	2.3	16,637
23. Ocean Springs	8	87	1.7	17,246
24. Oxford	8	126	2.4	14,911
25. Pascagoula	8	82	1.6	23,452
26. Pearl	8	366	7.1	24,065
27. Ridgeland	8	270	5.2	21,495
28. Southaven	8	330	6.4	42,567
29. Starkville	8	57	1.1	23,856
30. Vicksburg	8	112	2.2	25,454
31. Yazoo City	8	298	5.8	11,520
Totals	268	5181	100.0	853,171

* July 1, 2007 city population estimates retrieved from U.S. Census Bureau at www.census.gov



Due to the size of Jackson, data was collected from 28 sites within the city. Although 14.6 percent of the observations were made in Jackson, the population of Jackson represents about 20 percent of the population of the sample cities. Using the population figures from 2007 Census estimates, 31 of 38 cities with at least a population of 10,000 persons were included in the survey. One city, Brookhaven, had a population of less than 10,000. Brookhaven was kept in the study due to its history of being in the study. Sample cities are located in every geographical area of the State of Mississippi.

An attempt was made to select sites in each city that would provide a cross sample of the population. A systematic sample was selected by obtaining sites from four different types of locations: (1) a day care or controlled intersection with a signal light; (2) county or city health departments, welfare, or social service offices; (3) hospitals or pediatric offices; (4) shopping centers and fast food establishments.

Where it was feasible, local observers were utilized because they were familiar with the diversity of people in the area and could determine the most appropriate site locations. Previous observers were employed when available to promote consistency. Additional information was collected for each car. These data were the driver's gender, the time of day, the day of week, the weather during the time period of the observation, and whether or not the driver was wearing a seat belt.

Each surveyor was given a checklist for making observations. Locations were observed for 40-minute periods and surveyors were instructed to skip cars when they were unsure of the observation. The following instructions were given to the surveyors: (1) Record the use of vehicles only with children as passengers. (2) Observe all children under the age of seven. Devices designed to be rear facing are recorded as infant seats. Devices designed to be forward facing devices are recorded as toddler seats. (3) Correct use of an infant restraint is determined if the seat installed is facing the rear of the vehicle, along with proper use of the harness system and a compatible vehicular restraint system. (4) Correct use of a toddler seat is determined if a harness and/or shield apparatus in the forward facing position protected the toddler. (5) Proper booster seat use is determined when the vehicular restraint system was correct for the size of the child.



RESTRAINT USAGES OF CHILDREN AND ADULTS

There were children in 5,181 cars observed during the survey period. These cars contained a total of 7,890 children under the age of 7, in 31 municipalities.

In Table 2, information is provided on the type of location, the number of children observed and whether they were restrained. It should be noted that none of the locations are definitive of that type of location, but only provide some indication of the level of use. Also, the overall calculated child restraint usage rate for Mississippi in 2008 was 77.5%.

Table 2: Child Restraint Use by Type of Location

Type of Location	Not Using Restraints	Using Restraints	Total Observations	Percent Using Restraints (%)
1. Fast Food	253	672	925	72.6%
2. Large Shopping Mall	15	45	60	75.0%
3. Grocery Store	178	472	650	72.6%
4. Daycare or Child Learning Center	156	842	998	84.4%
5. Health Dept. or Human Resources	48	129	177	72.9%
6. Medical Care Complex	97	331	428	77.3%
7. Playground, Park, Museum or Zoo	70	234	304	77.0%
8. Small Shopping Center or Wal-Mart	333	1057	1390	76.0%
9. Discount or Dollar Store	0	13	13	100.0%
10. Street Intersection	431	1509	1940	77.8%
11. Church or Church Nursery	118	587	705	83.3%
12. Service Station	27	57	84	67.9%
13. Restaurant	50	144	194	74.2%
14. Post Office	2	4	6	66.7%
15. Bank	1	15	16	93.8%
Totals	1779	6111	7890	77.5%

In Table 3, the percentage of drivers using seat belts by gender is presented. Of the drivers observed, 75.2% of the female drivers were belted while 68.6% of the male drivers used their seat belts. Overall, 73.2% of the adults observed were belted, and this percentage coincides extremely well with this year's official seat belt usage rate of 71.3% observed in the *2008 Seat Belt and Motorcycle Helmet Survey*.

Table 3: Seat Belt Usage Status for Drivers

Gender	Using Seat Belt	Not Using Seat Belt	Total Observations	Percent Using Seat Belts (%)
1. Male	1102	504	1606	68.6%
2. Female	2683	884	3567	75.2%
Totals	3785	1388	5173	73.2%



CHILD RESTRAINT USE BY SEATING POSITION OF CHILD

It is known that the safest place for a child to be restrained, or for that matter to ride unrestrained, is on the back seat of a car. It would therefore be expected that adults putting children in the back seat of a car would also have more awareness of the importance of using child restraints. The seating position, as well as whether the child was restrained, was recorded in this survey. As expected children on the back seat of automobiles were restrained at a higher rate than were those on the front seat. Children in the back seat were restrained at a rate of 78.9% while children on the front seat were restrained at a rate of 73.8%

Table 4: Child Restraint by Position of Child

Seating Position	Not Restrained		Restrained		Total	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
1. Front Seat	578	26.2%	1627	73.8%	2205	28.1%
2. Back Seat	1192	21.1%	4455	78.9%	5647	71.9%
Totals	1770	22.5%	6082	77.5%	7852	100.0%

CHILD RESTRAINT USE BY SEATING POSITION OF CHILD AND GENDER OF DRIVER

Male drivers were slightly more likely to place a child on the front seat than were female drivers. Children in cars driven by male drivers were placed on the front seat of the car 31.0% of the time as compared to 26.7% when the driver of the vehicle was female. Likewise, female drivers who placed their children on the front seat were slightly more likely to use child restraints than were male drivers with children on the front seat. Approximately 70.9% of the children on the front seat were restrained when the driver was male, while 75.4% of the children in the front seat of cars driven by females were restrained. However, children placed on the front seat, as opposed to the back seat, were more likely to be unrestrained regardless of the sex of the driver. Female drivers are also slightly more likely to buckle children in the back seat when compared to male drivers with children in the rear seat. The data suggests about 3 out of 4 male drivers will utilize some kind of child restraint for children when they are in control of the vehicle. Likewise, 4 out of 5 females buckle up children when in control of the vehicle. Obviously educational efforts directed at restraining children in motor vehicles in general and also placing these children on back seat for safety reasons have had some effect in the state of Mississippi. Refer to Table 5 on the next page for more details.



Table 5: Child Restraint by Position of Child by Gender of Driver

MALES

Seating Position	Not Restrained		Restrained		Total	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
1. Front Seat	228	29.1%	556	70.9%	784	31.0%
2. Back Seat	451	25.9%	1290	74.1%	1741	69.0%
Totals	679	26.9%	1846	73.1%	2525	100.0%

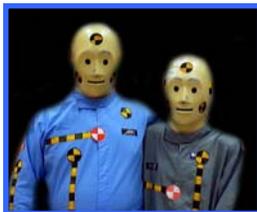
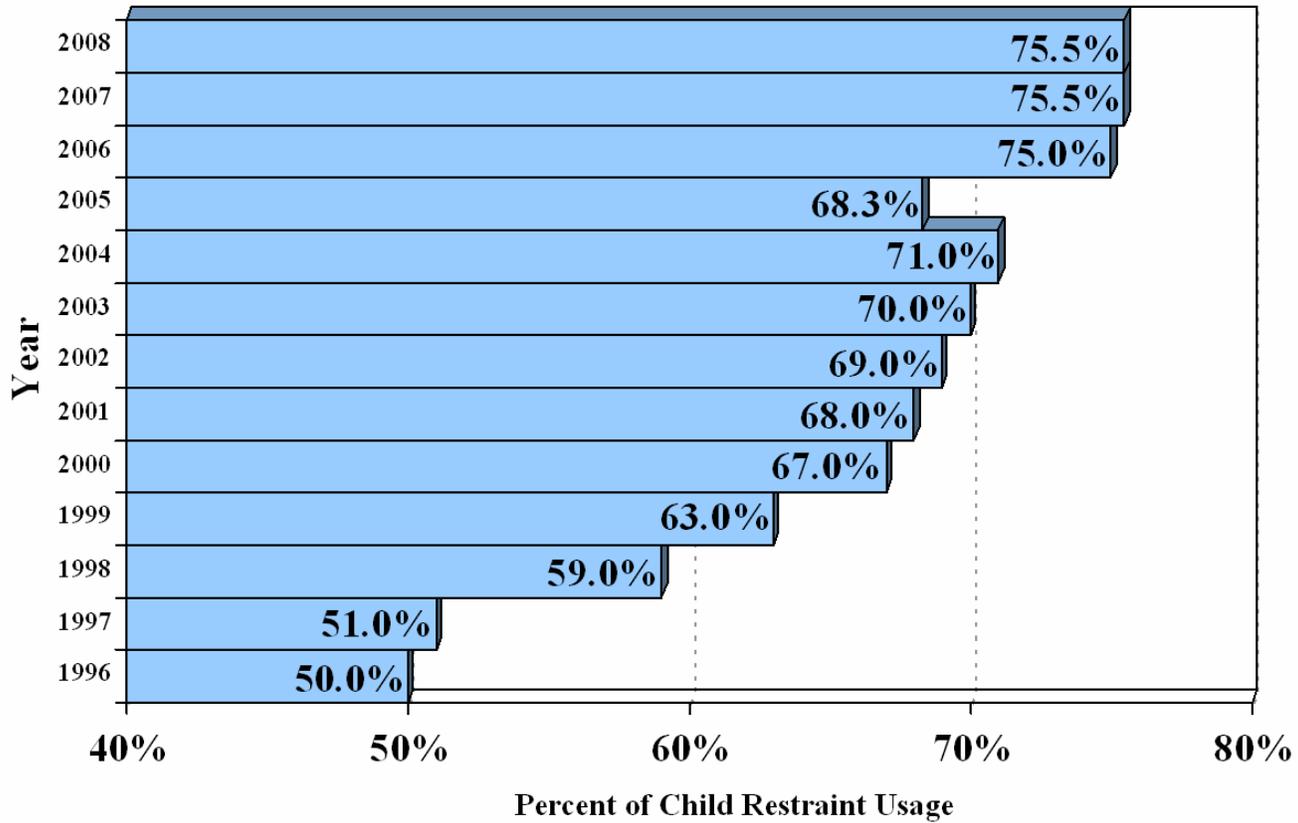
FEMALES

Seating Position	Not Restrained		Restrained		Total	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
1. Front Seat	350	24.6%	1070	75.4%	1420	26.7%
2. Back Seat	741	19.0%	3160	81.0%	3901	73.3%
Totals	1091	20.5%	4230	79.5%	5321	100.0%

CONCLUSION

Child restraint use in Mississippi was found to be **77.5% for the year 2008**. This rate is identical to last year's child restraint usage. Over time, the effort toward increasing and improving child restraint use has been both extensive and intensive. There is also little doubt that having a primary child restraint law has made a significant impact on the high use of child restraints in Mississippi. Also, the relatively new 2006 primary seat belt law for all front seat passengers could be an influential factor in the usage rate increase. Nevertheless, Mississippi is moving in the right direction with regard to child passenger safety, and perhaps with continued education and enforcement child restraint usage rates could be brought to an even higher level.

Mississippi Child Restraint Usage Rates (1996 – 2008)



Please Buckle Up Your Child



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