

Life Lessons

Seasoned safety campaigner Lou Lombardo holds forth on NHTSA, frustration and what it takes to achieve Vision Zero

AUTHOR SAUL WORDSWORTH
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Louis (Lou) Lombardo is not interested in keeping quiet. He spent nearly 30 years working with the US National Highway Traffic Safety Administration (NHTSA), and has strong opinions about his former employer, and automotive safety in general. “At my age, putting my head above the parapet doesn’t bother me,” he says. Today he is 77, but with a youthful voice and energy that belie his years. These days this energy is largely channeled into Care for Crash Victims, a public benefit enterprise he set up in 2007.

“The problem with the automotive industry in 2014 is the power of the OEMs,” Lombardo comments. “A leading company told me recently that they have a solution for pedestrian safety that’s on the shelf. They’re frustrated – they do the research and develop the product, but unless the OEMs choose to purchase it, it remains

(Below) Airbags are now considered standard equipment. Volvo, the safety efforts of which Lombardo praises, equipped its first production car with an airbag in 1987

on the shelf and people are left in a less safe position than they need to be. The public loses, the suppliers lose and the industry loses.”

Lombardo has an impressive history of achievement – in particular his influence on the development of the airbag. From 1985 to 1986 he was director of information support at the Insurance Institute for Highway Safety, and responsible for planning the Protect Company Car Drivers National Conference. The event brought prospective purchasers of fleets to Washington DC to meet with safety experts and automobile manufacturers offering models with airbags. Within three months, 3,000 airbag-equipped vehicles were ordered and thus entered the automotive mainstream. The project won the Silver Anvil Award, the Public Relations Society of America’s highest honor.

“I certainly believe the greatest achievement of modern automotive safety systems to be airbag inflatable restraints, protecting people in frontal, side and rollover crashes,” says Lombardo. “NHTSA has published estimates that up to the year 2012, more than 36,967 lives have been saved by airbags in frontal crashes. NHTSA does not estimate the number of serious injuries prevented, which is probably many tens of thousands more.”

Progress is possible

The inspiration behind his work is what Lombardo terms the “enormity” of the automotive safety problem, the suffering it causes, and the confidence that by applying science, engineering, political will and market forces, progress can be made. He says this is why he is frustrated with NHTSA.

“NHTSA has been going downhill since 1981, when Ronald Reagan

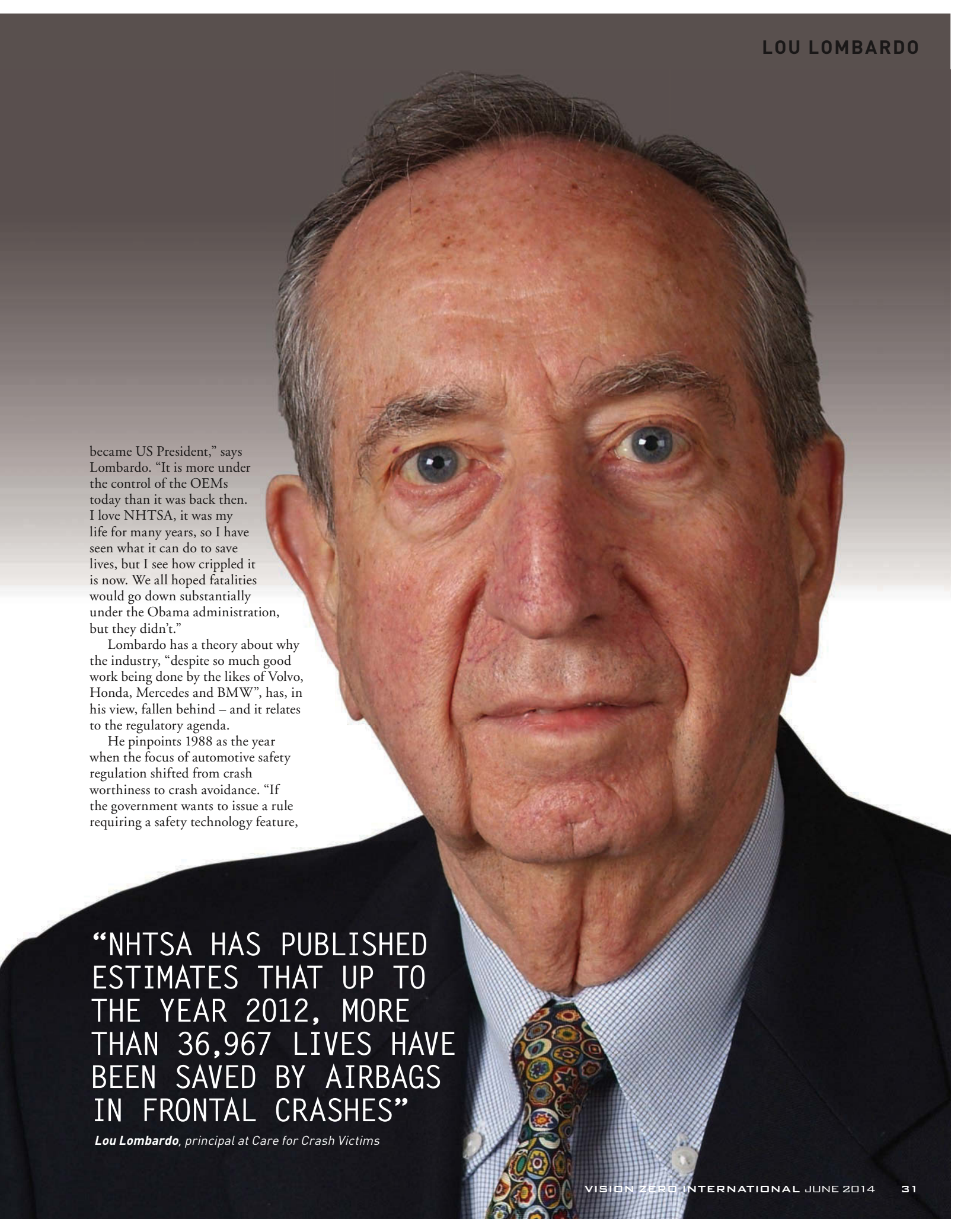


Airbag demand

» On March 12, 1990, there was a catastrophic crash in Culpeper, Virginia, that Lombardo pinpoints as a turning point in the acceptance of airbags. The head-on crash involved two drivers, who both avoided serious injury. They were both driving Chrysler LeBarons equipped with airbags, although only one of the two was wearing a seatbelt.

What was unique about the incident was that, for the first time, the media picked up on the story

and led with a new angle – lives saved by airbags. Chrysler drew on the accident in a huge television advertising campaign, while more and more people appeared on television telling the story of how their lives had been saved by airbag technology. After decades of political and legal battles to get people airbag crash protection as standard, this success story marked a tipping point and consumer demand for airbags began to grow strongly.



became US President,” says Lombardo. “It is more under the control of the OEMs today than it was back then. I love NHTSA, it was my life for many years, so I have seen what it can do to save lives, but I see how crippled it is now. We all hoped fatalities would go down substantially under the Obama administration, but they didn’t.”

Lombardo has a theory about why the industry, “despite so much good work being done by the likes of Volvo, Honda, Mercedes and BMW”, has, in his view, fallen behind – and it relates to the regulatory agenda.

He pinpoints 1988 as the year when the focus of automotive safety regulation shifted from crash worthiness to crash avoidance. “If the government wants to issue a rule requiring a safety technology feature,

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The power of leadership

» Lombardo says leadership is the key to fulfilling Vision Zero. He points to a famous speech by President John F Kennedy as an inspiration. Kennedy said: "I believe we possess all the resources and talents necessary. But the facts of the matter are, we have never specified long-range goals on an urgent time schedule, or managed our resources and our time so as to insure their fulfillment. I

believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon, and returning him safely to the earth."

"Applying that can-do spirit worldwide today, we can build a safer transportation infrastructure," says Lombardo. "In 10 years' time we can put safer vehicles on safer roads. Readers of *Vision Zero International*, in automotive companies,

equipment suppliers, insurance companies, government agencies at national and state levels, academic research institutions and consumer advocacy, are leaders. We are all working to give citizens the information they need to boost demand for safety, so we can meet Vision Zero by 2020. We can achieve that worthy goal by applying our technical, political and economic skills, in part, by taking the above steps."

it has to be able to point to something and say 'This is why we're doing it and these are the estimated benefits of such a rule,'" he says. "Those are the legal requirements to meet the need for safety. The problem is that it is virtually impossible to prove a negative. For instance, how do you point to a crash that didn't occur, thanks to anti-lock brakes? You can't. When the focus is crash avoidance, you're trapped in an absence of data."

Lou's vision

With more than 40 years in the safety industry, Lombardo has strong views about what it would take to drastically reduce fatalities on US roads. He has been especially impressed by Volvo's Vision 2020, in which the manufacturer detailed its mission to ensure that no one would die or be injured in a Volvo by 2020. Lombardo

(Main and right) Certain safety features have become more common over the course of Lombardo's career. For example, Ford debuted inflatable seatbelts on the 2011 Ford Explorer and now offers the feature as an option on a number of vehicles



has his own take on how to reach Vision Zero in the USA, citing Proverbs 29:18: "Where there is no vision, the people perish."

"With more than a million people dying of crash injuries each year worldwide, other auto makers will feel growing pressure to follow Volvo's lead," says Lombardo. "Safety sells – no one wants to die or kill in a crash. Each day, nearly 100 Americans die, 400 suffer serious injuries, and losses increase by about US\$1bn. The



million people and injured an estimated 250 million.

"We can do better," says Lombardo. "Today, worldwide, there are more scientists and engineers working with much more sophisticated technological capabilities to advance safety before, during and after a crash – through crash avoidance, crashworthiness and injury control, respectively."

Serious injuries

In the drive toward Vision Zero, Lombardo would like to see the adoption of a serious injury goal. The US National Safety Council's report 'Injury Facts' (2011 Edition) claims that in 2009 there were an estimated 3.5 million medically consulted injuries in the USA, the result of 2.4 million crashes. Of those 3.5 million injuries, there were roughly 150,000 serious injuries, including to the brain and spinal cord, as well as burns, amputations and other serious injuries that are currently not counted by the US government or NHTSA.

"We need to count – not just estimate – the number of these serious injuries," says Lombardo. "In all 50 states we need to study the crashes, injuries, treatments, outcomes, and consequences of these serious injuries – on individuals, families and society. Where are these people? How are they

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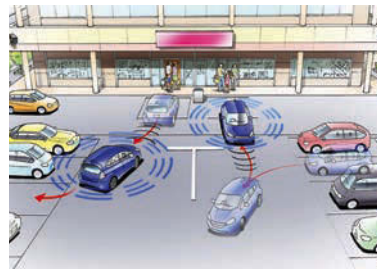
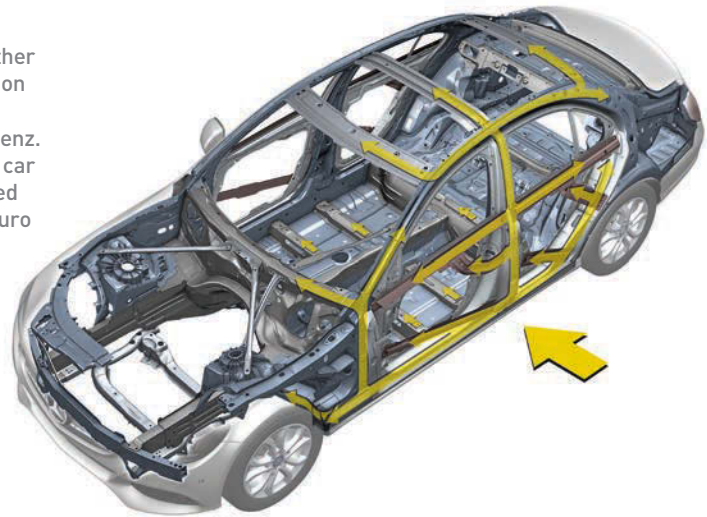
(Left) Volvo's safety efforts were lauded by Lombardo. The City Safety system, pictured, brakes the car if it gets too close to another

government does not count the tears of crash victims, but crash victims' stories can be put online."

In September 2013, the USA marked the 114th anniversary of the first American killed by an automobile crash. Henry Hale Bliss was killed in New York City in September 1899. Since then, in the USA, motor vehicle crashes have killed more than 3.5



(Right) A further commendation was given to Mercedes-Benz. The C-Class car shown earned a five-star Euro NCAP rating in 2009



(Above) Honda was also praised. Its latest research includes this Automatic Valet parking system

maker, and the average time taken to transfer these fatalities from the crash site to hospital.

“Imagine if there were a way in which people could hold the OEMs accountable for their safety progress,” he says. “We could also incentivize the world’s auto makers to compete for ratings of ‘substantially better than average’ in personal injury protection, medical payments, and bodily injury liability payments as part of an injury star-rating system. This would spur competition in automatic crash notification (ACN) systems to link all vehicles to trauma centers and air medical services at the time of the crash, to increase the likelihood of survival and prevention of disabilities for crashes with high probabilities of serious injuries.”

Crash data

Lombardo is an advocate of the widespread use of ACN data for automotive safety. But with today’s systems, although ACN data is owned by the vehicle owner, it is controlled by the vehicle maker. In Lombardo’s view, vehicle owners should be in control of who the crash data is transmitted to, because they should be protected not only physically and medically, but financially, legally and as citizens. “There are other stakeholders that the owner should consider including as recipients of their crash data,” says Lombardo. “Their doctor, their insurer and their lawyer are important in their protection. Data release terms and conditions should be controlled by the vehicle owner. In addition, government agencies such as NHTSA need such data to improve safety to achieve Vision Zero for all motorists. Leadership in this is essential.” ◀

Switch concerns

» One safety incident that has troubled Lombardo more than most in the past decade relates to General Motors (GM) and an ignition switch.

GM is recalling 2.2 million cars because the ignition switch can slip out of ‘run’ position to ‘off’ or ‘accessory’ positions, leading to a reduction or loss of power. Ignition cylinders are also being replaced, because they allow the ignition key

to be removed while the engine is running. The cars affected are the Saturn Ion (2003-2007), Chevrolet Cobalt (2005-2010), Pontiac Solstice (2006-2010), Pontiac G5 (2007-2010), Saturn Sky (2007-2010) and Chevrolet HHR (2006-2011).

The fact that the recall of these cars was delayed until 2014 has led to several investigations, including one by the Securities and Exchange Commission.

doing? What are their outcomes? How can we do better? You can’t manage what you don’t measure. So let us measure serious injuries.”

Lombardo also believes the USA should adopt a goal for timely and optimal treatment of serious crash injuries. “If Secretary of Defense Robert Gates can be proud of giving our troops ‘one-hour medevac or less in Afghanistan’, we can certainly achieve this goal for crash victims by 2020 here in the USA,” he says.

OEM accountability

Perhaps Lombardo’s most powerful suggestion is to measure and report, annually, average fatality rates by auto



Photo: Denis Meunier



(Left) Renault crash tests. The NCAP rating system has boosted consumer awareness of safety