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July 3, 2013

Mr. David Strickland  
Administrator  
National Highway Traffic Safety Administration  
NVS-112  
1200 New Jersey Ave, S.E.  
Washington, DC 20590

**Re: Proposed Update to the New Car Assessment Program**  
**Docket No. NHTSA-NHTSA-2012-0180-0001**

Dear Administrator Strickland:

We write to provide comment about the child safety aspects of the National Car Assessment Program (“NCAP”) update of the National Highway Traffic Safety Administration (“NHTSA”). Safe Kids Worldwide is a firm believer in the NCAP, as well as its strategy of updating it. The process of updating NCAP is good public policy because, especially in this area, there is constant change: emergent risks and evolving technology and engineering. We write to provide Safe Kids’ interest in several areas of the NCAP: enhancing rear seat child safety and the “Family” Star rating; improvements to the car seat “Ease of Use” rating; seat belt reminders; and blind spot detection.

**Introduction: Safe Kids Worldwide**

Safe Kids Worldwide is a global network of organizations dedicated to providing parents and caregivers with practical and proven resources to protect kids from unintentional injuries, the number one cause of death to children in the United States. Safe Kids works with an extensive network of more than 600 coalitions in the U.S. and in 25 countries to reduce traffic injuries, drowning, falls, burns, poisonings and more. All of our work is evidence-based.

Since 1988, Safe Kids has worked with multiple partners and government agencies including the Department of Transportation (“DOT”), NHTSA and the National Transportation Safety Board (“NTSB”), to help reduce the U.S. childhood death rate from unintentional injury—with a special emphasis on motor vehicles--by 55 percent.<sup>1</sup> A significant part of that improvement is from a 59% reduction in occupant car crash fatalities in children 19 and under from 1988 to 2011.<sup>2</sup> Coupled with education, lawmaking and enforcement, there is no question that innovations by government, industry and organizations like Safe Kids are a large factor in that remarkable success. This is why NCAP is so important.

However, unintentional injuries remain the number one cause of death of kids 19 and under, and car crashes remain the single largest contributor. In 2011, 3,933 kids 19 and under died in motor vehicle crashes.<sup>3</sup> Working together, we can do much more to make kids safer. Recently, on the occasion of the organization’s 25<sup>th</sup> anniversary, Safe Kids issued a call to action that we strive to reduce child injury

resulting in death by 50% by 2020. Making significant progress involving kids under 19 in cars is indispensable in attaining that goal.

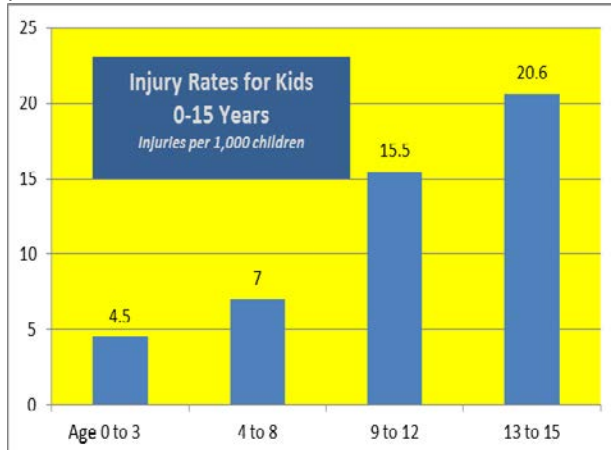
The technology and education that is vital to child passenger safety has been part of Safe Kids' DNA throughout its 25 years. NHTSA has designated Safe Kids as the body to certify technicians who have the expertise to check for correct use and installation of car seats. Today, more than 36,000 certified child passenger technicians work in every state to make families safer. Safe Kids coalitions alone have conducted 84,162 car seat check events over the years and have provided 572,374 car seats to families in need. Annually, they check more than 100,000 car seats using a standardized, scannable checklist form that provides timely data and monitors trends. Safe Kids has made this data available for research and education purposes to NHTSA, injury prevention partners, child restraint and vehicle manufacturers.

Thus, Safe Kids plays a vital part in the federal and state scheme relating to child passenger safety, the laws, their implementation and education. Moreover, it has developed an expertise about keeping kids safe in motor vehicles.

### 1. It is Important to Address the Rear Seat Safety Challenge.

Opening the door to a heightened focus on the car's rear seat is imperative. Significant progress has been made to enhance safety in the front seat through airbags and enhanced safety belt features. In addition, there has been continuing progress in protecting younger children through sophisticated child restraint systems and engineering in cars.

Kids spend a significant part of their day in the back seats of motor vehicles. According to a recent study by the Children's Hospital of Philadelphia ("CHOP"), kids under 16 spend an average 45 to 50 minutes in cars every day and predominantly in the rear seat.<sup>4</sup> A September 2011 Safe Kids study of 79,000 car seats and child occupants who attended our car seat and inspection station events, 98.8% of children arrived in a back seat.<sup>5</sup> According to the recent CHOP report, 70% of rear seat occupants are children.<sup>6</sup> Safe Kids has taken the position that kids younger than 13 should be in the rear seat, adopting the best practice recommendation of the American Academy of Pediatrics.<sup>7</sup>



However, while younger children are safer because of child restraint systems, the injury rates increase as kids get older. The dramatic difference is demonstrated in the chart at left. The standard for laws requiring when a child should be in a child restraint system uses age 8 as the breakpoint. Kids under age 8 involved in motor vehicle crashes are much safer compared to children 9 to 15.<sup>8</sup>

Unfortunately, research and engineering the rear seat for safety has lagged behind public information and education efforts including

recommendations regarding use of this preferred location in the car for child occupants. The CHOP study helps us take a giant step forward in this area. Current regulation and testing has almost solely focused on the front seat, except for testing of small adults in side impact and out of position children exposed to side airbags in the rear seat. Thus, Safe Kids recommends that NHTSA include a focus on effective and feasible rear seat occupant safety features that would increase survivability of young

passengers in crashes in back seats. Before new testing is implemented, careful consideration should be given to unintended, negative consequences of new rear seat innovations:

- It is vital that innovations not compromise safe child restraint installations.
- Changes to the rear seat should be made only after thorough evaluation to assure that enhancements do not adversely affect the proper use or the performance of rear and forward facing child restraints and booster seats.
- The changes should not resolve potential injury to one part of a passenger's body to the detriment of another body part.

Among the technologies that should be considered include those that have been used to make the front seat safer: adjustable shoulder belts and safety belts with load limiters and pre-tensioners. Additionally, the length of motor vehicle rear seat cushions is important to study because many kids in the later age groups with short femurs or legs may not "fit" on them. This may cause the young occupant to slide forward until they can bend their knees or have their feet touch the floor. This causes them to slouch in the seat and results in poor lap belt positioning high on the abdomen, potentially causing serious injury in a crash. The recent CHOP study observed that many vehicle seat cushions are longer than needed for comfort and safety.<sup>9</sup> All innovation should be encouraged and then diligently tested.

#### **1.a. Require Rear Seat Reminders**

Part of the challenge is that rear seat passengers, young and old, are not buckling up. Safe Kids believes that NCAP should give serious consideration to requiring or incentivizing the installation of reminders for all passengers to buckle their seat belts. The history involving the use of front seat reminders goes back to 1972.<sup>10</sup> It is time for the rear seat to catch up. The reminder system should be sensitive enough to detect the weight of an unoccupied child restraint system and younger children beyond the booster seat age. We note that the recent MAP-21 law required a rulemaking proceeding on rear seat belt reminders and are supportive of that effort.<sup>11</sup>

#### **2. Refine Child Seat "Ease of Use" Rating**

Congress required NHTSA through the TREAD Act to evaluate the "ease of use" of child restraint systems<sup>12</sup> and the agency developed a star rating program on a child seat's "ease of use." It has been helpful in drawing attention to child restraint features such as labeling, instructions, child securement, and vehicle installation features.

However, the public remains confused as to whether the star rating on a car seat also reflects its safety performance in a dynamic crash test. Safe Kids sees the need to provide the public with a more inclusive rating of the car seat crash performance coupled with its ease of use, before awarding stars as both are important factors in choosing a car seat. Safe Kids recommends that the agency work with both vehicle and child restraint manufacturers to develop a dynamic product testing environment relevant to vehicles in use today. The new star rating should be phrased in plain English, as well as presented in Spanish.

### **3. Safe Kids Supports Development of a “Family Star” Rating**

Safe Kids is very supportive of the idea of providing a “Family Star Rating.” To make the rating as valid as possible, Safe Kids Worldwide recommends that work continue to develop a crash test dummy family that appropriately replicates children in frontal and side impact crashes.

Vigorous testing involving older kids in the rear seat would help to maximize its safety in the rear seat and address the kids no longer in a child restraint system or booster seat. The new “Family Star” rating would be a significant contribution as parents evaluate which motor vehicle to purchase knowing that a full range of dummies were used to test not only the front but also the rear seating positions in both frontal and side impact crashes. In addition, it would encourage industry to adopt the best engineering and technology involving the rear seat.

### **4. “Silver Car” Rating Should Be Consistent with CPS**

We note, also, that the NCAP invitation for comment discusses the possibility of a “Silver Car” rating that considers risks unique to older Americans. We applaud this vision. Any “silver car” rating should be entirely consistent with child safety best practices because grandparents are so often caregivers.<sup>13</sup> Technology that benefits older adults should not compromise child occupant protection and must be thoroughly evaluated before adoption. A silver car rating should include and evaluate the potential impact for child occupant safety--both in child restraint systems and when using the seat belt designed for the older adult. In addition, we must anticipate change of ownership of motor vehicles, sometimes within an extended family.

### **5. Address Blind Spot Detection**

Safe Kids has an interest in the risk posed to kids from motor vehicle back-overs. They constitute a significant risk to kids on foot, bicycles and tricycles, and other vulnerable populations. The following statistics call for continued vigilance:

- In 2007, motor vehicle back-overs were associated with an estimated 99 deaths and 2,000 injuries among children ages 14 and under.<sup>14</sup>
- It is estimated that back-overs account for 45 percent of non-traffic crash fatalities and 20 percent of non-traffic crash injuries to children.<sup>15</sup>
- Approximately 39 percent of back-over deaths occurred at home in the driveway, an apartment parking lot or in a townhome complex.<sup>16</sup>
- Back-over fatalities disproportionately affect children under 5 years old and adults 70 or older. When restricted to back-over fatalities involving passenger vehicles, children under 5 account for 44 percent of the fatalities, and adults 70 and older account for 19 percent.<sup>17</sup>

In recent years, vehicle manufacturers have provided some forms of blind spot detection, including rear view cameras and other sensing technology. In addition to technology, however, the child safety community must continue to educate the public about ways to prevent back-over injuries for the millions of vehicles still on the road built without back-over avoidance technology. An updated study of the Not in Traffic Surveillance (“NiTS”) program<sup>18</sup> might help us evaluate how the newer technology is impacting backovers and other non-traffic injuries and fatalities. In another rulemaking process, we know that NHTSA is studying rear view camera technology, though we are disappointed that the timeline has been extended.<sup>19</sup>

## Conclusion

Based on the foregoing, Safe Kids strongly supports the NCAP update process and appreciates the opportunity to address these concerns which have an impact on kids, both the most vulnerable passengers who are young and older child passengers who are experiencing higher injury rates.

Sincerely,

Kate Carr  
President & CEO

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## SOURCES:

<sup>1</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). National Center for Injury Prevention and Control Website. Available from: <http://www.cdc.gov/injury/wisqars/index.html>, last accessed January 2013.

<sup>2</sup> National Highway Traffic Safety Administration, FARS, Available at: <http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectYear.aspx>, last accessed March 11, 2013.

<sup>3</sup> National Highway Traffic Safety Administration, FARS, Available at: <http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectYear.aspx>, last accessed February 27, 2013.

<sup>4</sup> Arbogast, K, Durbin, D, "Optimizing the Rear Seat for Children," Children's Hospital of Philadelphia, Center for Injury Research and Prevention, June 2013, hereinafter "CHOP Optimizing report," available at [http://injury.research.chop.edu/sites/default/files/documents/cps\\_issue\\_report\\_2013\\_web.pdf](http://injury.research.chop.edu/sites/default/files/documents/cps_issue_report_2013_web.pdf), last accessed, 06.26, 2013.

<sup>5</sup> Decina L, Lococo K, Joyce J, Walker L. A Look Inside American Family Vehicles: National Study of 79,000 Car Seats, 2009-2010. Washington (DC): Safe Kids Worldwide, September 2011.

<sup>6</sup> Arbogast, K, Durbin, D, "Optimizing the Rear Seat for Children," Children's Hospital of Philadelphia, Center for Injury Research and Prevention, June 2013, hereinafter "CHOP Optimizing report," available at [http://injury.research.chop.edu/sites/default/files/documents/cps\\_issue\\_report\\_2013\\_web.pdf](http://injury.research.chop.edu/sites/default/files/documents/cps_issue_report_2013_web.pdf), last accessed, 06.26, 2013.

<sup>7</sup> "Child Passenger Safety," American Academy of Pediatrics, available at [http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Child\\_Passenger\\_Safety\\_SLR.pdf](http://www.aap.org/en-us/advocacy-and-policy/state-advocacy/Documents/Child_Passenger_Safety_SLR.pdf), last accessed 06.27.2013

<sup>8</sup> Partners for Child Passenger Safety. *Fact and Trend Report*. Philadelphia, PA: Children's Hospital of Philadelphia, 2008; Promoting Correct Car Seat Use in Parents of Young Children: Challenges, Recommendations, and Implications for Health Communication, *Health Promot Pract* 2013; 14:2 301-307, available at <http://pediatrics.aappublications.org/content/127/4/e1050.full#ref-20>, last accessed 06.26.2013.

<sup>9</sup> Arbogast, K, Durbin, D, "Optimizing the Rear Seat for Children," Children's Hospital of Philadelphia, Center for Injury Research and Prevention, June 2013, hereinafter "CHOP Optimizing report," available at [http://injury.research.chop.edu/sites/default/files/documents/cps\\_issue\\_report\\_2013\\_web.pdf](http://injury.research.chop.edu/sites/default/files/documents/cps_issue_report_2013_web.pdf), last accessed, 06.26, 2013.

<sup>10</sup> "Buckling Up: Technologies to Increase Seat Belt Use," The National Academies, 2004, available at [http://www.nap.edu/catalog.php?record\\_id=10832](http://www.nap.edu/catalog.php?record_id=10832), last accessed 06.26.2013.

<sup>11</sup> Moving Ahead for Progress in the 21<sup>st</sup> Century Act, H.4348, 07.06.2012, Section 31503, available at <http://www.govtrack.us/congress/bills/112/hr4348/text>, last accessed 06.26.2013.

<sup>12</sup> Section 14(g) of the Transportation Recall Enhancement, Accountability and Documentation (TREAD) Act.

<sup>13</sup> The number of children being raised by their grandparents has risen sharply. According to a new Pew Research Center study, one in 10 children in the U.S. now lives with a grandparent. In addition, 39% say they have helped their adult children with childcare in the past 12 months. Livingston, G., Parker, K, "Since the Start of the Great Recession, More Children Raised by Grandparents, 9.9.2010, available at <http://www.pewsocialtrends.org/2010/09/09/since-the-start-of-the-great-recession-more-children-raised-by-grandparents/>, last accessed 06.27.2013.

<sup>14</sup> National Highway Traffic Safety Administration. Traffic safety facts, crash stats: not-in-traffic surveillance (NITS) 2007-children. DOT HS 811 116. Washington, DC: National Highway Traffic Safety Administration, National Center for Statistics and Analysis.

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<sup>15</sup> National Highway Traffic Safety Administration. Traffic safety facts, crash stats: not-in-traffic surveillance (NiTS) 2007-children. DOT HS 811 116. Washington, DC: National Highway Traffic Safety Administration, National Center for Statistics and Analysis.

<sup>16</sup> Insurance Institute for Highway Safety, Highway Loss Data Institute. Q&A: back-over crashes. Insurance Institute for Highway Safety, Highway Loss Data Institute Website, June 2011. Available from: <http://www.iihs.org/research/qanda/back-over.html>. Accessed October 26, 2011.

<sup>17</sup> National Highway Traffic Safety Administration, "Fatalities and Injuries in Motor Vehicle Backing Crashes," November 2008, available at <http://www-nrd.nhtsa.dot.gov/Pubs/811144.pdf>, last accessed 02.21.2013.

<sup>18</sup> National Highway Traffic Safety Administration. Traffic safety facts, crash stats: not-in-traffic surveillance (NiTS) 2007-children. DOT HS 811 116. Washington, DC: National Highway Traffic Safety Administration, National Center for Statistics and Analysis.

<sup>19</sup> National Highway Traffic Safety Administration, "NPRM to Require a Rear Detection System for Single-Unit Trucks," August 2005, available at [http://www.nhtsa.gov/cars/rules/rulings/NPRM-FMVSS/PRE\\_FMVSS\\_No111.html](http://www.nhtsa.gov/cars/rules/rulings/NPRM-FMVSS/PRE_FMVSS_No111.html)