

**SB**

**218**

**HFIN**

**FILE**



# FISCAL NOTE

STATE OF ALASKA  
2008 LEGISLATIVE SESSION

Fiscal Note Number: \_\_\_\_\_  
Bill Version: SB 218  
( ) Publish Date: \_\_\_\_\_

Identifier (file name): \_\_\_\_\_ Dept. Affected: DOT&PF  
Title: \_\_\_\_\_ RDU: Planning  
Sponsor: Senator French Component: Program Development  
Requester: House Finance Committee Component Number: 2762

## Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information						
		FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>OPERATING EXPENDITURES</b>								
Personal Services								
Travel								
Contractual								
Supplies								
Equipment								
Land & Structures								
Grants & Claims								
Miscellaneous								
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
-----------------------------	------------	------------	------------	------------	------------	------------	------------	------------

<b>CHANGE IN REVENUES ( )</b>	<b>0.0</b>							
-------------------------------	------------	--	--	--	--	--	--	--

## FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts								
1003 GF Match								
1004 GF								
1005 GF/Program Receipts								
1037 GF/Mental Health								
Other Interagency Receipts								
<b>TOTAL</b>	<b>0.0</b>							

Estimate of any current year (FY2008) cost: \_\_\_\_\_

### POSITIONS

Full-time								
Part-time								
Temporary								

### ANALYSIS: *(Attach a separate page if necessary)*

Federal DOT Chief Counsel has confirmed that the passage of SB 218 will qualify Alaska for additional federal funds. Alaska would be eligible to receive an estimated \$194,235 in FFY09 and \$194,235 in FFY10. The exact funding amount will be based on the number of states that qualify and apply for funding.

Language has been included in the SFY 09 capital budget that provides that the sum of \$194,000 is appropriated from federal receipts to DOT&PF to provide child safety and booster seat incentive grants. The capital budget also includes contingency language with appropriation upon enactment of SB 218.

Prepared by: Suzanne Armstrong  
Division: House Finance Committee  
Approved by: Rep. Kevin Meyer, Co-Chairman  
Rep. Mike Chenault, Co-Chairman

Phone: 465-6875  
Date/Time: 4/09/2008 9:20 p.m.  
Date: 4/9/2008

## FISCAL NOTE

STATE OF ALASKA  
2008 LEGISLATIVE SESSION

BILL NO. CS SB 218

### ANALYSIS CONTINUATION

#### Child Safety and Booster Seat Incentive Grants:

Provides funds to states that are enforcing a law requiring any child riding in a passenger vehicle who is too large to be secured in a child safety seat, to be secured in a child safety seat to be secured in a child restraint that meets the requirements prescribed under section 3 of Anton's Law (49 USC 30127 note:116 Stat. 2772). States become eligible for these funds when specific weight and height of children are included in statute.

To qualify for a grant under this program, a state child restraint law must not leave any gaps in coverage for children under 8 years old (e.g.: gaps between coverage by a child safety seat and a booster seat).

Current Alaska law requires the use of proper safety devices for children under the age of 16 as approved by the U.S. Department of Transportation, but does not include which safety device must be used based on a child's age, height, and weight.

SB 218 puts USDOT National Highway Traffic Safety Administration (NHTSA) recommendations in statute, clarifying for law enforcement officials what devices are required for proper child restraint.

Up to 50 percent of the grant a State receives in a fiscal year may be used to fund programs for purchasing and distributing child safety seats and restraints to low income families. The remaining amounts shall be used to carry out child safety seat and child restraint programs, including: enforcement of child restraint laws; training of child passenger safety professionals, police officers, fire and emergency medical personnel, educators, and parents concerning all aspects of the use of child safety seats and child restraints; and educating the public concerning the proper use and installation of child safety seats and child restraints.

Replaced H110  
**FISCAL NOTE**

STATE OF ALASKA  
2008 LEGISLATIVE SESSION

Fiscal Note Number: \_\_\_\_\_  
Bill Version: CSSB 218(FIN)  
( ) Publish Date: \_\_\_\_\_

Identifier (file name): SB218CS(FIN)-DOT-PD-04-08-08 Dept. Affected: DOT&PF  
Title: An Act relating to use of child safety seats and seat belts. RDU: Planning  
Sponsor: Senator Hollis French Component: Program Development  
Requester: House Finance Component Number: 2762

**Expenditures/Revenues** estimated \$194,235 additional federal funding in FFY09

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information					
		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>OPERATING EXPENDITURES</b>							
Personal Services							
Travel							
Contractual							
Supplies							
Equipment							
Land & Structures							
Grants & Claims							
Miscellaneous							
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>	<b>194.2</b>		<b>194.2</b>				
-----------------------------	--------------	--	--------------	--	--	--	--

<b>CHANGE IN REVENUES ( )</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
-------------------------------	------------	------------	------------	------------	------------	------------	------------

**FUND SOURCE**

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1002 Federal Receipts	194.2	194.2				
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1007 GF/Mental Health						
Other Interagency Receipts						
<b>TOTAL</b>	<b>194.2</b>	<b>194.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY2008) cost: 0.0

**POSITIONS**

Full-time						
Part-time						
Temporary						

**ANALYSIS:** *(Attach a separate page if necessary)*

Federal DOT Chief Counsel has confirmed that the passage of SB218 will qualify Alaska for additional federal funds. Alaska would be eligible to receive an estimated \$194,235 in FFY09 and \$194,235 in FFY10. The exact funding amount will be based on the number of states that qualify and apply for funding.

CHILD SAFETY AND BOOSTER SEAT INCENTIVE GRANTS provide funds to States that are enforcing a law requiring any child riding in a passenger vehicle who is too large to be secured in a child safety seat to be secured in a child restraint that meets the requirement prescribed under section 3 of Anton's Law (49 USC 30127 note; 116 Stat.2772), for an appropriate child safety seat or booster seat. States become eligible for these funds when specific weight and height of children are included in statute.

Prepared by: Mary Siroky Legislative Liaison  
Division: Commissioner's Office DOT&PF  
Approved by: Nancy Slagle DOT&PF  
Director Division of Administrative Services

Phone: 907 465-4772  
Date/Time: 4/8/08 2:30 PM  
Date: 4/6/2008

FISCAL NOTE

STATE OF ALASKA  
2008 LEGISLATIVE SESSION

BILL NO. SB 218

ANALYSIS CONTINUATION

To qualify for a grant under this program, a State child restraint law must not leave any gaps in coverage for children under 8 years old (e.g., gaps between coverage by a child safety seat and a booster seat.)

Current Alaska law requires the use of proper safety devices for children under the age of 16 as approved by the US Department of Transportation, but does not include which safety device must be used based on a child's age, height and weight.

SB 218 puts USDOT National Highway Traffic Safety Administration (NHTSA) recommendations in statute, clarifying for law enforcement officials what devices are required for proper child restraint.

Up to 50 percent of the grant a State receives in a fiscal year may be used to fund programs for purchasing and distributing child safety seats and restraints to low income families. The remaining amounts shall be used to carry out child safety seat and child restraint programs, including: enforcement of child restraint laws; training of child passenger safety professionals, police officers, fire and emergency medical personnel, educators, and parents concerning all aspects of the use of child safety seats and child restraints; and educating the public concerning the proper use and installation of child safety seats and child restraints.

DOT&PF would receive these federal funds through federal transportation funding via the capital budget.

# Alaska State Legislature



## Senator Hollis French

### Sponsor Statement

#### SB 218 - Child Safety Seats and Seat Belts

Booster seats save lives. Of the sixty one children under the age of eight injured in auto accidents in recent years, only five were properly restrained in the recommended child safety seat. Nearly two thirds of the sixty one injured were children ages four to eight. At this age, many children are too large for a child's car seat but too small for an adult seat belt. The National Highway Traffic Safety Administration recommends that children under 80 pounds and under 57" use a child safety seat or a belt positioning booster seat.

Current Alaska law requires the use of proper safety devices for children under the age of 16 as approved by the US Department of Transportation. SB 218 puts USDOT National Highway Traffic Safety Administration (NHTSA) recommendations in statute, clarifying for law enforcement officials what devices are required for proper child restraint.

SB 218 states that:

- Children under one year of age or older but under 20 pounds, shall be secured in a rear facing child safety seat.
- Children one to four years old who weigh over 20 pounds shall be secured in a child restraint device or seat.
- Children ages four to eight who are under 57" in height and under 80 pounds shall be secured in a booster seat or a child restraint system.
- Children over 4 who are taller than 57" and weigh over 80 pounds shall be properly secured in a seat belt, just like adults.
- Children over eight but under 16 years of age who are under 57" and 80 pounds shall be restrained by the proper safety device or a seat belt, whichever is appropriate.

All safety devices, boosters and child seats must meet or exceed the standards set out by the United States Department of Transportation.

At this time, thirty nine other states mandate booster seat use. While any restraint is better than no restraint, national studies have shown booster seats are sixty percent safer than seat belts alone.

The cost of booster seats range from approximately \$25 to \$100, depending on the model.

Please join me in promoting passenger safety by supporting this legislation.



# Safe Kids<sup>®</sup>

## Alaska

January 30, 2008

The Honorable Senator Hollis French and Members of the State of Alaska Legislature  
Transportation Committee

Dear Senator French and Transportation Committee Members,

On behalf of Safe Kids Alaska, I urge you to support Senate Bill 218, the proposed upgrade to Alaska's child passenger safety law. I strongly urge you to approve this legislation in its entirety during the current legislative session.

As you may know, motor vehicle crashes remain the leading cause of unintentional injury-related death among children ages 14 and under. Each year, nearly 1,600 child occupants ages 14 and under die in motor vehicle crashes and close to 228,000 are injured as occupants in motor vehicles. Unrestrained children are more likely to be injured, to suffer more severe injuries, and to die in motor vehicle crashes than children who are restrained.

We know that strong occupant protection laws that are consistently enforced are one of the best ways to prevent injuries and save children's lives. Senate Bill 218, if enacted into law, would close a significant gap in Alaska's child occupant protection law by clearly requiring some older children to ride properly restrained in a booster seat or high-weight-harness child restraint, secured by the motor vehicle's safety belt system.

If Safe Kids Alaska can be of any assistance to you regarding Senate Bill 218, please do not hesitate to contact me. Thank you for your leadership on this important safety initiative for Alaska's children!

Sincerely,

*Sara L. Peniston, RN, BSNS, CPSTI*  
Safe Kids Alaska State Coalition Coordinator  
Child Passenger Safety Technician Instructor  
The Children's Hospital at Providence  
Telephone: (907) 261-3194  
Email: [safekidsak@providence.org](mailto:safekidsak@providence.org)

Safe Kids Alaska: Preventing Childhood Injury in The Last Frontier

Senator Hollis French  
Alaska State Legislature

January 25, 2008

Support Letter: SB 218  
Child Safety Seats and Seat Belts

Booster seats DO save lives and DO prevent life long injuries. The last child passenger safety law written in Alaska was in the 80's. We have discovered since then, through the advancement of technology, of on-scene crash investigations, hands-on emergency trauma treatment, through pediatric intensive care, and months, if not years, of rehabilitation the serious consequences of non-use and misuse of child restraints.

I have been an emergency department registered nurse in three major western trauma centers during my 42 professional years. The last 22 of those years, I worked in the largest emergency department in an Anchorage, Alaska and coordinated a statewide, national injury prevention program for children. Currently, in "retirement", I serve as the Chair of the Alaska Committee for Child Passenger Safety (CPS) and am a nationally certified CPS Instructor.

Beginning in 1987 in Alaska, CPS technicians and instructors began "checking" car seats, educating parents and caregivers how to choose and correctly install seats. Annual evaluation of thousands of car seat "check" records, indicated an 85% misuse rate in the most commonly used seats, with three or more critical errors. We also continued to find, through the years, parents and caregivers misunderstood the Alaska Child Passenger Safety Law. Most, when questioned, said the law allowed children to turn forward facing BEFORE one year of age and children could MOVE to a "safety belt" at age 4.

Due to muscle instability and bone growth, children MUST remain rear facing until they are at the very least one-year of age and 20 pounds. The American Academy of Pediatrics recommends, barring any medical conditions, children remain rear facing for even longer depending on the range of the car seat. Car seat belts (lap only and lap-shoulder) were designed by all car manufacturers for individuals over 4 foot 9 inches and heavier than originally indicated, fitting over the upper thighs, across the chest, with knees bent at seat edge, feet touching the floor, holding an individual safely in the restraint.

It is time to join the majority of states and update Alaska's Child Passenger Safety Law. We have the knowledge and the data indicating children are at risk if not secured properly and secured in booster seats for a longer period than previously indicated. Parents look to our current law for guidance and have been confused, putting children at risk.

There is nothing quite so tragic as the loss of a child due to preventable injuries.

Thank you for your consideration; Margaret (Peggy) Hayashi, R.N.

January 24, 2008

Dear Senator Hollis French,

Thank you for hosting Senate Bill 218 which if passed, would mandate booster seat use for children under 4'9". The law currently states "Children over four must be secured in an approved child safety seat, booster seat or safety belt, whichever is appropriate for the particular child."

As a nationally certified Child Passenger Safety instructor, I work with families promoting motor vehicle safety. It is quite common to find the 4-8 year old child restrained only by a seat belt. If Senate Bill 218 was passed, parents with children between 4-8 years old would know that a booster seat is appropriate for their child's motor vehicle safety.

I commonly witness youngsters (4 to 8 years old) in seat belts only. Seat belts are designed for an adult body and do not fit a child properly; the shoulder belt cuts into their neck or face, the lap belt fits high on their abdomen. To counteract the poor fit, the child puts the shoulder belt behind their back- now the child only has a lap belt holding them into the vehicle.

Unfortunately in the event of a crash, if the child is only secured by the lap belt up high on their abdomen, the injuries to their internal organs, spine, neck, and head are far greater and severe. National studies have shown children restrained in booster seats are sixty percent safer than seat belts alone.

In the June 2003 issue of the Journal of the American Medical Association, a study was published showing the first real-world evidence of the added safety benefits of booster seats compared with seat belts alone. In addition, the study demonstrates that proper positioning of the belt by booster seats virtually eliminates injuries associated with seat belt syndrome, including injuries to the abdomen and spine. In contrast, children in the study who were restrained in seat belts alone suffered injuries to every body region.

Seat belts are not designed for children, seat belts are designed to fit those over 4'9" and at least 80 pounds. Let's protect our Alaskan children, as 39 states have, by passing a Booster Seat law.

Thank you and please let me know if I can be assistance in promoting booster seat legislation. Sincerely, Beth

Beth Schuerman, Certified Child Passenger Safety Instructor  
8805 Little Brook St.  
Anchorage, AK 99507  
907-244-1123

# Alaska Automobile Dealers Association

January 25, 2008

Re: SB 218

To All Members of the House and Senate:

The Alaska Auto Dealers Association Board of Directors passed a unanimous resolution in support of SB 218 and we urge you to support this worthy bill. SB 218 bill, if passed, will help protect young children by updating the current infant and booster seat law which has become outdated.

For example, current law gives the parent the option of placing a small four year old in a booster seat or utilizing a seat belt. Vehicle safety systems have advanced dramatically since the current law was written with a variety of active and passive safety devices being added to vehicles. Front, side and curtain airbags, which have tremendous explosive force if triggered, are just one example of safety devices that weren't in existence when the current law was written.

As automobile dealers, we can assure you that no vehicle manufacturer recommends placing a small four year old in a seat belt only. Doing so could result in serious injury or death to the child.

Nearly forty two states have updated their infant and booster seat laws along the lines proposed. By adopting new legislation, the State will be eligible for grant monies which could be used for a safety campaign. Most importantly, however, updating our law will insure that children are better protected on Alaska's roads. We urge and appreciate your support of SB 218.

Sincerely,

*Jon Cook*

Jon Cook  
Legislative Director

**Allison Biastock**

---

**From:** Heath, Brian [BHeath@borough.kenai.ak.us]  
**Sent:** Monday, January 28, 2008 4:51 PM  
**To:** Allison Biastock  
**Subject:** SB218

As a Paramedic/ Firefighter, as a parent of three children and as someone who has witnessed the aftermath of preventable childhood injuries, I fully and without reservation support the passage of SB218.

NREMT-P/Engineer/CSS Tech  
Brian P. Heath  
Central Emergency Service  
Soldotna, Alaska



Property Casualty Insurers Association of America

Shaping the Future of American Insurance

January 29, 2008

The Hon. Hollis French  
Alaska State Senator  
State Capitol, Room 417  
Juneau, AK 99801-1182

**RE: Support for SB 218**

Dear Senator French,

On behalf of the more than 1,000 insurer members of the Property Casualty Insurers Association of America, who collectively write more than 40% of the property/casualty insurance policies in force in the United States today, I am pleased to inform you of our support for your proposed **SB 218**, an act relating to child safety seats and seat belts.

PCI has recently adopted a revised policy position on the issue of child safety in private passenger autos, which recognizes that while all 50 states currently have laws on the books aimed at protecting children traveling in private passenger autos, there are gaps in those laws in many states, particularly in the 4-8-year old age group. Passage of SB 218 would bring Alaska into compliance with standards set by the National Highway and Transportation Safety Administration for children. We support this legislation and applaud the efforts you and your colleagues in the Alaska Legislature are putting forth to improve child safety.

Please let me know if I can provide any additional information.

A handwritten signature in cursive script that reads "Kenton Brine".

Warm Regards,  
Kenton Brine  
NW Regional Manager

CC: Kris Knauss, PCI AK lobbyist



The Children's Hospital at Providence

January 30, 2008

The Honorable Senator Hollis French and Members of the State of Alaska Legislature  
Transportation Committee

Dear Senator French and Transportation Committee Members,

On behalf of The Children's Hospital at Providence, I urge you to support Senate Bill 218, the proposed upgrade to Alaska's child passenger safety law. I strongly urge you to approve this legislation in its entirety during the current legislative session.

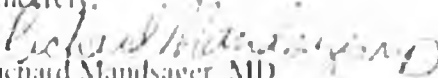
As you know, motor vehicle crashes remain the leading cause of unintentional injury-related death among children ages 14 and under. Each year in the United States, nearly 1,600 child occupants ages 14 and under die in motor vehicle crashes and close to 228,000 are injured as occupants in motor vehicles. Unrestrained children are more likely to be injured, to suffer more severe injuries, and to die in motor vehicle crashes than children who are restrained.

The Children's Hospital at Providence provides the hospital care to many of Alaska's children who are seriously injured in automobile accidents. So many of these tragedies could be prevented or would have less severity if the children had been adequately restrained.

We know that strong occupant protection laws that are consistently enforced are one of the best ways to prevent injuries and save children's lives. Senate Bill 218, if enacted into law, would close a significant gap in Alaska's child occupant protection law by clearly requiring some older children to ride properly restrained in a booster seat or high-weight-harness child restraint, secured by the motor vehicle's safety belt system.

If we at The Children's Hospital at Providence can be of any assistance to you regarding Senate Bill 218, please do not hesitate to contact me. Thank you for your leadership on this important safety initiative for Alaska's children!

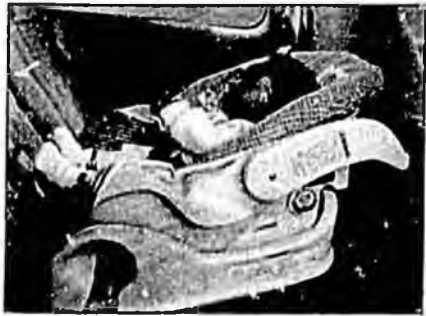
Sincerely,

  
Richard Mandsager, MD

Executive Director - The Children's Hospital at Providence

## SB 218

### Child Safety Seats and Seat Belts



1) A child under one year, or over one year but under 20 pounds shall be secured in a rear facing child safety seat

2) A child one to four years of age who is over 20 pounds shall be properly secured in a child restraint device.

3) A child over four years, but under eight years who is less than 57 inches and under 80 pounds shall be secured in a booster type seat or another child passenger restraint system secured by a belt system.

4) A child over four years of age who exceeds the height and weight requirements of 3) shall be secured in a seat belt.

5) A child between the ages of eight and sixteen who does not meet the height and weight requirements of 3) shall be secured in a child safety device or a seat belt, whichever is appropriate.



**AS 28.05.098 - A person may not sell, offer for sale, or install a child safety device that does not meet federal standards**



### Primary and Secondary Laws

**Primary** (AK, AL, CA, CT, DC, DE, GA, HI, IA, IL, IN, KY, LA, MD, MI, MS, NC, NJ, NY, OK, OR, SC, TN, TX, VA, WV)

**Secondary** (AR, AZ, CO, FL, ID, KS, MA, ME, MN, MO, MT, ND, NE, NH, OH, PA, RI, SD, UT, VT, WI, WY)

**■** No adult safety belt law (NH)

**★** States Mandating Booster Seat Use

# FOR YOUR family

## Belt-positioning Booster Seats: *Easy to Use, Affordable and Safe*

When your child reaches the top weight or height for his child safety seat, his shoulders are above the harness slots or his ears have reached the top of his child safety seat, he needs a booster seat. A booster seat raises your child up so that the vehicle's lap/shoulder belt fits him correctly.

### How do you use a booster seat?

- Read the booster seat and vehicle user manuals.
- Place the booster seat in the back seat in a position with a lap/shoulder belt. Never use a booster seat if there is only a lap belt.
- After your child sits in the booster, pull the lap/shoulder belt across him and buckle the seat belt.
- Check to see if the belt crosses the shoulder between the neck and arm and that the lap belt is low and snug on the hips, just touching the thighs.



### What type of booster is best?

- Use a backless booster seat if the back seat of your car has head rests or a high seat back. Otherwise, choose a high-back booster seat.
- Prices start at \$20 for a backless booster. More expensive seats are not necessarily safer.

### How effective are boosters? Why aren't seat belts good enough?

- Belt-positioning boosters are safest for your school-age child in a crash. Any restraint is better than no restraint, but boosters are 66 percent safer than seat belts alone. In a crash, poor-fitting seat belts can result in serious injury to a child's abdomen, neck and head.
- Seat belts are made to fit adults. Until your child is big enough, he needs a boost.

### What to do if your child says, "But I'm a big kid now!"

- Tell your child that the car will not move until everybody is buckled up correctly.
- Let your child select his booster seat, and teach him how to buckle himself up.
- Show your child that the booster will let him see out the window better and help make the seat belt comfortable.
- Tell your child that boosters are for "big kids." Don't call a booster seat a child's seat.

### When is it safe to move my child from his booster seat to an adult seat belt?

Your child should stay in a booster seat until the adult seat belt fits — usually when he is about 4'9" in height and is 8 to 12 years old. The seat belt fits properly when:

- The shoulder belt lies across the chest, not the neck or face.
- The lap belt is low and snug across the thighs, not across the stomach, and
- The child is tall enough to sit against the vehicle seat back with his legs bent at the knees and feet hanging down.



The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.



## Report from the Alaska Trauma Registry on Motor Vehicle Injuries to Children

A query of the Alaska Trauma Registry data for the most recent years available, 2001-2005, identifies 61 children, from birth through eight years of age, seriously injured in a motor vehicle crash on the highway. The National Highway Traffic Safety Administration recommends that children be restrained in a child safety seat or belt positioning booster seat up through age eight.

All of these injuries required admission to the hospital, three died, and one two-year-old's injuries resulted in quadriplegia. **Only five of the 61 injured children were recorded to have been restrained properly in the recommended child safety seat at the time of injury** – and none of the four mentioned above was properly restrained. There was one additional injury, not included in the 55, which involved a fetus who was subsequently delivered by C-section.

A further breakdown of age groups and safety equipment use is as follows:

≤ 1 year:	7 injured	3 restrained in child safety seats; <b>4 unrestrained</b>
1 year old:	4 injured	1 restrained in a child safety seat; <b>1 unrestrained</b> ; 2 unrecorded
2 years old:	5 injured	2 in child safety seat ( <b>1 child seat failed-was ejected</b> ); <b>2 with safety belt/harness</b> ; <b>1 unrestrained</b>
3 years old:	6 injured	<b>1 lap belt only</b> ; <b>5 unrestrained</b>
4-8 years old:	39 injured	<b>15 with safety belt/harness</b> ; <b>9 lap belt only</b> ; <b>11 unrestrained</b> ; 4 unrecorded

Total: 61

Clearly the incidence of not using restraints is very high among the injured population in this study. However, also remarkable, is the incidence of improper restraint, especially among children ages 4 through 8. Without belt positioning booster seats, this group is not adequately protected during a motor vehicle crash.

Tariq Ali & Martha Moore  
Alaska Trauma Registry, Dept. of Health & Social Services (HSS)  
Section of Injury Prevention & EMS (IPEMS)  
Division of Public Health

## Preliminary Data Indicate That Booster Seat Laws Increase Child Safety Seat Use

On June 1, 2006, Wisconsin enacted a child passenger safety law requiring children between 4 and 8 years old or who weigh between 40 and 79 pounds and are no taller than 4 feet 9 inches to be restrained in booster seats. The law does not require the booster seat to be placed in a back seat. During a six-month grace period, police issued written warnings instead of citations for first-time violations. Beginning January 1, 2007, police issued citations for violations.

Prior to June 1, 2006, Wisconsin law required all children under 4 to be in child restraints, and children between 4 and 8 years old to be in child restraints or safety belts. While Wisconsin's child passenger safety (CPS) law is a primary enforcement law, meaning police can write tickets to parents and caregivers of improperly restrained children, Wisconsin's adult seat belt law is a secondary enforcement law. Police can only give an adult seat belt violation if a driver is pulled over for another violation.

The Wisconsin Department of Transportation developed a one-page information sheet and card to provide details of the new law for law enforcement personnel and the public. The Wisconsin Bureau of Transportation Safety also ran an article on the new law in its May newsletter. The American Automobile Association (AAA) of Wisconsin and Safe Kids Worldwide (SKW) held a news conference in Madison on June 1 in conjunction with SKW car seat checks around the State.

In order to examine the effectiveness of this law to increase booster seat use among children of booster seat age, the National Highway Traffic Safety Administration contracted with TransAnalytics, LLC, and its subcontractor, Program Professionals, Inc., to conduct an observational survey of booster seat use in Wisconsin before and after the law changed.

### Method

Booster seat observation sites were located in urban and suburban areas and based on site permission, high numbers of target vehicles entering the site, safety, and location. The most common sites were shopping centers with retail stores that attract the target vehicle group (e.g., Wal-Mart,

Toys“R”Us); elementary schools and child care centers; health care centers; and recreational sites. A convenience sampling approach was used.

To obtain control/comparison data, booster seat observations were also conducted in Michigan, a neighboring State that had no legislative action for enacting a booster seat law. Under Michigan's law, all children under the age of 4 must be in a child restraint system, and children between 4 and 16 must wear a seat belt. All front-seat occupants must wear seat belts. However, in Michigan, both CPS and seat belt laws are primary enforcement laws.

Baseline data was collected in the Milwaukee, Wisconsin, area May 9-11, 2006, and in the Detroit, Michigan, area May 18-24, 2006. Post-intervention data was collected in Wisconsin September 6-23, 2006, and in Michigan September 11 to October 3, 2006.

Data collectors stationed in parking lots and targeted drivers who were (a) parking their cars, and, (b) transporting at least one child passenger appearing to be 4 to 8 years old. Upon receiving the driver's permission to participate in the study, data collectors noted the vehicle type, number of passengers, seating positions, sex, and restraint use.

### Results

Overall, the driver and vehicle characteristics (e.g., percentage of female versus male, race, vehicle types, and number of occupants) were similar in Wisconsin and Michigan during the pre- and post-intervention periods.

Although booster seat use among children 4 to 8 years old increased from 40 to 45.9 percent in Wisconsin and from 38.6 to 40.2 percent in Michigan during this same period, these increases were not statistically significant (see Table 1).

However, during the pre- and post-booster-seat law period, the overall patterns of restraint use (safety belt, child safety seat [CSS], booster, and unrestrained) for children 4 to 8 changed significantly in Wisconsin ( $p < .02$ ) and in Michigan ( $p < .01$ ). In both States, the number of children in child safety seats and booster seats increased, and the number of children

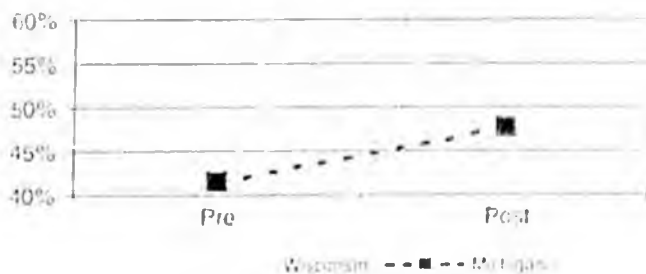
in seat belts decreased. However, in Wisconsin, the number of unrestrained children remained relatively stable, while the number in Michigan increased.

**Table 1. Restraint Use for Booster-Seat-Age Children**

	Wisconsin		Michigan	
	Pre N=407	Post N=355	Pre N=472	Post N=465
Safety Belt	30.7%	21.1%	45.6%	35.7%
CSS	8.6%	11.8%	3.0%	7.3%
Booster	40.0%	45.9%	38.6%	40.2%
Unrestrained	20.6%	21.1%	12.9%	15.8%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Since there is a large variation in children's sizes between 4 to 8 years old, smaller children would be appropriately restrained in CSSs with internal harnesses while larger children would be appropriately restrained in booster seats. There is also some variation in upper weight limits for forward-facing CSSs with internal harnesses (e.g., from 40 to 80 pounds), so a child 40 pounds or over may still be appropriately restrained in a CSS.

**Figure 1. Children Ages 4 to 8 Appropriately Restrained in Child Passenger Seats or Booster Seats**



A chi-square test was performed to determine if there was a significant difference from the pre- to post-booster law period in the number of children who were appropriately restrained, without regard to the type of child restraint system. Thus, an appropriately restrained child could be riding in a booster seat or in a CSS. In Wisconsin, significantly more children were appropriately restrained from before to after the law (p < .02) while the results for Michigan were not significant. The combination of CSS and booster seat use in Wisconsin

showed an increase of 9.1% (48.6% to 57.7%) and the same combination yielded an increase in Michigan of 5.9% (41.6% to 47.5%, see Figure 1).

There was also a trend for children inappropriately restrained for their age (e.g., in seat belts or completely unrestrained). In Wisconsin, the number of children in seat belts and the number of children who were completely unrestrained decreased 9.1% (51.3% before the law; 42.2% after the law). In Michigan during this same period the number of children in seat belts and the number of children who were unrestrained decreased 6% (58.5% before the law; 52.5% after the law).

For both States, over half of the booster seats were the backless type in the pre- and post-intervention periods. Over one-third of the booster seats were belt-positioning, high-back models in the pre- and post-intervention periods. About 10% were combination seats and only about 2% were shield boosters in each period.

## Conclusions

These findings offer the first indications that Wisconsin's Booster Seat Law had the effect of increasing child restraint system use (CSS or booster seats) for children 4 to 8 years old. However, this study has limitations because it used a convenience sample. While not necessarily representative of the State, the study findings show a significant change in the direction of safer practices from pre- to post-Wisconsin's booster seat law change.

It can be inferred that the booster seat law motivated parents and caregivers to move their children into some type of restraint that was appropriate for the child's age and weight. Since there was no concomitant change in the comparison State from pre- to post-intervention (no child booster seat law was implemented in Michigan), it may be inferred that the increase in appropriately restrained children in Wisconsin was the result of the new law.

## How to Order

The report for *Preliminary Data Indicate That Booster Seat Laws Increase Child Safety Seat Use* prepared by TransAnalytics, LLC, will be available in the next few months by writing to the Office of Behavioral Safety Research, NHTSA, NHT-130, 1200 New Jersey Avenue SE, Washington, DC 20590, fax 202-366-7090, or download from [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov). John Siegler, Ph.D., was the Task Order Manager for this project.



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

1200 New Jersey Avenue SE | NHT-130  
Washington, DC 20590

*TRAFIC TECH* is a publication to disseminate information about traffic safety programs, including evaluations, innovative programs, and new publications. Feel free to copy it as you wish. If you would like to receive a copy, contact Patricia Ellison Potter, Ph.D., Editor, fax 202-366-7090, e-mail [traffictech@dot.gov](mailto:traffictech@dot.gov).