TABLE 1.—REVISED METHODS AND CHAPTERS OF SW–846 DRAFT UPDATE IVB—Continued

<table>
<thead>
<tr>
<th>Method No.</th>
<th>Method or chapter title</th>
<th>Sections or parts open for comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9056A</td>
<td>Determination of Inorganic Anions by Ion Chromatography.</td>
<td>All parts.</td>
</tr>
<tr>
<td>9210A</td>
<td>Potentiometric Determination of Nitrate in Aqueous Samples with Ion-Selective Electrode.</td>
<td>All parts.</td>
</tr>
</tbody>
</table>

Note: The documents with an asterisk (*) were also in Draft Update IVA, dated January 1998, and are being released again as part of Draft Update IVB, with some revisions and a new date of November 2000.

TABLE 2.—NEW METHODS OF SW–846 DRAFT UPDATE IVB

<table>
<thead>
<tr>
<th>Method no.</th>
<th>Method title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1040</td>
<td>Test Method for Oxidizing Solids.</td>
</tr>
<tr>
<td>1050</td>
<td>Test Methods to Determine Substances Likely to Spontaneously Combust.</td>
</tr>
<tr>
<td>3546</td>
<td>Microwave Extraction.</td>
</tr>
<tr>
<td>3815</td>
<td>Screening Solid Samples for Volatile Organics.</td>
</tr>
<tr>
<td>4425</td>
<td>Screening Extracts of Environmental Samples for Planar Organic Compounds (PAHs, PCBs, Dioxins/Furans) by a Reporter Gene on a Human Cell Line.</td>
</tr>
<tr>
<td>8085</td>
<td>Explosives by Gas Chromatography.</td>
</tr>
<tr>
<td>8095</td>
<td>Volatile Organic Compounds by Vacuum Distillation in Combination with Gas Chromatography/Mass Spectrometry (VD/GC/MS).</td>
</tr>
<tr>
<td>8261</td>
<td>Colorimetric Screening Procedure for RDX and HMX in Soil.</td>
</tr>
<tr>
<td>8510</td>
<td>Screening Procedure for Total Volatile Organic Halides in Water.</td>
</tr>
<tr>
<td>8535</td>
<td>Pentachlorophenol (PCP) by Ultraviolet-Induced Colorimetry.</td>
</tr>
<tr>
<td>8540</td>
<td>Determination of Perchlorate Using Ion Chromatography with Chemical Suppression Conductivity Detection.</td>
</tr>
<tr>
<td>9058A</td>
<td>Determination of Inorganic Anions by Ion-Chromatography.</td>
</tr>
</tbody>
</table>

TABLE 3.—METHOD REFERENCES PROVIDED BY SW–846 DRAFT UPDATE IVB

<table>
<thead>
<tr>
<th>Method no.</th>
<th>Method title</th>
</tr>
</thead>
<tbody>
<tr>
<td>25E</td>
<td>Determination of Vapor Phase Organic Concentration in Waste Samples.</td>
</tr>
<tr>
<td>207–1</td>
<td>Sampling Method for Isocyanates.</td>
</tr>
<tr>
<td>207–2</td>
<td>Analysis for Isocyanates by High Performance Liquid Chromatography (HPLC).</td>
</tr>
</tbody>
</table>

Matthew Hale,
Acting Director, Office of Solid Waste.
[FR Doc. 00–30111 Filed 11–24–00; 8:45 am]
BILLING CODE 6560–50–U

DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
49 CFR Part 571
[Docket No. NHTSA 2000–7967; Notice 1]
RIN 2127–AG41

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Advance notice of proposed rulemaking.

SUMMARY: On June 17, 1996, NHTSA published a notice requesting comments on a petition for rulemaking asking us to require convex cross-view mirrors on the rear of the cargo box of stepvan and walk-in style delivery and service trucks to allow drivers to see children behind the trucks. In addition to reviewing the six public comments on our notice, we have also gathered and evaluated data to quantify the size of this safety problem. If off-road fatalities by vehicle type occurred in the same proportion as on-road fatalities, an estimated 114 of these deaths annually would involve straight trucks over 10,000 pounds gross vehicle weight rating (GVWR). These vehicles’ on-road backup fatality death rate per vehicle mile traveled is eight times the backup fatality rate of the second highest vehicle type. In addition, we have conducted research on the feasibility of improving visibility to the rear of these vehicles. This research shows that a substantial area directly behind straight trucks can be made visible for the driver with rear cross-view mirrors. Based on comments we receive on this notice, we plan to develop a proposal for a performance requirement for straight trucks to detect objects directly behind the vehicle to prevent pedestrian deaths when the vehicle backs up.

DATES: Comments must be received on or before January 26, 2001.

ADDRESSES: Comments must refer to the docket and notice numbers cited at the beginning of this notice and be submitted to: Docket Management, Room PL–401, 400 Seventh Street, SW., Washington, D.C. 20590. The Docket Section is open on weekdays from 10:00 a.m. to 5 p.m.
FOR FURTHER INFORMATION CONTACT: For nonlegal issues: Mr. Chris Flanagan, Office of Crash Avoidance Standards, NHTSA, 400 Seventh Street, SW, Washington, D.C. 20590. Mr. Flanagan’s telephone number is: (202) 366–4918. His facsimile number is (202) 366–4329.

Please note that written comments should be sent to the Docket Section rather than faxed to the above contact person.

For legal issues: Mr. Steve Wood, Office of the Chief Counsel, NHTSA, 400 Seventh Street, SW, Washington, D.C. 20590. Mr. Wood’s telephone number is: (202) 366–2992.

SUPPLEMENTARY INFORMATION:

I. Background

Mr. Dee Norton petitioned NHTSA in 1995 to amend its mirror standard (Federal Motor Vehicle Safety Standard No. 111, 49 CFR 571.111) to require convex cross-view mirrors on the rear of the cargo box of stepvan and walk-in style delivery and service trucks. Mr. Norton’s petition was motivated by a desire to prevent any more tragedies like the fatal crash that killed his three-year-old grandson, C.J. Norton. C.J. was killed when he was struck and backed over by a diaper delivery truck backing out of a parking stall in an apartment parking lot. Mr. Norton told us that the driver of the delivery truck did not know a child was behind the truck and could not see the area directly behind the truck in the truck’s rearview mirrors. Mr. Norton asked that this situation be remedied by NHTSA requiring a convex cross-view mirror on the left rear top corner of the cargo box of these trucks.

II. NHTSA’s Federal Register Notice

In response to Mr. Norton’s petition, we published a Notice of Request for Comments on June 17, 1996 (61 FR 30586). This notice asked the public for information about the effectiveness of rear cross-view mirrors, as well as the cost of those mirrors and any operational problems those mirrors would present for users of these trucks.

In addition, the notice described the research work that we had been conducting to determine alternative measures for preventing backing crashes. This work includes external audible alarms that sound when trucks are backing, as well as in-vehicle warning systems and mirrors. Generally speaking, the external audible alarms are ineffective with young children. The in-vehicle warning systems, which typically use ultrasound, radar, or infrared technology to detect the presence of nearby objects, were still in the early stages of development. Another approach described in the notice, used on certain commercial and recreational vehicles, was rear video cameras to give the driver a view of the blind spot. Although these approaches were more costly than cross-view mirrors, NHTSA believed they were also promising countermeasures that should be investigated further.

We announced that we were initiating a research program to collect data on the extent to which low cost mirror systems can improve the driver’s view in the obstructed view areas behind commercial vehicles. At that time, we told the public it would take several years to complete this data collection and analysis.

We also announced that we were working with the Consumer Product Safety Commission to gather data on motor vehicle backing crashes that occurred off public roads (for instance, in parking lots, driveways, etc.), and so would not be available in NHTSA’s databases. NHTSA also stated that the requirement for rearview mirrors in Standard No. 111, “Rearview Mirrors,” do not address the visibility of the area directly and immediately behind a vehicle. Accordingly, Standard No. 111 does not preempt any State from requiring rear cross-view mirrors on vehicles. Our notice concluded by asking a series of specific questions about the safety effectiveness of rear cross-view mirrors, any problems with those mirrors, cost estimates for the mirrors, and any alternatives to rear cross-view mirrors the commenter wanted the agency to evaluate.

III. Comments Received

We received six comments in response to our Federal Register notice. The International Brotherhood of Teamsters (IBT) commented that a courier company achieved more than a 30% reduction in backing crashes with rear cross-view mirrors installed on 65% of their delivery vans. Additionally, IBT said that backing crashes account for more than 25% of all courier crashes. IBT does not believe this subject should be sent back to the states for 50 separate responses, but believes that Federal action would be the best way to resolve the current problem. IBT concluded by saying that many of its members have been struck and some killed by trucks that were backing up, and IBT supports the effort to require rear cross-view mirrors on the left rear corner of the cargo box of stepvans and walk-in style delivery and service trucks.

The American Trucking Associations, Inc. (ATA) was less supportive. In fact, ATA said that it does not believe a Federal standard mandating rear cross-view mirrors on certain trucks will serve to reduce backing crashes. ATA recommended that the selection of a system to assist drivers in backing be left to the discretion of the consumer. ATA claimed that, based on its analysis and talks with drivers of vehicles equipped with rear cross-view mirror systems, useful information from rear cross-view mirrors is no longer available when the distance between the rear cross-view mirror and the front rearview mirror exceeds 6.1 meters (m) and that dimension can be considered to establish the maximum range for the system. ATA also said that rear cross-view mirrors are most effective at mounting heights under eight feet as opposed to top corners locations on cargo bodies. Additionally, ATA noted that there are many vehicles having a 10,000 to 26,000 lb. GVWR that are not vans and that use body configurations that are unacceptable for rear cross-view mirror technology—such as flat beds, stake bodies, dump trucks, tow trucks, tradesmen and mechanics bodies, and the common light duty pick-up truck bed. Finally, ATA asked that if NHTSA were to proceed with rulemaking, it should develop a performance standard.

Hylant MacLean (HM) commented that, as long ago as 1991, cameras became the preferred device for Waste Management of North America trucks and that monitor systems cost as low as $200. HM also states that the effectiveness of camera systems was much greater than mirrors since mirrors are difficult to keep adjusted properly, are affected by glare, easily become dirty, and are just plain difficult to see anything in. HM supports the requirement for installation of backing safety devices, but does not recommend limiting that application to mirrors.

Advocates for Highway and Auto Safety (Advocates) agreed with HM’s comment on this last point. Advocates urged us to address the situation more broadly than by a design-oriented solution of rear cross-view mirrors. Advocates believes that a system to provide a reasonable level of rear detection, even if inferior to the expensive powered electronic systems described in our notice, could be valuable to provide a reasonable level of rear detection. Finally, Advocates recommended that property damage be considered when calculating benefits from this action.

Caliber System, Inc. (Caliber) challenged the agency’s interpretation of 49 U.S.C. 30103(b), which allows states to regulate rear view mirrors on vehicles-in-use. In the Request for Comments, the agency outlined the
State of Washington’s belief that it, and any other State, was prohibited from requiring cross-view mirrors due to Standard No. 111’s applicability. The agency disagreed with this position in the Request for Comments. Moreover, since the notice was published, the State of Washington has enacted a law to require delivery vehicles up to 5.5 m in length to be equipped with driver warning backup alerts or rear-mounted cross-view mirrors. This requirement became effective September 30, 1998. The agency disagrees with Caliber and continues to maintain the position that cross-view mirrors can be required individually by States.

Finally, the Easter Seal Society of Washington commented that they supported the NHTSA research into the effectiveness of having rear cross-view mirrors required on all delivery trucks.

IV. Size of the Safety Problem

a. Number of Victims

To decide upon the appropriate agency response, we needed to determine the problem size, i.e., gather data on the annual number of incidents of people being backed over by a motor vehicle of any type or size. We began by searching our own Fatality Analysis Reporting System (FARS) data and found an average of 85 victims for the years 1992 and 1993. However, by design, a fatality is included in the FARS database only if a motor vehicle is involved in a crash while traveling on a roadway customarily open to the public. This excludes other likely scenarios for backing deaths, e.g., events where someone is backed over in a driveway, parking lot, or other non-roadway locations.

We decided to address this gap in our data by working with the National Center for Health Statistics (NCHS) to gather data on the involvement of children with motor vehicles in non-highway injuries and fatalities. NCHS obtains information on the cause(s) of death, as recorded on individual death certificates, from each of the 50 states, the District of Columbia, and the five boroughs of New York City. NCHS and FARS data for 1992 and 1993 were used in this study to obtain average annual estimates of the number of fatalities associated with off-road and on-road fatal backing crashes for children aged 1–4 and for all other ages. This work is described in detail in a Research Note prepared by NHTSA published in February 1997 and titled Nonoccupant Fatalities Associated With Backing Crashes. The Research Note identified 85 on-road (FARS) and 390 off-road average annual backing fatalities for the 1992–1993 time period, with the very young (children aged one to four) being significantly over-represented as victims. A copy of this is in the docket under NHTSA–98–4308.

b. Vehicle Type Involvement in Backing Crashes

Unlike NHTSA’s FARS data, the NCHS data collected from death certificates does not record the vehicle type that backed over the victim. As noted in the Research Note on backing crashes, there are about four times as many off-road backing fatalities as on-road backing fatalities. FARS data show the following for 1991–1997 on-road pedestrian and pedalcyclist deaths in backing crashes:

**Cumulative Number of Pedestrians and Pedalcyclists Killed in On-Road Backing Crashes**

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>Number of people killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger car</td>
<td>129</td>
</tr>
<tr>
<td>Light truck/van</td>
<td>139</td>
</tr>
<tr>
<td>Bus</td>
<td>1</td>
</tr>
<tr>
<td>Straight truck over 10,000 lbs. GVWR</td>
<td>81</td>
</tr>
<tr>
<td>Combination truck</td>
<td>15</td>
</tr>
<tr>
<td>Unknown truck over 10,000 lbs. GVWR</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>381</td>
</tr>
</tbody>
</table>

From looking only at these numbers, it would appear that the backing crash problem primarily involves light vehicles. However, we do not believe this is a complete assessment of the problem. It is not sufficient to consider absolute numbers of deaths. One must also consider relative risk. This is done by using the number of vehicles in the fleet and the miles driven to calculate the rate of backing deaths for different vehicle types. We have done this by using estimates of registered vehicles and vehicle miles traveled information. The following breakdown of on-road fatality rate information is based on cumulative 1991–97 data:

**Rate of On-Road Fatal Backing Crashes**

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>Pedestrians and pedal cyclists killed by a backing vehicle per million registered vehicles</th>
<th>Pedestrians and pedal cyclists killed by a backing vehicle per 100 billion vehicle miles traveled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger cars</td>
<td>0.15</td>
<td>1.26</td>
</tr>
<tr>
<td>Light truck/vans</td>
<td>0.33</td>
<td>2.80</td>
</tr>
<tr>
<td>Combination trucks</td>
<td>1.42</td>
<td>2.21</td>
</tr>
<tr>
<td>Straight trucks over 10,000 lbs. GVWR</td>
<td>2.71</td>
<td>21.89</td>
</tr>
</tbody>
</table>

The data on rates of fatal backing crashes suggest that the problem is most acute for straight trucks. This experience is consistent with Mr. Norton’s observation that the driver of the straight truck has no way of knowing if a pedestrian is directly behind the truck when the driver is backing up. The agency notes that buses seem to have rearward visibility problems similar to those of straight trucks, but there is a near absence of bus-related fatalities in the FARS data on backing crashes (a total of one death in seven years). Transit and school buses are typically driven on a set route, which is designed to avoid the extent possible situations in which the bus must back up. Thus, the way the vehicle is driven impacts its susceptibility to backup fatalities.

V. Information and Activities Since the Last Comment Period

a. Agency Research

NHTSA has conducted research to quantify the visibility provided by the current state-of-the-art rear cross-view mirror designs. Our research also compared several prototype mirrors in terms of the ability of drivers to use them to detect objects. The agency believes this research shows that good
current designs of rear cross-view mirrors can provide high detection and recognition rates in a 3 m by 3 m area directly behind a large step van with the rear cross-view mirror. This area was determined based on two factors. First, the 3 m distance behind the vehicle is based on stopping distance data gathered in previously conducted research (Hardstem, Huey, Lerner, and Steinberg (1996)). This distance behind the vehicle provides a small margin of safety over these data. Second, the 3 m along the rear of the vehicle would ensure that the entire area along the vehicle’s bumper could be visible. The cross-view mirror research also showed that the mirror must be mounted to within 5 m from the driver’s side mirror. Beyond 5 m, the images became too small to recognize. This research is published as Rear Cross-View Mirror Performance: Perception and Optical Measurements, DOT HS 808 824. A copy of this is in the docket under NHTSA-98-4308.

b. Other Developments

Since the request for comments was published, the State of Washington has enacted a law to require delivery vehicles up to 5.5 m in length to be equipped with driver warning backup alerters or rear-mounted cross-view mirrors. This requirement became effective September 30, 1998. The implementing rules in Washington allow driver warning backup alert devices to be any type of motion detection device, laser device, camera, or television device that will warn the driver of the presence of a person or object at a minimum distance of 1.8 m to the rear of the vehicle across the entire width of the rear of the vehicle. Similarly, Washington rules allow rear cross-view mirrors to be any type, provided that those mirrors allow the driver of the delivery truck to view a minimum distance of at least 1.8 m to the rear of the vehicle across the entire width of the rear of the vehicle. NHTSA is aware that some other States are also considering such legislation.

In August of 2000, legislation that would have required trucks with delivery bays longer than 2.6 m to be equipped with cross-view mirrors or video cameras in the State of New York was vetoed by its Governor. While the Governor of New York believed that the legislation was “well-intentioned,” it was reported that he believed it was flawed because it did not account for other rear object detection systems, such as sonar-based ones. Some of these are described above. The authority of local police to enforce civil penalties also presented a problem. The sponsors of the legislation created it in response to incidents like one that occurred in Ulster County where a five-year-old boy was killed by a delivery truck backing out of his driveway.

As we noted in our Request for Comments, any nonidentical state standards would be preempted if this rulemaking culminates in the issuance of a NHTSA safety standard for detecting people to the rear of vehicles. However, we would carefully consider all existing state laws in deciding upon what performance requirements should be adopted in a Federal standard. As part of a labor settlement, United Parcel Service had agreed to study rear cross-view mirrors on its delivery vans. Since then, UPS said that it would install video monitoring equipment on its fleet by October 2001 (see Transport Topics, August 28 2000, page 4). There are many other fleets with rear cross-view mirrors, such as Federal Express, the United States Postal Service, and various regional telephone companies and delivery services and with other rear systems. The experience of any fleet with and without rear cross-view mirrors or any other rear-of-vehicle detection or vision system is very pertinent information for this rulemaking action. Please submit any information, test reports, studies, and etc. on the success and benefits of your use of such devices.

Several commonly used vans and passenger cars are now available with optional rear object detection systems that are advertised and intended for use as parking aids—not pedestrian detectors. Ford, GM, BMW and Mercedes-Benz have devices that are claimed to reliably detect when the vehicle is about to back into a pole, but not when it is about to back into a person. Ford’s Reverse Sensing System is an optionally available ultrasonic system on its 2000 Windstar minivans at a suggested retail price of $245. This system uses four sensors and has a range of up to 1.8 meters. The system is promoted as a low-speed parking device for assisting drivers making maneuvers in detecting large and fixed objects to the rear of a vehicle—not as a safety feature. Information from Ford states that the system consistently detects the following objects: a shopping cart, a lamp post and other barriers or types of posts. Additionally, information from Ford states that the system will not detect, or will detect only inconsistently, low-lying objects with rounded edges and/or objects with a high capacity for sound wave absorption.

GM’s Cadillac Ultrasonic Rear Parking Assist (supplied by Bosch) comes as part of a $400 option package that includes a garage door opener. BMW also has an optional rear object detector system with five sensors intended to prevent property damage in backing. BMW states that its Park Distance Control is more of a vehicle parking aid for proximity with a range of 1.2 m than an actual object detection system. Its retail price is $350.

The Mercedes-Benz Parktronic system utilizes 10 sensors with ranges up to 1.2 m. The Mercedes-Benz of North America press release states that the system may detect children as well as bumpers, but no further details are known.

Thus, rear systems that detect some inanimate objects are not “Star Wars” technology; instead, they are being offered on vehicles right now. These systems may be more effective than mirrors because they offer an audible or visual alert, instead of relying on the driver to check the rear cross-view mirror to be alerted to people behind the vehicle. They are, however, relatively expensive technologies that do not presently reliably detect pedestrians.

Rear video camera systems are already used on certain commercial and recreational vehicles. These rear video cameras are linked with a monitor inside the cab to provide the driver with a view of the area directly behind large trucks. Their cost is not as low as rear cross-view mirrors.

VI. Agency Decision to Develop a Proposal

A. Vehicles Covered

The data indicating that 475 people are killed in backing crashes each year has led NHTSA to the conclusion that it should consider proposing Federal requirements. However, we are inclined to limit the application of potential Federal requirements in this area to straight trucks with a GVWR of more than 10,000 pounds, but not more than 26,000 pounds. This is based on the information from FARS showing the rate of fatal backing crashes for these vehicles is substantially greater than that of other vehicles. In addition, this is based on the fact that the blind spot behind these vehicles is large and there is nothing the driver can do to see in that area. NHTSA is aware that there is also a blind spot for cars and light trucks, but notes that it is substantially smaller, in part because most light vehicles have interior rear view mirrors and rear windows, which many straight trucks do not have. We also note that the rearward visibility for buses should be somewhat similar to straight trucks.

As noted above, however, our FARS
data show only one fatal backing crash for buses over a seven year period. Given these data, we are not inclined to cover buses in this rulemaking.

However, NHTSA is concerned that the absolute numbers of vehicles involved in fatal backing crashes indicate that something should be done to improve the situation for drivers of cars and light trucks. At present, there are practicability and effectiveness questions regarding the issue of what can be done to reduce fatal backing crashes involving cars and light trucks. For instance, rear cross-view mirrors present special problems for cars and light trucks because of the size of the mirror needed relative to the size of the vehicle and because it would be difficult to mount the mirrors high enough on cars and most light trucks so that the mirrors would not themselves be a hazard to pedestrians and cyclists. Further, it is unlikely that the public would accept a cross-view mirror due to the aesthetic problems it would create. For this reason it is highly unlikely the agency would ever pursue this mirror solution for passenger cars or light trucks, except possibly for windowless vans and similar vehicles.

Another way to improve rearward visibility in these vehicles would be to use rear video systems. However, this is very expensive. Further, it may be difficult to install a monitor large enough to offer a helpful view in a location where it could be seen by the driver, yet would not pose an interior injury hazard in the event of a crash. Rear object detector systems are yet another way to reduce the risk of fatal backing crashes in cars and light trucks. However, as noted above, there are not yet commercially available systems that can reliably detect pedestrians and children to the rear of the vehicle. The agency will reevaluate the need for and practicability of means of avoiding fatal backing crashes as technology progresses and performance is improved. However, public comment is specifically invited on the agency’s current intentions of limiting the requirements to straight trucks with a GVWR between 10,000 and 26,000 pounds. We are especially interested in the data and analysis the commenter believes supports covering additional groups of vehicles.

The agency is unaware of any industry or international requirements regarding the cross-view mirrors. We would appreciate any information from additional groups of vehicles.

**B. Required Performance**

A performance standard would specify the test environment for the system (e.g., ambient lighting, contrast, etc.), the required target detection area, the characteristics of the targets, acceptable information for the driver (such as the characteristics of the in-vehicle audible alarm for detector systems, which might vary with the proximity to the target) and other parameters requisite for safety. NHTSA is interested in learning what the public believes should be considered acceptable performance criteria.

NHTSA always tries to establish standards that are as performance-oriented as possible. We specify the required safety performance that must be achieved and allow manufacturers to select whatever means they prefer to achieve the specified performance. In this case, we plan to develop a performance standard that would specify conditions under which the driver either must be provided with a view, or must be alerted to the presence of a pedestrian, in an area of 3 m by 3 m directly to the rear of the truck. This would permit manufacturers to select from rear cross-view mirrors, rear object detector systems, or rear video systems, among presently-available technologies. However, we would propose to limit the applicability of rear cross-view mirrors to situations where the mirrors are no more than 5 m from the driver’s side outside rear view mirror. This limitation would be based on our research finding that the image size in the mirror is too small at greater distances. We would like the public to comment on this intended position and on the research that supports this tentative conclusion.

**C. Contemplated Effective Date**

We would contemplate that these new requirements to prevent backing deaths go into place beginning with vehicles manufactured one year after publication of a final rule. This relatively quick implementation is based on the simplicity of attaching rear cross-view mirrors on straight trucks. It would not involve substantial engineering efforts or changes in the manufacturing process. Manufacturers would likely need more time to implement the more technically demanding systems (rear object detection and rear video). It is not our intent to limit solutions to mirrors. However, it appears we are not at a point where these other systems are understood well enough to specify desired or undesired performance, which may prevent them from being viable alternatives to mirrors. But, we request comment on this tentative conclusion.

**VII. Questions on Which Answers and Comments Are Requested**

**A. Concerning Rear Cross-View Mirrors**

1. Would limiting installation of rear-cross-view mirrors to maximum side and rear cross-view mirror separation distances of 5 m assure adequate image size without specifying a minimum size and image distortion and a test procedure to measure compliance? If not, what minimum image size and image distortion criteria must be specified to assure adequate mirror performance? What types of objective criteria should be specified to assure adequacy? How should the values for those criteria be selected? Provide the basis for your answers.

2. Is the 3 m by 3 m area being considered an appropriate size for the rear detection area? Would it be appropriate to allow vehicles to partially meet the standard with the field of view provided with the side view mirrors or would cross-view mirrors have to provide the full view? Should the requirements be similar to the existing field of view requirements of school buses, where an array of objects is placed in the rear of the vehicle for determination of the field of view? Should the requirements be based on detecting objects as small as a young child laying on the ground?

3. Should any truck equipped with an OSHA specified exterior, audible backup alarm system be excluded from these performance requirements. For example, would the tailgate shock and vibration on a dump truck cause premature failure of mirrors, as well as other detectors and cameras? Please provide all available data to support your views. What information is available on the effectiveness of OSHA exterior audible backup alarm systems especially for non-work zone areas where small children are present? What information is available for comparing exterior audible alarms with a direct or indirect vision and detection system?

4. NHTSA currently is considering a test for visibility that would be conducted on crushed gray stone surfaces in full cloud cover conditions with low reflectance, monotone targets (cylinders) which are about one foot in height and one foot in diameter. Are there any comments on these conditions and how to specify them? Are there any other conditions which the agency should consider in the requirements?

5. Some straight trucks may not be able to use the existing designs of cross-view mirrors. Is there a mirror design that would be practicable for vehicles whose design is other than a rectangular solid?
B. Concerning Rear Video Systems

6. What minimum image size should be specified for systems using a video screen? In lieu of specifying an image size, should we specify a minimum size for the video screen? What size should be specified? Should it be color or black and white?

7. NHTSA currently is considering tests for video systems on crushed gray stone surfaces in full cloud cover conditions with low reflectance targets (cylinders) which are about one foot in height and one foot in diameter. Are there any comments on these conditions or procedures?

8. Should NHTSA specify a location for the video screen? Obviously, we want the images to be easy for the driver to see, but we do not want the screen to be in a position where it would pose a hazard to the driver in a crash or where it would distract the driver. Please provide whatever data are available to support your recommendations.

9. Should NHTSA require video systems to provide a system failure alert to warn the driver of a system problem? If so, what performance requirements should be established for the system failure alert? If not, please explain why.

10. Should NHTSA conduct human factor analysis to examine the interface between video screen and drivers?

11. The existence and use of a video monitor/screen for any reason is prohibited by a number of states’ laws. What have been the consequences of these laws on the installation and use of rear video systems?

C. Concerning Rear Object Detection Systems

12. What surface characteristics, signal absorption or other characteristics value should be specified for the targets? Are there any data available on the ultrasonic wave absorption and radar reflection of children and other pedestrians in various types of clothing, and on the required temperature(s) of the target for infrared sensor detection? How quickly would/should a backing driver be alerted to the presence of a child who walks into the path of a backing vehicle?

13. Should NHTSA specify tests to ensure system detection accuracy and reliability, or would demonstrating performance under the conditions in our performance test be adequate?

14. One problem with the sensors in rear object detection systems is that currently, they are only effective at low backing speeds (a maximum of approximately 3 mph). The agency believes that backing speeds vary greatly depending on the conditions; is this a valid assumption? Are efforts currently underway to increase the range of the sensors so they could be effective at backing speeds above 3 mph?

15. Is it necessary to specify rain, fog, temperature and wind extremes in the performance tests to assure that rear object detection systems will perform acceptably in the real world? If so, please suggest appropriate conditions. If not, please explain why.

D. Other Questions

16. For manufacturers who have installed cross-view mirror systems or an other equivalent system, have the property damage benefits outweighed the cost of installing the devices? Please provide details if possible.

17. Does the State of Washington’s backup alert device range requirement of 1.8 m rearward, assure adequate protection for children and pedestrians behind moving trucks, or is it appropriate to extend it out to 3 m as NHTSA is considering? Please provide all data that support your position.

18. Because the states can regulate all vehicles-in-use, and also by type of use, as opposed to NHTSA’s authority over only new vehicles, would it be better to allow states to address this safety problem? Please explain your reasoning.

19. NHTSA’s vehicle categories are rather generic compared to those used by states which more fully describe the appearance and intended use. Should NHTSA proceed to define sub-categories of vehicles? If so, why, and how could it be done?

20. With NHTSA’s recently acquired ability to require retrofitting of safety devices on commercial motor vehicles, we would like information on the costs and complexities of retrofitting the applicable trucks with cross-view mirrors. This information would be helpful in the event that we include retrofitting in a future proposal.

VIII. Executive Order 12866 and DOT Regulatory Policies and Procedures

The Office of Management and Budget has informed NHTSA that it will not review this rulemaking action under Executive Order 12866. It has been determined that the rulemaking action is not significant under Department of Transportation regulatory policies and procedures. Our cost estimate, is about $75 for an installed OEM cross-view mirror. Based on 1996 sales data, we estimate that about 137,000 trucks greater than 10,000, but less than 26,001 lbs. Gross Vehicle Weight Rating (GVWR) were sold that would likely be regulated. Thus, the potential costs would be in the range of $10.3M. Accordingly, it does not appear to be economically significant. If NHTSA proceeds to a notice of proposed rulemaking in this area, the agency will have more detailed estimates of both the costs and safety benefits, that would be based on a more defined proposal.

IX. Procedures for Filing Comments

Interested persons are invited to submit comments on this request for comment. Comments must not exceed 15 pages in length. (49 CFR 553.21). Necessary attachments may be appended to these submissions without regard to the 15-page limit. This limitation is intended to encourage commenters to detail their primary arguments in a concise fashion.

If a commenter wishes to submit certain information under a claim of confidentiality, three copies of the complete submission, including purportedly confidential business information, should be submitted to the Chief Counsel, NHTSA, at the street address given above, and seven copies from which the purportedly confidential information has been deleted should be submitted to the Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in the agency’s confidential business information regulation. (49 CFR Part 512).

All comments received before the close of business on the comment closing date indicated above for the proposal will be considered, and will be available for examination in the docket at the address given above both before and after that date. To the extent possible, comments filed after the closing date will be considered. Comments received after the comment due date will be considered as suggestions for any future rulemaking action.

Comments on the request for comment will be available for inspection in the docket. The NHTSA will continue to file relevant information as it becomes available in the docket after the closing date, and it is recommended that interested persons continue to examine the docket for new material.

Those persons desiring to be notified upon receipt of their comments in the rule’s docket should enclose a self-addressed, stamped postcard in the envelope with their comments. Upon receiving the comments, the docket supervisor will return the postcard by mail.

DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
49 CFR Part 571
[Docket No. NHTSA–7938]

Child Restraint Systems Safety Plan

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Request for comments.

SUMMARY: This document announces the availability of a planning document that describes the agency’s ongoing and planned initiatives to improve the safety of motor vehicle occupants from birth through age 10. To realize our goal to have every child be protected by an appropriate, and properly used child restraint system on every trip, NHTSA has developed a child restraint system plan that employs three key strategies: encourage correct use of child restraints for all children; ensure that child restraint systems provide optimal protection; and provide consumers with useful information on restraining their children. For each of the defined strategies, the plan provides background information, describes recent agency actions, and presents ongoing and planned programs to achieve our goals. NHTSA seeks public review and comment on the planning document. Comments received will be evaluated and incorporated, as appropriate, into the planned agency activities.

DATES: Comments must be received no later than December 22, 2000.

ADDRESSES: Interested persons may obtain a copy of the planning document by downloading a copy of the document from the Docket Management System, U.S. Department of Transportation, at the address provided below, or from NHTSA’s website at http://www.nhtsa.dot.gov/people/injury/childps. Alternatively, interested persons may obtain a copy of the document by contacting the agency officials listed in the section titled, FOR FURTHER INFORMATION CONTACT, immediately below.

Submit written comments to the Docket Management System, U.S. Department of Transportation, PL 401, 400 Seventh Street, SW, Washington, D.C. 20590–0001. Comments should refer to the Docket Number (NHTSA–7938) and be submitted in two copies. If you wish to receive confirmation of receipt of your written comments, include a self-addressed, stamped postcard.

Comments may also be submitted to the docket electronically by logging onto the Docket Management System website at http://dms.dot.gov. Click on “Help & Information” to obtain instructions for filing the comment electronically. In every case, the comment should refer to the docket number.

NHTSA has developed a child restraint system plan for public review and comment. The plan will be available on the Docket Management System website at “http://dms.dot.gov.”


SUPPLEMENTARY INFORMATION: In February 2000, NHTSA held a public meeting to discuss child restraint system issues. Soon after that meeting, Senator Fitzgerald (R-Illinois) introduced “The Child Passenger Safety Act of 2000” (S. 2070). A similar bill (H.R. 4145) was introduced in the House by Congressman Shimkus (R-Illinois). On May 16, 2000, Deputy Administrator Millman testified before the House Commerce Committee Subcommittee on Telecommunications, Trade and Consumer Protection. At that hearing, she discussed the agency’s child passenger safety programs and stated that the agency would release a child restraint system plan for public comment.

NHTSA put together nine teams of agency experts to review all of the recommendations from the public meeting and from the House and Senate Bills and other sources. On November 1, 2000, the Transportation Recall Enhancement, Accountability and Documentation (TREAD) Act was enacted. Section 14 of the TREAD Act requires NHTSA to conduct rulemaking on side impact testing for child restraints and to consider several other related rulemaking actions. This draft plan includes the requirements of the TREAD Act, as well as those recommendations from the public that were considered to yield the biggest safety gains for child motor vehicle occupants.

The draft plan focuses on three strategies. The first strategy in the plan examines ways to increase restraint use among all children and to ensure that the appropriate restraint systems are used correctly. NHTSA estimates that if all children aged 0–4 years old were restrained in safety seats, 173 lives could have been saved in 1998. Additional studies have shown that as many as 68 additional deaths to children aged 0–6 years old could be prevented each year by eliminating misuse of safety seats. The agency conducts national campaigns to educate the public about the importance of buckling children into child restraint systems.

The second strategy is to improve existing standards for the performance and testing of child restraint systems. Since NHTSA first began regulating child safety seats in 1971, the agency has instituted numerous improvements to the original Federal safety standard, including the incorporation of dynamic performance testing, labeling improvements, and the recent introduction of a simplified, standardized system for anchoring safety seats in cars. This system, called the Lower Anchors and Tethers for Children (LATCH) system, may save as many as 50 lives and avert up to 3,000 serious injuries annually. In addition to research and the rulemaking initiatives described in this plan, NHTSA has urged child seat manufacturers to increase the margin by which they comply with the existing standards.

The safest child restraint systems available can prevent death and injury only if they are purchased and used correctly. The final strategy calls for improved mechanisms for getting safety information to consumers. The agency works closely with states, health communities, law enforcement agencies, and safety advocates to disseminate information to parents and caregivers on the correct installation and proper use of child restraint systems. NHTSA is committed to improving the information it provides to consumers both on the performance and proper use of child restraint systems as well as on defect investigations and safety recalls.

This document announces the availability of the document for public review and comment. The plan will be posted on NHTSA’s website on November 20, 2000. Received comments will be evaluated and incorporated, as appropriate, into the planned agency activities.