

Child Safety Restraint Use in Maine 2007

October 2007

Survey Research Center



UNIVERSITY OF
SOUTHERN MAINE

Child Safety Restraint Use in Maine 2007

Al Leighton and Jen Dodge
Survey Research Center, Muskie School of Public Service
University of Southern Maine

Bill Leaf
Preusser Research Group
Trumbull, Connecticut

October 15, 2007

Submitted to:



Bureau of Highway Safety
State of Maine
164 State House Station
Augusta, Maine 04333-0164

Child Safety Restraint Use in Maine, 2007

Table of Contents

ACKNOWLEDGMENTS	ii
EXECUTIVE SUMMARY	iii
INTRODUCTION	1
METHODOLOGY	2
<i>Intersections selected as observation sites</i>	3
<i>Sampling</i>	3
<i>Observation times and days</i>	3
<i>Observer training</i>	3
OBSERVATION STUDY FINDINGS	4
Overview	4
Gender differences	4
Urban/rural differences	4
Type of vehicle	4
CSR use related to seatbelt use by driver	4
Day of the week	5
Time of day	5
Weather conditions	5
Comparison of 2007 with 1995	5
Discussion	6
List of Tables	7
Tables 1-9	8
2007 Observation Form	14

ACKNOWLEDGMENTS

We would like to thank all of the people who were helpful in conducting this study. Lauren Stewart, Director, Bureau of Highway Safety, worked with us on behalf of the Maine Bureau of Highway Safety. Ed Beckwith at the Maine Department of Transportation provided all of the traffic data and location information for each of the observation sites. We especially wish to thank David Willauer of the Greater Portland Council of Governments, Suzanne Cook of Safe Kids Maine, and Betty Mason at the Maine Bureau of Health. Their assistance in organizing the study and training the Observers was crucial to the success of the project.

Finally, we recognize with heartfelt thanks the tremendous contributions of the Survey Research Center and Safe Kids Maine observers: Rachel Cooper, Diane Garriepy, Sharleen Garvey, Margaret Gormley, Jan Johnson, Anita Linnell, and Sue Schier (Survey Research Center) and Suzanne Cook, Lori Crowley, Erica Croxford, MJ Dougherty, Staci Fortunato, Sandra Graham, Shannon Hamner, Lloyd Murphy, Jule Ontengco, and Corey Perreault (Safe Kids Maine).

Al Leighton, Jen Dodge
Survey Research Center
Muskie School of Public Service
University of Southern Maine

Bill Leaf
Preusser Research Group
Trumbull, Connecticut

Child Safety Restraint Use in Maine, 2007

EXECUTIVE SUMMARY

In recent years, the Maine Bureau of Highway Safety, the Maine Bureau of Health, and Safe Kids Maine have each been involved in efforts to increase awareness and use of child safety restraints (CSRs, including forward- and rear-facing child safety restraints, booster seats and safety belts for young children, and safety belts alone for older children) in the state. Not since 1995, however, has there been an attempt to provide a methodologically sound measure of such use. For the year 2007, the Survey Research Center (SRC) at the Muskie School of Public Service, University of Southern Maine and Safe Kids Maine, with assistance from the Preusser Research Group of Trumbull, Connecticut, conducted a state-wide study of CSR use and produced this report of the findings. Research results from this study provide a baseline measure of CSR use in Maine and provide valuable information regarding the success of the state's efforts to educate the public about the importance of child safety restraint use.

This study was conducted from March through May, 2007. The sampling and observation method for the present study is designed to be generally comparable to the 1995 study while incorporating some adjustments. The general approach to the design is to sample from every county in the state, to distribute observation sites across counties according to their population, to select locations where traffic must come to a complete stop in order to allow observation of both front-seat and rear-seat child restraint details, and to select a mix of signalized (RGA) intersections and stop-sign-controlled intersections according to their traffic volume. This probability-based sampling method was utilized to select 86 intersections for observation, including 62 signalized intersections and 24 stop-sign intersections. As in the earlier studies, visual observations were made to determine the extent of use.

Road intersections selected as observation sites. Observations of restraint use were conducted at 86 intersections from Maine's 16 counties (see Table 9 for a full list of towns selected). Sites were selected following the probability-based sampling procedure developed by the Preusser Research Group outlined above. Restraint use was observed and recorded, by seating position within each vehicle, for all drivers and for all children age 11 or younger. This resulted in data for 13,432 drivers and 1,422 children age 11 or younger.

Sampling protocols. As of 2007, there was no single standardized methodology in place for states to follow in measuring CSR use. A number of possible approaches were considered, generally centered around either:

- 1) selecting locations for observations where vehicles were likely to contain a high number of children (pediatrician offices, day care centers, fast food restaurants, etc) or
- 2) designing a probability-based sampling procedure to select observation sites that would reflect the overall traffic types and patterns throughout the state.

Option 1 has the advantage of being very efficient but has a potential disadvantage; because these would be very specific destinations, often in high traffic times and areas, CSR use may not represent more general and typical use patterns, thus possibly providing inaccurate use rates. Option 2 addresses that concern very well, but is much less efficient; most cars on most roads at most times of day have few if any children in them. Following a conference call with SRC, MeBHS, Maine Bureau of Health, and the National Highway Traffic Safety Administration (NHTSA), it was decided to conduct the study following the Option 2 sampling protocol. Preusser Research Group was then brought in for their expertise in designing such sampling strategies. Safe Kids Maine was also engaged as a collaborator for the study, to ensure full understanding of the proper use of CSRs in Maine.

Subgroup analyses. This report includes findings from several subgroups, such as for different ages, gender, type of vehicle, etc. We urge readers to keep in mind that some of these groups have lower numbers and, therefore, the point estimates of their use rates are less precise than those for the entire sample.

OBSERVATION STUDY FINDINGS

Overview: Overall CSR use rates. The overall CSR use rate is very high, with 89.7% of all children under age 12 being in some type of restraint. As seen in Table B, use rates vary by age, ranging from a high of 100% of all children under a year old to just under 85% of those 8 – 11 years old.

Table A
Comparison of Restraint Use for All Children Under 12

All Children Under 12		
	N	%
Some Restraint*	1276	89.7
No Restraint*	146	10.3
No. Vehicles = 13,529; No. Children = 1,422		

* Known restraint and age only

Table B
Comparison of Restraint Use by Child Age Group

Child Age	Some Restraint*		Not Restrained*		Total	
	N	%	N	%	N	%
< 1 year	84	100.0	0	0.0	84	100.0
1 - 3 years	413	96.0	17	4.0	430	100.0
4 - 7 years	421	86.6	65	13.4	486	100.0
8 - 11 years	358	84.9	64	15.2	422	100.0

* Known restraint and age only

Gender differences. Table C shows that there is essentially no difference in CSR use between girls and boys.

Table C
Comparison of Child Passenger Restraint Use by Child Gender

Child Gender	Child Passenger Restraint Use					
	Some Restraint*		Not Restrained*		Total	
	N	%	N	%	N	%
Male	545	88.6	70	11.4	615	100
Female	654	89.7	75	10.3	729	100
Total	1,199	89.2	145	10.8	1344	100

* Known restraint and gender only

Children's use of safety restraints related to seatbelt use by driver. As has been found with adult studies, CSR use of passengers is strongly correlated with the practices of the drivers. When drivers use their safety belts, children in the vehicle (who are most likely family or friends of the driver) are much more likely to be in CSRs than they are when the driver is not using a belt.

Table D
Comparison of Child Passenger Restraint Use by Driver Restraint

Driver Restrained?	Child Passenger Restraint Use					
	Some Restraint		Not Restrained		Total*	
	N	%	N	%	N	%
Yes	1020	95.4	49	4.6	1069	100
No	189	68.7	86	31.3	275	100
Total	1209	90.0	135	10.0	1344	100

* Known restraint only

Type of vehicle. CSR use varies somewhat, depending on the type of vehicle in which children are traveling. Rates range from 94.9% for kids in vans to 84.6% for kids in pick up trucks. SUVs and cars fall in between, at 91.9% and 88.0%, respectively.

Table E
Comparison of Child Passenger Restraint Use by Vehicle Type

Vehicle Type	Child Passenger Restraint Use					
	Some Restraint*		Not Restrained*		Total	
	N	%	N	%	N	%
Car	643	88.0	88	12.0	731	100.0
Truck	115	84.6	21	12.3	136	100.0
SUV	273	91.9	24	8.1	297	100.0
Van	244	94.9	13	5.1	257	100.0

* Known restraint and vehicle type only

SUMMARY

This study has found that child safety restraint and seatbelt use among children is quite high in Maine. It is clear that most drivers are making an effort to ensure that children in their vehicles are restrained in some fashion. Further, we find that there has been substantial improvement in use rates since the 1995 study, with rates increasing from 80% then to nearly 90% in 2007. At the same time, we note that there remain areas with room for additional improvement. The rest of this report describes how the 2007 study was implemented and presents the key findings. It also shows some comparisons between 2007 and the 1995 study. It is our hope that findings from this study will provide the state of Maine with an important baseline measure of current CSR use and will identify areas in which the various child safety programs can best target their education and outreach efforts.

This project was conducted thanks to a contract between the Bureau of Highway Safety, Department of Public Safety, State of Maine, and the Survey Research Center at the Muskie School of Public Service, University of Southern Maine (USM), along with a sub-contract between USM and the Preusser Research Group in Trumbull, Connecticut. Again, our thanks go out to all who assisted in the funding, planning, and implementation of the study.

Child Safety Restraint Use in Maine, 2007

INTRODUCTION

For some years, the Maine Bureau of Highway Safety has contracted to have annual studies conducted to measure adult seatbelt use in the state. However, not since 1995 has there been an effort to examine the use of child safety restraints (CSRs). In 2007, the current study was undertaken to provide estimated use rates of child safety restraints (CSRs), booster seats, and seatbelts for children under the age of twelve. This report provides an overview of the findings and, where appropriate, comparisons with the 1995 results. The data contained in this report will be used to provide the Bureau of Highway Safety and the National Highway Traffic Safety Administration with the current use rates and a measure of changing use patterns over time.

The research project was conducted by the Survey Research Center of the Muskie School of Public Service at the University of Southern Maine, under a contract with the Maine Bureau of Highway Safety, Department of Public Safety, State of Maine. Tremendous assistance was also provided by our collaborators, Safe Kids Maine and the Preusser Research Group. The study was designed to determine the rate of child safety restraint use in Maine as part of the development of a statewide comprehensive highway safety plan for the state. It is also hoped that other child safety agencies and organizations will find the data useful in planning additional campaigns to increase use rates for Maine's children.

METHODOLOGY

A number of state and national studies of CSR use have been conducted in recent years. Because there is no standardized method in place, however, the methodologies utilized have varied significantly. Most have adopted some variation of the following two general methods:

- 1) observation sites are selected specifically from destination locations where high concentrations of children are likely to be found. These locations include pediatricians' offices, schools, day care centers, large toy stores, grocery stores, fast food restaurants, etc.
- 2) observation sites are selected from the full range of road segments and/or intersections within the geographic area being studied. Selection of intersections is generally weighted to reflect the traffic volume and type of road at each intersection.

While option 1 is very efficient, there is a risk that CSR use while traveling to those destinations may not be representative of general and typical use patterns. It may be that, when parents are taking their kids to the doctor's office or to school or day care, they are more likely to use their child restraints than they are for other travel. If this is so, the use rates could not be generalized to the larger population.

Option 2, on the other hand, would address that concern. Choosing observation sites that represent the traffic patterns of the entire state would include all types of traffic and destinations, thus providing a more accurate overview of CSR use in Maine. Following a conference call between SRC, Me BHS, and the Maine Bureau of Health, it was decided to utilize the second option. This also had the advantage of allowing some comparisons to the 1995 study, which was based on a similar approach.

The design that was developed followed four steps:

1. Allocate the proportion of sites to be sampled in each county. Distribute the total number of RGA intersections and the total number of stop-sign intersections according to those proportions.
2. Select specific RGA intersections randomly within county according to total AADT of the intersection legs; select stop-sign intersections randomly within county according to the AADT on the minor legs.
3. Develop observation procedures and schedules which provide reasonable balance for day of week and time of day consistent with efficient scheduling of observers.
4. Develop CSR and safety belt use estimation procedures and computations reflecting the design requirements.

Sites were selected from all 16 counties throughout the state, apportioned to counties according to their populations. A target of 60 RGA sites and 20 stop-sign-controlled sites was set to generally follow the 1995 study design; with rounding, the final figures were 62 RGA sites and 24 stop-sign sites. The distribution of sites by town and city, by county, appears as Table 9.

Intersections selected as observation sites. Observation sites must allow the opportunity for a reasonably representative flow of multi-purpose traffic, while allowing observers a safe viewing position from which to observe and record safety restraint and seatbelt use of occupants in each vehicle. Observers were given descriptions of the intersection to observe (“in Auburn, at the intersection of Minot Ave and Heath Lane”). They were also told which direction of traffic to observe. They then were able to find the most advantageous spot at the intersection from which to observe. Two observers were sent to each intersection; generally, they were diagonally opposite each other, such that one would observe traffic traveling one direction on the road and the other observer would record those traveling the other direction.

Sampling. The sites to be observed were selected by the Preusser Research Group of Trumbull, Connecticut. The sampling process was designed to provide a confidence level of 95% with an acceptable margin of error of plus or minus five percent. This resulted in a final sample size of 86 intersections, 62 with RGA signals and 24 with stop signs. Intersections were selected with probability of selection proportional to the traffic volume measured in average daily numbers of vehicles (AADT) by the Maine Department of Transportation. RGA intersections were selected according to total AADT for all legs of the intersections. Nearly all stop sign intersections are two-way stops; they were selected according to AADT on the minor legs, which would be the legs used for vehicle observations.

Observation times and days. Observations were made at 86 intersections throughout the state for 45 minutes each, on a structured schedule of observation times and days that would maximize the opportunity to study variations in restraint use by time and by day of week. Intersections were randomly assigned to a day and time for observations, although consideration had to be given for trips to locations that required lengthy travel times. Each day and time had an equal probability of selection. All observations were done during daylight hours.

Observation assignments were made across a schedule of time slots that began at 7:45 am and ended at 6:15 pm. They were conducted from March to May 2007.

Observer training. Observers were trained by SRC, Suzanne Cook of Safe Kids Maine, and Betty Mason from the Maine Bureau of Health. The training involved not only written material and oral presentation, but also field practice. Safe Kids Maine presented photos and descriptions of various child safety restraints and a segment on estimating ages of children, including practice exercises designed to increase the consistency of data collection between observers. The field practice was conducted at the intersection of Marginal Way and Preble Street Extension in Portland. The practice observations were crucial. Results were reviewed and analyzed for accuracy and consistency; no observers were allowed to begin until the practice observations met training standards.

OBSERVATION STUDY FINDINGS

Overview. In all, observations of belt and restraint use were made for 13,432 drivers and for 1,422 children. The vast majority of children in Maine, 89.7%, are in some type of child safety restraint or seatbelt. This represents an increase in the use rate of 1995, when 80.3% of children under age 11 were in a CSR or seatbelt (this figure is not quite comparable to 2007, as the age range was set at birth to 10 in 1995, compared to birth to 11 in 2007). However, it is likely that the type of restraint in use is often not the type that is appropriate for a child's age. While 84.4% of kids between 1 and 3 are in forward-facing child seats, for instance, 11.6 % are in other types of seats, suggesting that some parents are unsure of the type of restraint to be used for their children.

NOTE: We report the age and type of restraint in a number of tables and text. We need to point out that these data should not be considered to show "correct" use. Because height and weight are also factors in determining the type of CSR each child should be using, it is impossible to precisely report the correct or incorrect usage of CSR. While children age 1 – 3 would generally be placed in a forward-facing child restraint, for example, the child's size could lead to using a different type of restraint. In addition, the ages recorded are only estimates, not exact ages. Thus, we can only refer to the type of CSR used, not whether it is correct or incorrect.

Gender differences. There is very little difference between boys and girls in the overall use rates of CSR. Non-use is slightly higher among boys than girls, 11.4% and 10.3% respectively, but for practical purposes, these are essentially the same. Use rates are also quite consistent across age groups as well. See Table 2 for additional information regarding gender and CSR use.

Urban/rural differences. Some differences are found between urban and rural areas, with 91.6% of children in the 5 urban counties (Androscoggin, Cumberland, Kennebec, Penobscot, and York) being in some kind of CSR or seatbelt, versus 87.3% of those in the remaining 11 rural counties. For this study, over 59% of the intersections selected and 55.5% of the children observed were in the urban counties..

Type of vehicle. As with adult seatbelt use, CSR use is lowest among those in pickup trucks, 84.6%. Children traveling in cars have the next lowest rate, at 88%. Kids in SUVs have a use rate of almost 92%, and those in vans have a rate of almost 95%.

CSR use related to seatbelt use by driver. Also reflecting a pattern in adult seatbelt use, this study finds that when drivers use their safety belts, children in the vehicle (who are most likely family or friends of the driver) are much more likely to use their CSR or seatbelts as they are when the driver is not using a belt. The lowest CSR use rate in this study, 68.7%, was found to be when the driver did not use a seatbelt. Conversely, one of the highest rates measured, 95.4%, was when the driver was belted. The study also

Child Safety Restraint Use in Maine, 2007

finds that drivers who have children in their cars are more likely to use their seatbelts, at 78.7% vs. 73.3% of drivers without children in the vehicle.

Day of week. Observations were conducted on all days of the week, and while there are variations in CSR and seatbelt usage across the days (Table 6), there is no readily apparent pattern to the findings. The assignment of days and times of observation to the sites was systematic and unbiased, but the number of observations obtained on each day varied considerably because the traffic volume at the selected sites varied. Use rates were highest on Wednesdays (93%) and lowest on Tuesdays, at 86%.

Time of day. CSR use varies throughout the day (Table 7). The highest rates are at 8:30 and 9:15 am (100%) and 10:45am (97%), followed by 10:00 am and 1:45 pm, at 93% each. The lowest rates occur at 4:45 pm (86%) and 2:30 pm, at 80 percent. We wish to remind readers that the different times of day (and days of the week) have low numbers of observations and are therefore less precise than some of the other estimates in the study.

Weather conditions. Observers recorded the highest CSR use while it was raining (96%), but only 74 observations were made in the rain. (Because of the great difficulty seeing in cars while it's raining, observations can only be done during relatively light rain. If it's raining during a scheduled observation period, observers wait 15 minutes to see if it stops; if not, they go on to the next site and reschedule the rained out site for another time.) Ninety percent of children observed during sunny weather were in their CSR or belts, and almost 87% of those seen during cloudy weather were using theirs.

Comparison of 2007 with 1995. The 1995 study was a full statewide study of both child and adult safety seat and seatbelt use, utilizing a similar methodological design as the 2007 study. Because it was not specifically a child use study, only limited data analyses are available for comparison purposes, all related to the age of the child. Direct comparisons can be made for infants from birth to one year old, and for infants from 1 to 3 years old. For 1995, the next ages can be grouped from 4 to 10 years old but for 2007, the grouping is 4 to 11.

Among those children estimated to be under 1 year old, use rates have been very high. In 1995, 93% were found to be in some type of CSR, vs. 100% in 2007. For those aged 1 to 3 years, use rates are also higher in 2007 than in 1995, at 96% and 93%, respectively.

Use rates have improved considerably for the 4 to 11 year olds. In 1995, only 73% of children between 4 and 10 were restrained; almost all of them were in regular seatbelts. By 2007, that figure had increased to nearly 86%, using booster seats, forward-facing seats, and regular seatbelts. Especially noteworthy is the use of CSRs among the youngest of these children, the 4 to 7 year olds. While a booster seat is generally

the appropriate type of restraint for 4 to 7 year olds, only 20% of this age group were observed to be in such seats. Thirty-four percent were in forward-facing seats and 33% were in regular seatbelts. As mentioned earlier, the assortment of types of restraint used with this age group seems to indicate that some parents are unsure which type of restraint is best for their children. We do wish to acknowledge here that quickly recognizing the distinction between booster seats and forward-facing seats can be difficult; it is likely that some of those recorded as being in forward-facing seats were actually in boosters.

DISCUSSION

Child safety restraint and seatbelt use has increased in Maine over the years. This increase is most apparent among 4 to 11 year olds, who have improved from the 73% use rate of 1995 to 87% in 2007.

Some weaknesses can still be found, however:

- As children get older, their rate of use declines, so education around the importance of keeping kids in their appropriate restraints would seem to be of continuing value.
- The proper use of booster seats is clearly an area for continuing emphasis.
- Drivers' habits are related to children's use of CSR, as seen in the significantly lower use rate for children when the drivers aren't using their own seatbelts.
- Children in pickup trucks, like adults in pickups, are less likely to be restrained. All of these findings suggest areas on which to concentrate.

Some revisions might be made to the study design, if it is repeated in the future. Consideration could be given to expanding the number of intersections observed around the state, or to increasing the length of the observation period. As noted in the report, some of the subgroup analyses were based on a small number of observations; increasing the number of intersections or the length of observations at each site would increase the number of children seen, thus raising the precision of the estimates provided.

This study now provides a current measure of CSR and seatbelt use among Maine's children. As such, it establishes a baseline of use from which future change can be judged. This will be very important as programs assess results of their efforts to increase use rates for the state. It is likely that further media campaigns, education, and law enforcement efforts will be necessary to increase the current use level. Future studies may help to establish if additional steps are necessary to ensure that Maine's higher level of child safety restraint and seatbelt use in passenger vehicles will be maintained.

List of Tables

2007 Maine Child Passenger Restraint Use Observation Study

Table 1:	Restraint Use, All Children Under 12
Table 2:	Restraint Use, by Child Gender
Table 3:	Restraint Use, by Urban / Rural County
Table 4:	Restraint Use, by Type of Vehicle
Table 5:	Restraint Use, by Driver Restraint Use
Table 6:	Restraint Use, by Day of the Week
Table 7:	Restraint Use, by Observation Start Time
Table 8:	Restraint Use, by Weather
Table 9:	Maine 2007 Observation Sites List

TABLE 1

Child Passenger Restraint Use Statewide by Age Group

Maine, 2007

All Children Under 12

Child Age	Rear - facing CSR		Forward - facing CSR		Booster Seat		Seatbelt		Not Restrained		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
< 1 year	76	90.5	8	9.5	0	0.0	0	0.0	0	0.0	84	100.0
1 - 3 years	26	6.0	363	84.4	19	4.4	5.0	1.2	17	4.0	430	100.0
4 - 7 years	0	0.0	164	33.7	99	20.4	158	32.5	65	13.4	486	100.0
8 - 11 years	0	0.0	0	0.0	25	5.9	321	76.1	64	15.2	410	100.0
Total	102	7.2	535	37.9	143	10.1	484	34.3	146	10.4	1410	100.0

* Highlighted cells represent age appropriate restraints for each age group: Under 1 year = rear-facing CSR; 1 – 3 years = forward facing CSR; 4 – 7 years = booster seat; and 8 – 11 years = seatbelt.

TABLE 2

Child Passenger Restraint Use by Child Gender Statewide

Maine, 2007

Child Gender	Type of Restraint											
	Rear – facing CSR		Forward - facing CSR		Booster Seat		Seatbelt		Not Restrained		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Male*	37	6.0	226	36.7	65	10.6	217	35.3	70	11.4	615	100
Female*	40	5.5	275	37.7	76	10.4	263	36.1	75	10.3	729	100
Total	77	5.7	501	37.3	141	10.5	480	35.7	145	10.8	1344	100

* Known gender only

TABLE 3

Child Passenger Restraint Use by Urban / Rural County

Maine, 2007

County Setting	Age Appropriate Restraint*		Other Restraint		Not Restrained		Total	
	N	%	N	%	N	%	N	%
Rural	373	59.0	179	28.3	80	12.7	632	100.0
Urban	486	61.7	236	29.9	66	8.4	788	100.0
Statewide	859	60.5	415	29.2	146	10.3	1420	100.0

* Age appropriate restraints are different for each age group: Under 1 year = rear-facing CSR; 1 – 3 years = forward facing CSR; 4 – 7 years = booster seat; and 8 – 11 years = seatbelt.

TABLE 4

Percentage of Child Passenger Restraint Use by Type of Vehicle Statewide

Maine, 2007

Vehicle Type	Total Observations	Some Restraint	Not Restrained
Car	731	88.0	12.0
Truck	136	84.6	15.4
SUV	297	91.9	8.1
Van	257	94.9	5.1

TABLE 5

Child Passenger Restraint Use by Driver Restraint Use

Maine, 2007

Driver Restrained?	Child Passenger Restraint Use					
	Some Restraint		Not Restrained		Total*	
	N	%	N	%	N	%
Yes	1020	95.4	49	4.6	1069	100
No	189	68.7	86	31.3	275	100
Total	1209	90.0	135	10.0	1344	100

*Known restraint only

TABLE 6

Percentage of Child Passenger Restraint Use by Day of the Week Statewide

Maine, 2007

Day of Week	Total Observations	Some Restraint*	Not Restrained
Monday	204	90.7	9.3
Tuesday	121	86.0	14.0
Wednesday	181	92.8	7.2
Thursday	168	89.3	10.7
Friday	210	90.5	9.5
Saturday	295	88.8	11.2
Sunday	243	89.3	10.7

* Known restraint only

TABLE 7
Percentage of Child Passenger Restraint Use by Observation Start Time
Statewide
Maine, 2007

Observation Start Time	Total Observations	Some Restraint*	Not Restrained
7:45 AM	48	89.6	10.4
8:30 AM	25	100.0	0.0
9:15 AM	63	100.0	0.0
10:00 AM	135	93.3	6.7
10:45 AM	64	96.9	3.1
11:30 AM	105	89.5	10.5
12:15 PM	98	92.9	7.1
1:00 PM	89	89.9	10.1
1:45 PM	118	93.2	6.8
2:30 PM	132	80.3	19.7
3:15 PM	187	87.7	12.3
4:00 PM	138	88.4	11.6
4:45 PM	118	85.6	14.4
5:30 PM	102	87.3	12.7

* Known restraint only

TABLE 8

**Percentage of Child Passenger Restraint Use by Weather
Statewide**

Maine, 2007

Weather	Total Observations	Some Restraint*	Not Restrained
Sunny/Clear	1050	90.2	9.8
Raining	74	95.9	4.1
Cloudy	298	86.6	13.4

* Known restraint only

Observations of **Sunny/Clear** and **Cloudy** imply the roads are dry. **Raining** corresponds to light rain occurring during the observations (data are not collected in heavy rain) and thus the roads are wet. Other weather conditions such as "Fog" and "Snow/sleet", although they exist in our observation database, are not used in this table.

Table 9

Maine 2007 Observation Sites List

1. Cumberland County (16) <ol style="list-style-type: none">Portland (4)Brunswick (1)Standish (1)South Portland (2)New Gloucester (1)Cumberland (1)Gorham (1)Scarborough (2)Windham (3)	4. Kennebec (7) <ol style="list-style-type: none">Augusta (2)Waterville (2)Monmouth (1)Readfield (1)Gardiner (1)	10. Knox (3) <ol style="list-style-type: none">Rockport (1)Rockland (1)Camden (1)
2. York (12) <ol style="list-style-type: none">Saco (2)York (1)Alfred (1)Arundel (1)Wells (1)Waterboro (1)Eliot (1)Lyman (1)Sanford (2)Lebanon (1)	5. Androscoggin (7) <ol style="list-style-type: none">Auburn (1)Lewiston (3)Lisbon (1)Poland (1)Turner (1)	11. Waldo (3) <ol style="list-style-type: none">Belfast (2)Waldo (1)
3. Penobscot (9) <ol style="list-style-type: none">Bangor (3)Brewer (3)Bradford (1)Newport (1)Lincoln (1)	6. Aroostook (4) <ol style="list-style-type: none">Houlton (1)Presque Isle (1)Fort Fairfield (1)Limestone (1)	12. Piscataquis (3) <ol style="list-style-type: none">Guilford (1)Dover-Foxcroft (2)
	7. Hancock (3) <ol style="list-style-type: none">Blue Hill (1)Ellsworth (1)Bucksport (1)	13. Sagadahoc (3) <ol style="list-style-type: none">Bath (1)West Bath (1)Topsham (1)
	8. Oxford (4) <ol style="list-style-type: none">Oxford (1)Norway (1)Rumford (1)Mexico (1)	14. Franklin (3) <ol style="list-style-type: none">Farmington (2)Phillips (1)
	9. Somerset (3) <ol style="list-style-type: none">Fairfield (1)Skowhegan (1)Pittsfield (1)	15. Lincoln (3) <ol style="list-style-type: none">Boothbay Harbor (1)Dresden (1)Waldoboro (1)
		16. Washington (3) <ol style="list-style-type: none">Calais (2)Danforth (1)

