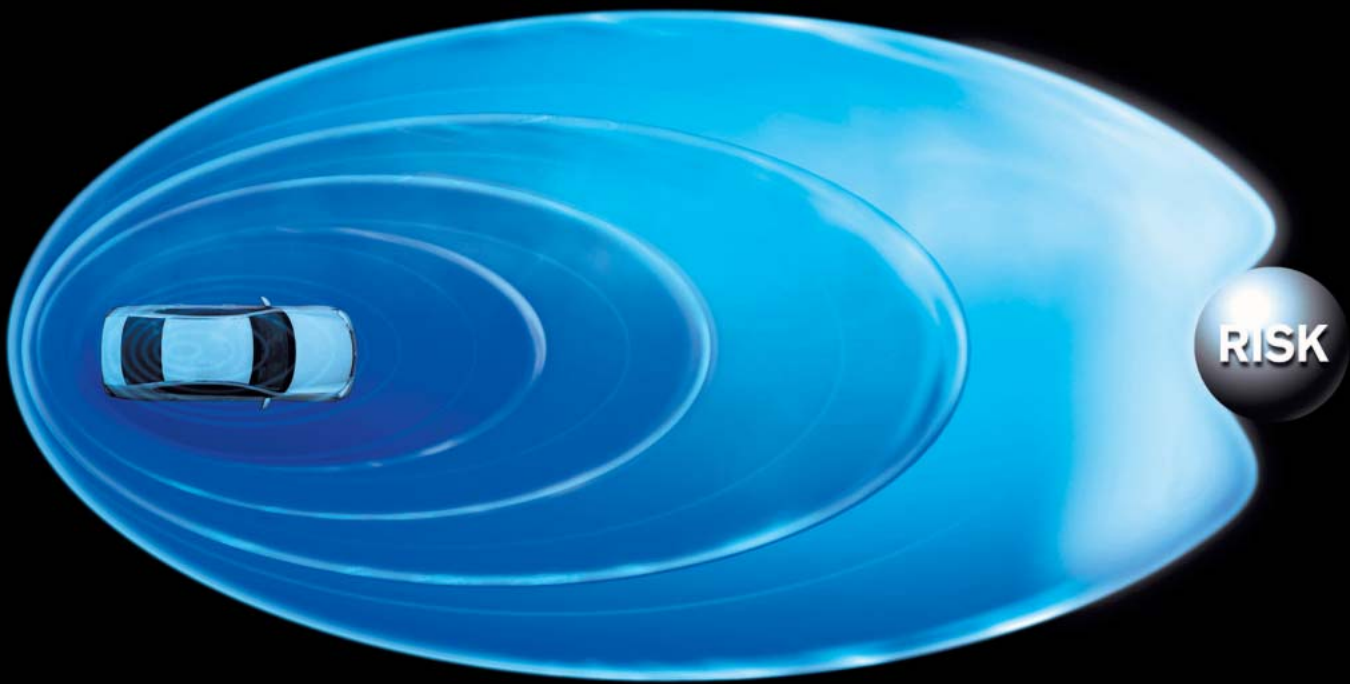
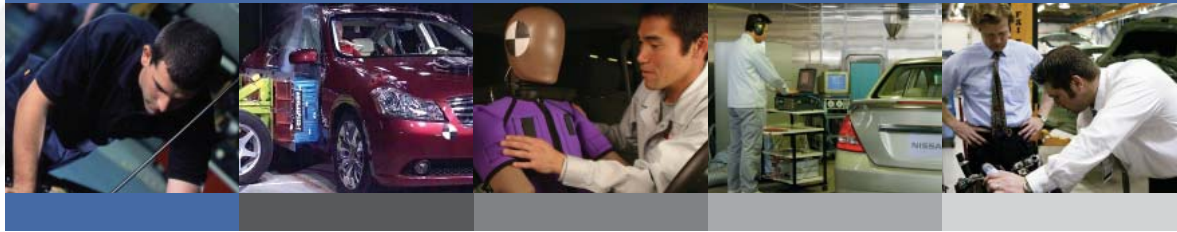


Improving Safety

Improving Safety

Aiming for a Society with No Traffic Accidents

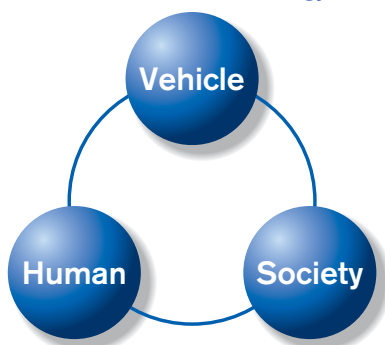




Nissan's Commitment and Technology

Keeping Customers Secure with Our Cars

Cars are many things to their owners: they are pleasant personal spaces, they are enjoyable vehicles and they are convenient forms of transportation that place the driver in full control. Nissan aims to create highly dependable cars that provide people with a rich, joyful driving experience. Backing up this goal is our commitment to safety: we place top priority on helping keep our customers safe and placing them completely at ease while they drive. Our approach in the area of safety goes beyond technologies in our products, including education activities to improve driver skills and our ITS Project, which focuses on improving the environment surrounding cars and their drivers. As an automaker Nissan positions safety at the core of its business activities alongside the other important areas of environment and energy efficiency.



Analyzing Global Accident Data In pursuit of "real-world safety"

According to statistics, as many as 1 million people worldwide are killed in traffic accidents every year. In Japan there were 6,871 traffic accident deaths in 2005, the first time since 1956 that the number has fallen below 7,000. Nissan has set the goal of halving the number of automobile accident fatalities or serious injuries involving its vehicles by 2015 as compared to 1995. We are continuously pursuing safety improvements to our vehicles based on the analysis of real-world accidents.

In Japan, the number of automobile accident fatalities and serious injuries decreased by 22% in 2003 as compared to 1995. The number of casualties may be falling, but the number of accidents in Japan is higher than ever. Nissan is investigating the reasons for this by scientifically analyzing the data in real-world accidents. To help clarify the safety issues, we carry out simulations and accurate re-creations of accident situations at our newly constructed Nissan Advanced Crash Laboratory, putting the results of these experiments to use in the development of new safety technologies. Through the process of accident analysis using accident re-creation crash

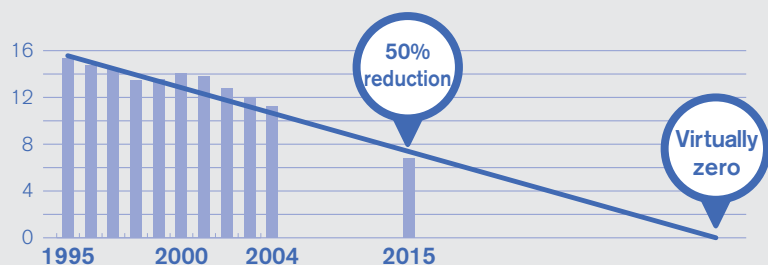
Our safety goal

To reduce fatal and serious injuries involving Nissan vehicles

The graph shows fatalities and serious injuries per 10,000 Nissan cars (data from Japan). We aim to reduce the number to 50% of 1995 levels by 2015. Our vision zero goal is to develop technologies that will bring this number to virtually zero.

Source: Institute for Traffic Accident Research and Data Analysis (Involvement of Nissan Vehicles in Traffic Accidents)

● Number of Fatal and Serious Injuries per 10,000 Nissan Vehicles in Japanese Market





Nissan Technical Center (Japan)



Nissan Technical Center Europe, Ltd. (U.K.)



Nissan Technical Center Europe, Ltd. (U.K.)

experiments, we continue to improve and develop new technologies. Ultimately in the future, Nissan's desire is to "reduce the fatalities and serious accidents to practically zero." We strongly believe it is possible to achieve this goal and will make every effort toward its realization.

The Nissan Safety Shield
Tackling safety issues at the highest levels

Nissan is developing new technologies as part of its "Safety Shield" concept, an advanced, proactive approach to safety issues based on the idea that cars should protect people.

Safety Shield classifies the conditions surrounding a car in a wide range of areas, from "risk has not yet appeared" to

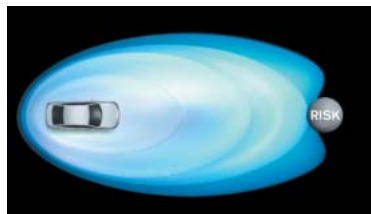
"post-crash," and provides the measures needed to reduce the risks present in each of those areas. In this way the system supports the driver, minimizing the threats to the vehicle's occupants whenever possible.

People are the key actors in the activity of driving, and our development efforts place focus on supporting the driver in control of the car. This means producing systems that provide the driver with appropriate information and respond accurately to the driver's input. We are also working on the development of vehicle systems that may intervene to help reduce injuries and damage in case a crash becomes unavoidable. Based on this Safety Shield approach, we will introduce 10 new safety technologies through fiscal 2007.

Safety Shield

The vehicle activates various technologies to help the driver, passengers and other road users avoid danger from normal driving conditions through post-accident conditions.

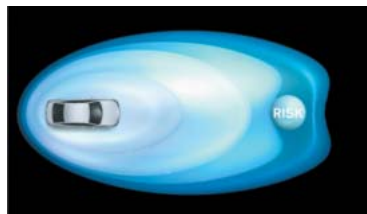
Helps the driver to maintain comfortable driving



Risk has not yet appeared

- Intelligent Cruise Control with low-speed following capability
- Adaptive Front Lighting System
- Xenon headlights
- Side View Monitor
- Around View Monitor

Helps the driver to return to safe driving from a dangerous condition



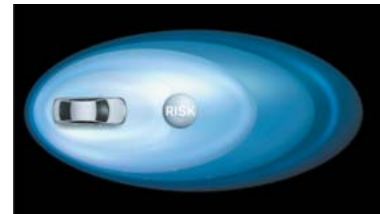
Risk has appeared

- Electronic Brake force Distribution
- Lane Departure Warning
- Lane Departure Prevention

Crash may occur

- Anti-lock Braking System
- Brake Assist
- Vehicle Dynamics Control

Helps reduce injuries and damage when a collision is unavoidable



Crash is unavoidable

- Intelligent Brake Assist
- Brake-operated front Pre-Crash Seat Belts

Crash

- Zone Body construction
- Active Head Restraint
- SRS airbag

Post-crash

- Helpnet



Adaptive Front Lighting System



Side View Monitor

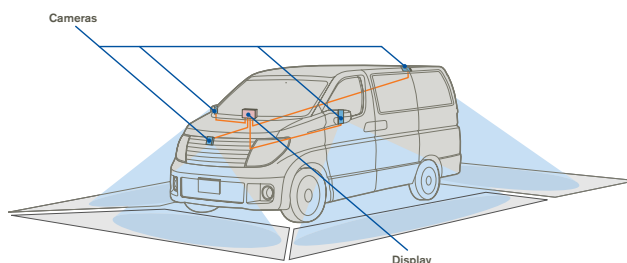


Intelligent Cruise Control

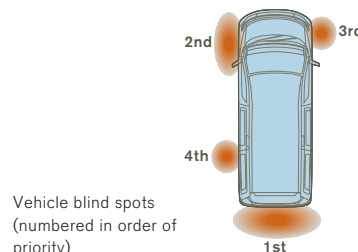
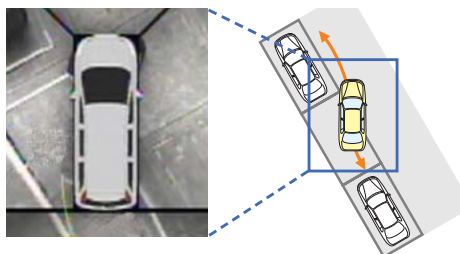
Technologies for Safety Shield

The Around View Monitor Keeping an eye on the car's surroundings

The circumstances all around the vehicle are shown on a dashboard display to help reduce blind spots. The system is especially helpful when parking, enabling the driver to steer easily and precisely into a parking space. This extremely practical technology makes it easy to view conditions all around the car, in real time, at a single glance.



The area all around the vehicle is shown on a dashboard display in real time



Distance Control Assist System Helps drivers control following distances

Nissan's Distance Control Assist System is especially useful in heavy traffic, when frequent braking is required to help drivers control the distance between themselves and the vehicle in front.

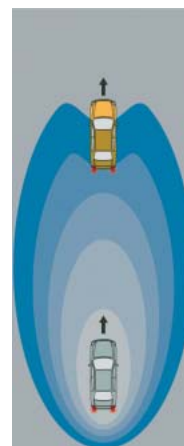
The Distance Control Assist System in operation:

Example of a car coming too close to a preceding vehicle



If the driver releases the gas pedal, the system automatically applies the brakes. (The system applies the brakes only when the driver is not pressing the gas pedal.)

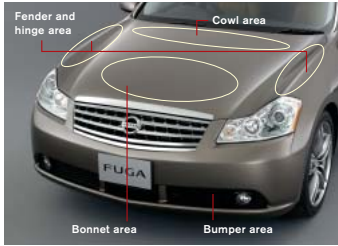
Example in which deceleration by a preceding vehicle requires the driver to brake



An indicator will appear on an instrument panel and a buzzer will sound. The gas pedal will automatically move up.



Active Head Restraint



Various shock-absorbing parts help reduce pedestrian injuries



SRS airbag system

Pre-Crash Seat Belts

Belts automatically tightened in emergency braking

This system detects emergency braking situations by brake pedal operation. If it determines that the driver is performing emergency braking, or Intelligent Brake Assist is activated, the system retracts seatbelts using a motor. Early seatbelt restraint helps reduce occupant motion, thereby helping lower the level of occupant injury in a collision.

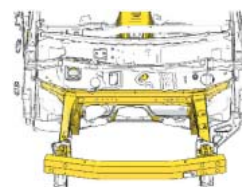


Crash-Compatible Zone Body

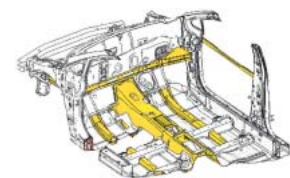
Helping keep cabin damage to a minimum

Accidents are by their nature unforeseeable incidents. There are technologies to help people avoid accidents, but no matter how well-equipped the car, as long as it is under human control it is impossible to completely prevent accidents. We have adopted this Zone Body technology to help minimize mutual damage when two vehicles crash. The March, for example, has since 2002 made use of the crash-compatible Zone Body. This body is constructed with two main areas: the crushable zone, which absorbs the energy of an impact, and the occupant zone, a high-strength cabin to help protect the car's occupants. This technology helps minimize damage to both cars in the case of an unavoidable accident, improving protection for one car's occupant zone and reducing damage to the other car with the crushable zone. Enhanced Zone Body construction is being utilized in the Tiida as depicted in the diagrams to the right. Our cars meet all the safety standards of the various countries where they are driven; however, they must also meet our own internal stringent safety standards. These internal standards help guide the continual improvement of our Zone Body structure.

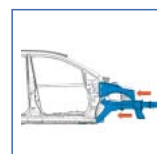
Crash-Compatible Zone Body



Crushable Zone



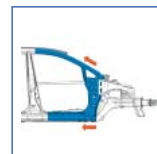
Occupant Zone



Front side members absorb impact energy



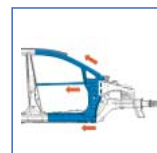
First stage of a collision



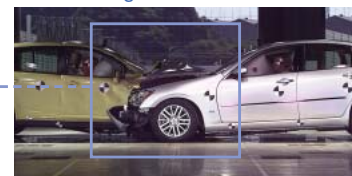
Crash energy distributed between the A-pillar and sill



Second stage of a collision



If the A-pillar begins to deform, the door waist beam helps further distribute crash energy



Third stage of a collision



Nissan Technical Center (Japan)



Nissan Technical Center Europe, Ltd. (U.K.)

Working for an Automobile Society

Safety technology is not enough to stop all accidents. Nissan aims to achieve a safe “automobile society” through proactive efforts to work together on safety issues with government agencies and other companies. With the expertise produced through these collaborations, we hope to reduce the number of fatalities and serious injuries resulting from car accidents to zero.

The ITS Project Improving safety and easing congestion

A key part of Nissan's broader approach to safety is plans to engage in a project with the aim of helping to reduce traffic accidents and traffic congestion. Toward this end we have launched a project in Japan's Kanagawa Prefecture that uses ITS, or Intelligent Transport Systems, to build

integrated networks of cars, roads and people with cutting-edge information and communication technology. We are currently concentrating mainly on reducing unforeseen accidents, increasing safety in school zones, reducing traffic congestion and providing drivers with information on the fastest routes. Nissan is focusing on making cars themselves able to resolve traffic problems. Our efforts here include the manufacture of safe automobiles and the introduction of our Carwings system, which helps predict traffic congestion and suggests optimal routes on the basis of historical and real-time traffic data and the latest information from VICS, the Vehicle Information and Communication System. Nissan's ITS Project will further help improve safety and reduce traffic congestion by creating cars that gather information on the status of other cars in the vicinity and the surrounding traffic environment from a data infrastructure including roadside sensors. Based on the results of the ITS Project in Kanagawa Prefecture, we hope in the future to bring the successes of the project to a much wider global market.





Smart tags distributed to children



Driving simulator

Pedestrian Protection Alerting drivers to the presence of children

From December 2005 through March 2006, Nissan carried out a pilot test of a pedestrian safety system in the city of Yokohama, Kanagawa Prefecture. We worked together with telecommunications companies to help prevent car accidents involving children at pedestrian crossings with poor visibility.

In this test we distributed smart tags to children living in the experimental zone and installed them in cars driving through the area. Receivers that pick up the signals emitted by these IC tags were installed at crossings with poor visibility and near parks where children play. The receivers keep track of the presence of these tags and the location of their bearers; when the system judges that a car and a child are too close it alerts the driver to the child's presence, urging caution with an audible signal. From fiscal 2006 Nissan will begin implementing a system that sends warnings to cars exceeding the speed limit on roads in the vicinity of elementary schools in Yokohama, using their onboard car navigation systems to tell drivers to reduce their speed.

Keeping Watch Around the Car Vehicle-to-vehicle communications system alerts driver to five potential collisions

We developed a third-generation Advanced Safety Vehicle equipped with a Nissan-developed vehicle-to-vehicle communications system that alerts the driver to potential collisions in five common driving scenarios. The driver is alerted through color-coded displays on an onboard monitor and an audio alert. If the driver releases the brake and continues despite the alert, the alert becomes louder. The vehicle-to-vehicle communications system onboard the Nissan ASV-3 incorporates the results of our research and development of the Human Machine Interface, which gives the driver fast, effective information about the situation around the car. The HMI contributes to improved safety by allowing the driver to start action earlier to help avoid danger. System development was based on five specific accident scenarios, such as collisions resulting from sudden encounters at junctions with poor visibility and crashes with oncoming vehicles when turning across the opposing lane. In each case, the system obtains information on the positions of other cars through vehicle-to-vehicle communication, providing this information to the driver via a visual display and audible alarms to increase safety.

Messages for Our Stakeholders



Alan Kennedy

Engineer
Safety Strategy Group
Nissan Technical Center
Europe, Ltd. (U.K.)

Vehicle Crash Safety a Fundamental Aspect of Our Products

At Nissan, we consider numerous factors when improving an automobile's crash safety, including a multitude of accident scenarios as well as variations in occupants' body types. Thinking along these lines, we have considered how advanced technology in other areas, such as medicine, might be applied to automobiles. Participation in the Bone Scanning for Occupant Safety project is an excellent example of Nissan's initiatives in this direction.

Through this project, a consortium of industry and university research groups in the fields of medicine and engineering has

worked to create a bone-scanning system with the goal of improving crash safety in automobiles. As a member of the consortium, Nissan has contributed to the development of technology that will allow safety devices to adjust according to the bone density of occupants, maximizing the effectiveness of such features as airbags and seatbelts. We believe this technology will contribute to further reductions in the number of serious injuries involving Nissan vehicles.



Nissan Advanced Crash Laboratory (Japan)

Nissan Advanced Crash Laboratory completed (Japan)

We launched operations at the Nissan Advanced Crash Laboratory at the Oppama Proving Ground in Kanagawa Prefecture in July 2005. The NACL, which allows us to re-create actual accident conditions with great precision, tests safety performance in vehicle-to-vehicle

crashes and helps improve the understanding of occupant protection in rollover accidents. The facility is equipped for barrier impact tests, in which the car collides with a wall, rollover crashes and vehicle-to-vehicle crashes with both vehicles traveling up to a maximum of 120

kilometers per hour. The angle of impact can be precisely set in five-degree increments. At the NACL, Nissan can also evaluate occupant protection performance in four types of rollover crash modes through a dolly rollover test, a trip-over test, a ditch rollover test and a corkscrew test.

Protecting the Human Body A system to help prevent broken bones

Nissan Technical Center Europe is part of a research group working with the support of the U.K. Department for Transport to develop a system that will identify groups at risk of bone fractures. Analysis of traffic accidents shows that the number of people suffering sternum and rib fractures—especially among the elderly and other people who have weaker bones—is on the rise. We are aiming to develop a system that can help protect car occupants from these injuries, reducing the total number of casualties. The research group, which includes the British Cranfield Impact Centre, is basing its work in part on scanners already in use in hospitals. The consortium has developed a prototype device that can read body information from the driver's finger via ultrasound before the car begins moving. In the event of a collision, the system uses this information to adjust the timing of the airbag firing and the tension of the seatbelt according to the bone strength of the driver, thereby helping to reduce injuries. Nissan is investigating further ways to adapt the technology behind this scanner, originally developed for medical applications, for use in cars.

Promoting Safety Around the World Two ongoing programs in the United States

Since 1998 Nissan North America, Inc. has continued its Quest for Safety program, which includes a series of public child passenger safety seminars. This is a program to educate parents and caregivers at the grass-roots level about child passenger safety, such as the importance of using child safety seats. Additionally for the North American market, in order to ensure that the participants at the seminars can use what they learned, we distributed educational materials written in English and Spanish and our safety engineers gave demonstrations and answered specific questions. Since 2001, Nissan's industry first program, called Snug Kids, has provided valuable child safety seat fit information to aid in child seat selection for Nissan vehicles. What lies behind the program is the reality that up to 80% of the child restraints are not used properly, and automobile accidents are the leading cause of death for young children in the United States, with approximately seven children killed and 800 children injured (14 years of age or younger) every day in motor vehicle crashes in 2004. As an automobile manufacturer, Nissan can through

Messages for Our Stakeholders



Hiroshi Kawai

Crash Safety and Homologation Test Group
Vehicle Project Test Department
Nissan Motor Co., Ltd. (Japan)

Toward an Accident-Free Society

In 2005 the number of traffic accident fatalities in Japan dropped below the 7,000 mark. I believe this number has fallen thanks to a rapid increase in vehicle safety in recent years, along with two other key factors: improvements in driver skills and better road and traffic conditions. Part of Nissan's social responsibility is to help realize an accident-free society, and we are working hard to reduce the number of accidents. We have implemented a number of safety measures, such as making airbags standard on our vehicles, and we recently completed the Nissan Advanced Crash Laboratory. This state-of-the-art facility in Japan

will be used to help simulate different accident scenarios and develop testing methods, allowing us to incorporate new safety measures into cars. Our goal is to halve the 1995 number of fatalities and serious injuries involving Nissan cars by 2015, and to work toward a future society with no accidents at all. Along with this work to maintain high levels of safety, we will be developing attractive cars to give our customers maximum satisfaction. This in turn lets us enjoy our own utmost satisfaction as Nissan employees.



Safe Driving Forum in China

Nissan takes part in i2010 Intelligent Car Initiative (Belgium)

On February 23, 2005, Nissan Technical Center Europe participated in the launch of the European Commission's i2010 Intelligent Car Initiative, held in Brussels, Belgium. The event, the largest concentration of "intelligent vehicles" displayed in Europe in recent years, was supported by 20 automakers and

suppliers and attracted hundreds of industry specialists, media representatives and transportation officials from around Europe. Promoting the development of smarter, safer and cleaner automobiles is part of the five-year European Information Society 2010, or i2010, strategy to boost jobs and economic growth.

At this event Nissan displayed its Infiniti FX45, equipped with our Lane Departure Warning system and Intelligent Cruise Control. This was a successful demonstration that innovative technologies are already on the marketplace, contributing to more user-friendly driving conditions.

these two programs help protect children and decrease injuries and deaths among them.

In Japan, we have carried out our Nissan Hello Safety campaign since 1972. In fiscal 2005 this traffic safety campaign included measures for people aged 65 and over, as well as a focus on traffic safety for infants and young children. Nissan has also been working on safety campaigns rooted in local communities. In April 2005 we designated Yokohama, Kanagawa Prefecture, as a model area; we incorporated the contents of children's books featuring traffic safety messages into programs screened at Yokohama Science Center, a museum aimed at children, for a one-year period.

Safe Driving Forum
Nissan takes part in safety event

The Nissan Safe Driving Forum took place in Beijing in November 2005. This event, the first such forum organized by a Japanese automaker, was aimed at the media and Nissan customers, and sought to raise awareness of safety issues and to help improve driving skills in China. Participants took part in braking, cornering and other driving programs under the guidance of instructors, gaining first-hand knowledge of the showcased safety technology in Nissan's cars. One presentation on Nissan's safety strategies stressed the need for an integrated approach to safety that brings together drivers, vehicles and infrastructure. Nissan representatives at the forum explained Nissan's safety initiatives, such as the new Safety Shield approach, that aim for a society free of traffic accidents.

The automobile market is growing rapidly in China, and safety is a critical issue. The Safe Driving Forum was a milestone event in Nissan's commitment to Chinese customers, and similar events will be carried out in other cities across the country.

Messages for Our Stakeholders



Robert Yakushi
Director
Product Safety and Regulatory
Nissan North America, Inc. (USA)

Improving Auto Safety for Children

When it comes to securing the safety of child passengers, it is not enough to simply use seatbelts and safety seats—they must be used properly, taking into account the child's age and size. To address this problem, we initiated the Snug Kids program, which informs parents how to select and correctly use safety seats that are suitable for their Nissan automobiles. Our Snug Kids Child Safety Seat Fit Guide takes the frustration out of buying a safety seat and finding it doesn't fit, and ensures that parents select the most appropriate type of seat for their child.

Nissan is also promoting wider use of booster seats. In general, parents graduate children too early into adult seatbelts; depending on their height, children should ride in booster seats until they are at least eight years old. When restrained by seatbelts before reaching a certain height, children can actually be harmed by seatbelts in the event of an accident.

Nissan is working to provide parents with this and other essential information needed to guard their children's safety.