

Statement of Barry W. McCahill
President, SUV Owners of America, Inc.
Eagle, Idaho
Concerning
The Issue of the Potential Impacts of Global Warming on Recreation and the Recreation
Industry
Committee on Environment & Public Works

United States Senate
May 24, 2007

Good morning, Chairman Boxer, Senator Inhofe and members of the Committee.

Thank you for including the views of SUV, van, minivan and pickup truck owners in the hearing today. All of which are referred to and regulated as "light trucks."

SUVOA is an independent, non-profit organization looking out for the needs of not only those who enjoy the great outdoors, but also those who need the power and utility of full-size vehicles that can haul, tow and carry more people. Our purpose is not to market light trucks. Instead, we advocate for vehicle choice, and work to educate consumers honestly about such topics as safety, fuel economy, emissions and vehicle utility.

Personal transportation is a multi-faceted proposition. We are not a one-size-fits-all society and light trucks fill an important economic and social niche. Those who own these vehicles want improved fuel economy and less dependence on imported oil as much as anyone. Let me be clear. As an SUV owner who lives in a state where these vehicles are very popular, I can assure you that owners want better fuel economy.

Most own them because they meet their family, business or lifestyle needs, and a smaller vehicle would force them to give up important attributes they need and value. Most do not buy them to make a fashion statement.

After four decades of a federal emphasis on making safety a purchase priority, many also are persuaded by the better crash performance of larger vehicles. Based on 10 years of data from the National Highway Traffic Safety Administration (NHTSA) found that SUVs are 5-7 times safer than passenger cars. I have attached our study as Attachment A.

Moreover, numerous experts have studied the effect of gas mileage standards that resulted in downsized cars and light trucks and found that safety has suffered because smaller vehicles simply do not provide the same protection to their occupants that larger ones do.

One group, the Insurance Institute for Highway Safety (IIHS), tracks the safety of a variety of vehicles using NHTSA and insurance company claims data. IIHS data clearly show that since 1978, the overall rates of driver and occupant deaths per million registered vehicles have declined across the board. However, declines in death rates have been largest for SUV occupants, showing that larger vehicles are safer than smaller ones. A chart comparing fatal crash risk across vehicle groups can be found as Attachment B.

Tens of millions also use their light trucks both as family transportation during the week and as the vehicle that tows a trailer or boat on weekends and vacations. Most people buy their vehicles for “peak use.” That is, if they need a vehicle to tow a boat or horse trailer, they buy a vehicle capable of doing that – and then use that vehicle for other transportation needs such as commuting and family errands.

I am one of them. I hold a U.S. Coast Guard Master license and have owned boats all my life. I also own a motor home that my wife and I use for camping and to connect with our children, grandchildren and friends around the country.

Last summer, while camping, a reporter with a major news organization called me. He wanted to know if SUV owners should feel guilty for owning what he referred to as “gas-guzzling vehicles that some would say nobody needs.”

It was early morning and as I looked around the beautiful campground, Ponderosa State Park in McCall, Idaho, I saw lots of motor homes, SUVs and pickups. Near them were families cooking breakfast over open fires. A father and son headed to Payette Lake to fish. Some of the families included grandparents who were passing along an important tradition.

What a profound disconnect from the question the reporter asked. I saw no guilt, nor should there be any. What I saw is what we need more of in this country—families together outdoors having fun and creating memories.

Importantly, they would not be doing so without vehicles that can get them, their trailers’fifth wheels and all their other gear to the campsites. This lifestyle, along with boating, horse shows and many other forms of outdoor recreation, could disappear if fuel economy mandates are pushed to the extreme -- or at minimum a luxury that only the wealthy could continue to enjoy.

As part of my formal statement, I am including a photograph of a restored 1951 Ford sedan hitched to a camping trailer. Tom Nelson, an Idaho RV dealer, owns this rig and keeps it at his dealership as a reminder of the days back in the 1950s when RVing was just beginning. *And cars could still tow a trailer.*

Today, just one percent of cars have the capacity to tow a small trailer or fishing boat. Why? Because of Federal fuel economy mandates.

Indeed SUVs and minivans came on the scene as car substitutes because Americans demanded vehicles that could carry a family comfortably and safely, and haul and tow for recreational purposes after ever more stringent CAFE standards had regulated family station wagons off the market. Fortunately Congress was wise enough to recognize that light trucks do a lot more work than passenger cars and therefore should be subject to less stringent fuel economy standards.

SUVOA recently compiled a towing guide to help consumers match 2007 tow vehicles to popular RVs, boats, and other recreational equipment that need to be towed. The guide also provides safety tips, illustrations and links to other towing-related websites. In compiling the guide, we learned that there is a real need for consumer education about towing because many people today try to tow things that exceed motor vehicle and RV dealer recommendations for safe towing.

According to the RV Safety and Education Foundation, 49 percent of travel trailers are towed in excess of the vehicle's recommended maximum capacity. Our SUVOA press release on lost towing capacity, containing a link to the towing guide on our website is in Attachment C of my testimony.

Loss of towing capacity was not envisioned when the Corporate Average Fuel Economy or CAFE program was conceived in 1976. But it happened because in the rush to "do something" about oil dependence, the down range consequences were not well thought out. Fuel economy trumped all other considerations.

Let's hope history does not repeat itself. But it could. The CAFE levels many now want to require would have profound lifestyle consequences for our vehicle fleet — cars, light trucks and even large RVs and on-road trucks. Moreover, it's highly unlikely to get us where we need to be with energy independence. In 1975, we imported 35 percent of our oil from foreign sources. Today, we import more than 70 percent of our oil.

I've been involved with CAFE for nearly three decades. I retired in 1996 after a career at NHTSA, the agency that manages the program. So, I'm familiar with the history of the CAFE program. It manipulates the supply of vehicles while ignoring consumer wants and needs. Thousands of lives have been lost because of unintended safety consequences from CAFE-induced vehicle downsizing. Whole forests have been decimated to print enough paper to explain its complexities.

But its most strategic shortcoming is that it creates expectations that do not pan out. Conceived to reduce our reliance on foreign oil, as I mentioned earlier, we have since *doubled* the percentage of oil imports. CAFE did not do what it was intended to do.

The perfect analogy of CAFE's unintended consequences is in this month's issue of Consumer Reports. The article, "Washers and Dryers – Dirty Laundry" is about the federal government's new efficiency standards for washing machines that saves energy but weakens the washers to the point they don't do what they're supposed to. According to Consumer Reports:

"Not so long ago you could count on most washers to get your clothes very clean. Not anymore. Our latest tests found huge performance differences among machines. Some left our stain-soaked swatches nearly as dirty as they were before washing. For best results you'll have to spend \$900 or more. What happened? As of January, the U.S. Department of Energy has required washers to use 21 percent less energy, a goal we wholeheartedly support. But our tests have found that traditional top-loaders, those with the familiar center-post agitators, are having a tough time wringing out those savings without sacrificing cleaning ability, the main reason you buy a washer."

Among the reasons we are here today is precisely because CAFE has failed to deliver and the nation needs a new strategy. Are we willing to bet our strategic interests on CAFE again, or is it time to try something else?

So why can't somebody just make a light truck that gets 35 miles per gallon? As complex as all of this is it really boils down to one simple concept: Gasoline has been five and six dollars a gallon in Europe for years and yet the fastest growing vehicle segment in Europe is SUVs. In the US we have had sustained high gas prices and light trucks are still selling strong. The marketplace is begging for an ultra-high-mileage full-sized vehicle that meets the utility niche. Since market pressures have not already resulted in such a vehicle(s), legislation forcing its arrival surely must come with negative tradeoffs consumers would not accept if they knew. As a matter of basic fairness and sound policy, potential tradeoffs need to be anticipated and explained up front to the American people.

Moreover, why not try a better approach? Why not work innovatively to solve our strategic energy challenges in ways that hold more promise and preserve the varied transportation needs of the American people?

Chairman Boxer, I commend you for your remarks last month at the National Press Club where you said that "cars and trucks must move toward, green, renewable fuels such as environmentally clean biofuels..." I would add clean diesel to the list.

There is a "build it and they will come" energy opportunity in this country today. SUV, minivan pickup truck and RV owners would like to be able to burn alternative fuels that are more efficient. *The problem is lack of availability and no infrastructure to make these fuels viable economically.* I urge this Committee to be the catalyst for making infrastructure incentives a key part of a path forward.

Historically our nation has accomplished great things when the times demanded it. Now is such a time. Energy and environmental decisions must be grounded in technical feasibility rather than unrealistic thinking; shared responsibility rather than some carrying the burden for all; and respect for individual preferences rather than a "nobody needs" attitude.

Lifestyle preferences that include outdoor recreation should be valued as traditions worth protecting.

Finally, we must get it right this time. There will be no second chance if policies of expediency are allowed to rule the day and a decade from now the only results are way of life detriments and no environmental or energy security improvements.

Thank you and I would be pleased to answer any questions.

ATTACHMENT A



ANALYSIS: SUVs 5-7 PERCENT SAFER THAN PASSENGER CARS ***Fatalities in SUV-Passenger Car Crashes Trending Downward***

Contact: Ron DeFore
877-44-SUVOA (877-447-8862)

WASHINGTON, DC -- In anticipation of the release of the National Highway Traffic Safety Administration's (NHTSA) "Early Assessment" of 2006 traffic crashes, SUV Owners of America, released today an expert analysis of 1997-2005 data for vehicle performance in all kinds of crashes. It found that SUVs are 5-7 percent safer than passenger cars in reducing fatality risk. This is particularly important for consumers that may be downsizing to cut fuel costs – a dangerous tradeoff.

SUVOA President Barry McCahill said, "The public is being told by some that small cars are now as safe as larger cars and SUVs, and can do all the same things. But, 99 percent of cars can no longer tow a boat or camp trailer, and small cars are not as safe as larger cars and SUVs. Just as important, light trucks like minivans and SUVs can carry more passengers safely than passenger cars."

"It's also inaccurate to say that SUV drivers are causing more deaths to occupants of smaller vehicles. There has been no increase in fatalities because of the size mismatch between SUVs and cars, and in 2005 the trend even turned downward for these kinds of crashes," he added.

"People buy vehicles that meet their needs, and they like to do so with good information in hand. Our intent in augmenting the NHTSA 2006 early fatality summary is not to advocate the purchase of any vehicle type, but to provide additional perspective," he said. "We also advise consumers to read the comprehensive new data summary now available from the Insurance Institute for Highway Safety (IIHS)."

"All vehicles have become safer because of increased safety belt use, air bags, electronic stability control, improved vehicle structure and greater awareness about traffic safety. But the laws of physics that ultimately rule the road have not changed. Equipped with identical safety equipment, the larger vehicle also gets safer and always performs better in a crash than a smaller one," McCahill said.

McCahill explained that NHTSA's "Early Assessment" is based on vehicle registrations and reflects all occupant fatalities, and the effect of vehicle, roadway situation and driver

behavior. The NHTSA analysis does not measure the safety performance of just the vehicle.

“The “Early Assessment” chronicles what occurred on the road in 2006, and that’s important to know. Our analysis covers nearly a decade of crash data, giving consumers additional information to help guide their vehicle purchase decisions,” he said.

McCahill pointed out that NHTSA’s New Car Assessment Program (NCAP) provides test results on the crash performance of individual vehicles to help guide consumer purchasing decisions. SUVOA’s analysis, by a retired NHTSA engineer, considered both total occupant fatality rates and then solely driver fatality rates, the latter to get a more accurate picture of the vehicle’s performance (since every vehicle has at least a driver).

He said the NHTSA analysis does not control for the fact that SUVs, because they typically hold more occupants, tend to have more occupant fatalities when a crash occurs.

These are the key findings based on vehicles that were involved in crashes:

- When the analysis considers only driver fatalities (focusing more on the vehicle’s performance), and most recent years data (2003-2005) to include the contribution of the newest safety features, **SUVs are 5-7 percent safer than passenger cars.**
- **In crashes involving a light truck/van (includes SUVs) and a passenger car,** occupant fatalities in passenger cars remained fairly constant from 2001-2004, but between 2004-2005 they declined by 4.3 percent.
- For both passenger cars and SUVs there has been a substantial reduction in overall **occupant fatality rates**, and by 2005 the rates are virtually identical per 100,000 registered vehicles (13.64, passenger car / 13.84, SUVs).
- For both passenger cars and SUVs the **occupant fatality rates in rollover crashes** have decreased. The percentage reduction from 1997-2005 is 15.7 percent for passenger cars and more than 19 percent for SUVs.
- **When considering the more prevalent frontal, side and rear crashes, by 2005 SUVs had become about twice as safe as passenger cars.** In 2005, SUVs had an occupant fatality rate in these crashes that was nearly 50 percent lower than passenger cars (10.42, passenger cars / 5.56 SUVs).

A copy of the full report (with graphics) is available at www.suvoa.com.

###

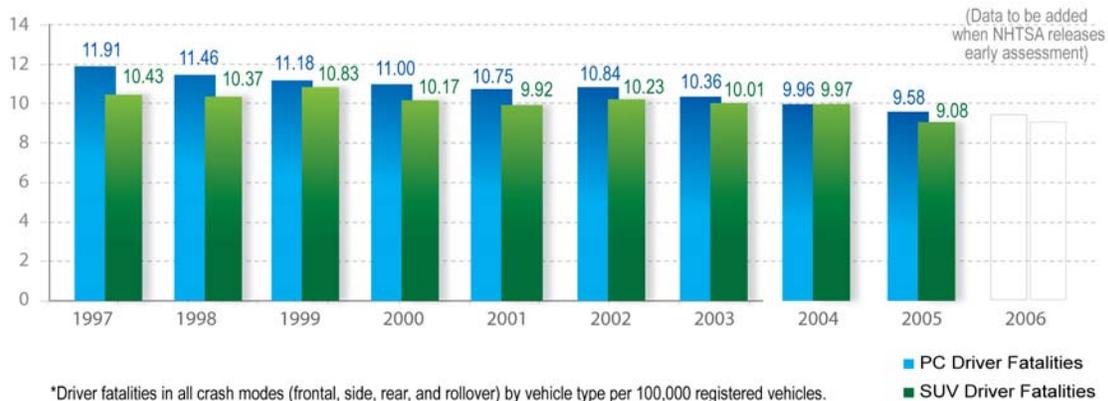
SUVOA is a non-profit consumer organization dedicated to supporting the rights and serving the interests of more than 80 million SUV, pickup, crossover and Van Owners of America. Founded in 1999, SUVOA strives to ensure balanced media reporting of light truck issues and represents our supporters by educating federal and state policymakers.

Analysis of the National Highway Traffic Safety Administration's Early Assessment of 2006 Traffic Crashes

Key Finding (Starts on page 7 of attached report.)

As Table 5 illustrates, when analyzing only driver fatalities, SUVs are safer than passenger cars. In 2005, the driver fatality rate for SUVs was over 5% lower than for PCs ($9.58-9.08)/(9.58) = 5.22\%$. By analyzing only driver fatalities, the effects of occupancy differences between PCs and SUVs are removed. If SUVs had, say, six occupants in every fatal crash and all were fatally injured, while PCs had only a single occupancy, the occupant fatality rate would be six times larger for the SUV, simply because there were more occupants in the vehicle. By only including driver fatalities, the effect of occupancy is removed.

Table 5 - Driver Fatality Rates* for PCs and SUVs



Driver Fatality Rates** for PCs and SUVs for 2003-2005: All Crashes

Year	PC driver fatality rate	SUV driver fatality rate
2003	2.09	1.98
2004	2.13	2.00
2005	2.13	1.99

** Driver Fatalities per 1,000 crashes

For each year, SUVs are safer than passenger cars.

In 2003, SUVs were 5.3% safer than passenger cars in all crashes;
 In 2004, SUVs were 6.1% safer than passenger cars in all crashes; and
 In 2005, SUVs were 6.6% safer than passenger cars in all crashes.

I. Occupant Safety in Passenger Cars and Sport Utility Vehicles, 1997-2005

The information available from the National Highway Traffic Safety Administration provides for an assessment of the safety of various types of motor vehicles, including passenger cars (PCs) and sport utility vehicles (SUV).

The following table presents the occupant fatality rates for these two vehicle types for the years 1997-2005. Occupant fatality rates are obtained by dividing the total number of occupant fatalities in a vehicle type during a particular year by the number of registered vehicles (registered in states for use on the nation's highways) of that type for the same year. (Note – For Tables 1,2, and 3, the data for 1997-2003 are obtained from a January 2006 NHTSA Research Note titled “Passenger Vehicle Occupant Fatality Rates by Type and Size of Vehicle” DOT HS 809 979. The data for 2004-2005 are from NHTSA’s 2005 Annual Assessment of Motor Vehicle Crashes – Updated December 13, 2006.)

Table 1 – Occupant Fatality Rates* for PCs and SUVs for 1997-2005: All Crashes

<u>Year</u>	<u>PC occupant fatality rate</u>	<u>SUV occupant fatality rate</u>
1997	17.81	16.38
1998	16.83	16.70
1999	16.44	16.44
2000	16.20	16.20
2001	15.77	15.35
2002	15.80	15.79
2003	14.99	15.81
2004	14.32	15.07
2005	13.64	13.84

* Occupant fatalities in all crash modes (frontal, side, rear, and rollover) by vehicle type per 100,000 registered vehicles of that type

These rates indicate that, for both passenger cars and SUVs, there has been a substantial reduction in occupant fatality rates from 1997 through 2005, and that in 2005, the rates are quite similar for PCs and SUVs.

As noted, the rates in Table 1 are for all crash modes. One may characterize motor vehicle crashes in two general categories, vehicle crashes in which the tires of the vehicle remain on the road and the vehicle is struck in the front (by another vehicle, or a fixed object, such as a bridge abutment), side, or rear. These may be termed planar crashes. The second category is when the vehicle rolls over, i.e., the vehicle's tires lose contact with the road surface. These are rollover crashes.

Because vehicles in crashes follow the basic laws of physics, the various vehicle types perform differently in planar crashes and in rollover crashes. For example, since SUVs are higher off the ground and thus more susceptible to being involved in a rollover, one would expect that the rollover fatality rate (occupant fatalities in rollover crashes per 100,000 registered vehicles) to be higher in SUVs than in passenger cars.

Similarly, because passenger cars generally place seated occupants lower, i.e., closer to the roadway, in a frontal, side, or rear crash (i.e., planar crashes), occupants of these vehicles would be more likely to receive severe crash forces than SUV occupants. Accordingly, in planar crashes, one would expect the frontal/side/rear fatality rate (occupant fatalities in frontal/side/rear crashes per 100,000 registered) to be higher in PCs compared to SUVs.

Table 2 presents the occupant fatality rates in rollover crashes for 1997-2005.

Table 2 – Occupant Fatality Rates* for PCs and SUVs for 1997-2005 Rollover Crashes

<u>Year</u>	<u>PC occupant fatality rate</u>	<u>SUV occupant fatality rate</u>
1997	3.82	10.25
1998	3.71	10.49
1999	3.72	10.34
2000	3.56	9.96
2001	3.54	9.35
2002	3.68	9.68
2003	3.39	9.38
2004	3.27	9.32
2005	3.22	8.28

* Occupant fatalities in all rollover crashes by vehicle type per 100,000 registered vehicles of that type

These rates indicate that for both PCs and SUVs, the occupant fatality rate in rollover crashes has decreased over the 1997 through 2005 time period. For PCs, this rate has decreased by 15.7% from 1997 to 2005. For SUVs, the decrease has been over 19%.

Thus, SUVs have improved in rollover performance more than passenger cars during this time period. It is clear that in rollover crashes, SUVs have a higher occupant fatality rate than passenger cars. If the only type of crash that occurred on the nation’s highways were rollover crashes, a comparison of PC occupant fatality rollover rates to the rate for SUVs would be sufficient to assess the relative safety of these two vehicle types.

However, rollover crashes represent only about 2-5% off all crashes on the nation’s highways. The other crashes that represent 95-98% of all crashes are the planar (front, side, and rear) crashes discussed above. To fully represent vehicle safety, it is imperative to present occupant

fatality rates for PCs and SUVs in these crashes. Table 3 shows occupant fatality rates in planar crashes for 1997-2005.

Table 3 – Occupant Fatality Rates* for PCs and SUVs for 1997-2005: Frontal, Side, Rear Crashes

<u>Year</u>	<u>PC occupant fatality rate</u>	<u>SUV occupant fatality rate</u>
1997	13.99	6.13
1998	13.12	6.21
1999	12.72	6.10
2000	12.64	6.24
2001	12.23	6.00
2002	12.12	6.11
2003	11.60	6.43
2004	11.05	5.75
2005	10.42	5.56

* Occupant fatalities in all planar, i.e., frontal, side and rear, crashes by vehicle type per 100,000 registered vehicles of that type

The rates in Table 3 provide for a number of conclusions. First, for PCs the occupant fatality rate in frontal, side and rear crashes has declined by 25.5% from 1997 to 2005, while for SUVs the reduction is 9.3%. It would seem reasonable that these increases in safety are due to increased belt use, introduction of air bags, including advanced air bags, into a larger portion of the on the road fleet, and overall improvement in safe vehicle designs.

An important conclusion from these rates is that in the much more prevalent frontal and side and rear crashes (i.e., in PCs for every rollover crash, there are some 50 frontal, side and rear crashes), SUVs are much safer than PCs. In 2005, SUVs had an occupant fatality rate in these planar crashes that was nearly 50% lower than the rate for PCs – that is, in these crashes, SUV occupants were about twice as safe as PC occupants.

Further, comparing the rollover rates (Table 2) to the frontal, side and rear rates (Table 3) demonstrates that for every year, the occupants of PCs had a higher fatality rate in these planar crashes than the SUV occupant fatality rate for SUVs.

As discussed, the rates shown in Tables 1-3 are occupant fatalities in PCs and SUVs divided by the number of registered vehicle years for the two vehicle types. A concern with these rates is that there are a number of non-vehicle factors that cause the crashes which resulted in these fatalities. As such, these rates do not provide a measure of only a vehicle's intrinsic safety performance, but rather the combination of the vehicle, roadway, and driver.

Consider the following. If all SUV occupants wore their safety belt and SUV drivers did not drink and drive, while no PC occupants wore their belt, and more than half of the PC drivers



were intoxicated, one would expect a much higher crash involvement risk for PCs compared to SUVs. Also, given a crash did occur, one would expect a much higher risk of fatal injury in the PC since all the occupants were unbelted, while all the SUV occupants were belted.

Additionally, if all SUVs were driven in an urban environment, while all PCs were driven in a rural environment, PC crashes would be much more severe (since the rural speeds are much higher) than SUV crashes, thus resulting in a higher fatal injury risk. Using the occupant fatality rate calculation above, these crash involvement, crash severity and crash injury risk issues would not be taken into consideration, since the calculation involves a count of fatalities and vehicle registrations only.

Thus, in calculating the occupant fatality rates, one does not obtain information on the actual safety a vehicle type, but as noted above, the combination of a vehicle's safety, the driving environment, and the driver behavior.

There are data available to remove some non-vehicle factors from the occupant fatality rates. For example, the occupant fatality totals used in Tables 1-3 above are the total occupant fatalities for each vehicle type in the various crash modes. NHTSA does provide information on the number of occupant fatalities, by vehicle type, that were killed in alcohol related crashes. These alcohol-related crashes are clearly not a measure of a vehicle safety. Rather, these crashes are a result of improper driver behavior that resulted in a crash in which there were fatalities. These alcohol fatalities should not be included in an assessment of safety by vehicle type.

It is possible to remove these alcohol related occupant fatalities from the total occupant fatality counts. Data from the National Highway Traffic Safety Administration (NHTSA's 2005 Annual Assessment of Motor Vehicle Crashes – Updated December 13, 2006 – page 76) provide the number of occupant fatalities killed in motor vehicle crashes for PCs and SUVs in 2005. These are subtracted from the total occupant fatalities for occupants of PCs and SUVs in 2005.

2005 Passenger Car Occupant Fatalities:	18,440
2005 Passenger Car Occupant Fatalities that Were Alcohol Related:	<u>-7,000</u>
2005 Passenger Car Occupant Fatalities that Were Not Alcohol Related:	11,440

2005 Sport Utility Vehicle Occupant Fatalities:	4,807
2005 Sport Utility Vehicle Occupant Fatalities that were Alcohol Related:	<u>-1,886</u>
2005 Sport Utility Vehicle Occupant Fatalities That Are Not Alcohol Related:	2,921

The number of registered vehicles for PCs and SUVs used to calculate the rates in Tables 1-3 are;

2005 Passenger Car Registered Vehicles – to 135,152,104
2005 Sport Utility Vehicle Registered Vehicles – 34,732,377.

The occupant fatality rates for 2005 are then;

Table 4 – Occupant Fatality Rates* for PCs and SUVs for 2005: All Crashes That Are Not Alcohol Related

$$\text{PCs} - (11,440)/(135,152,104) = 8.46$$

$$\text{SUV} - (2,981)/(34,732,377) = 8.41$$

* Occupant fatalities in all crash modes (frontal, side, rear, and rollover) by vehicle type per 100,000 registered vehicles of that type

For 2005, the occupant fatality rates for PCs and SUVs, in all crashes that are not alcohol related, are very similar, with SUVs $(8.46-8.41)/8.46 \times 100 = 0.6\%$ lower than PCs.

This demonstrates the weaknesses of using occupant fatality rates in assessing vehicle safety. By its very nature, registration based occupant fatality rates cannot provide an objective assessment of intrinsic vehicle safety. In addition to the alcohol issue noted above, other non-vehicle factors must be addressed.

These include;

- Safety Belt Use. There may be differences in belt use between SUV and PC occupants, since the use of a safety belt reduces the risk of a fatal injury by some 50%, differential belt use rates can have substantial effects on occupant fatality totals. This difference is not addressed in occupant fatality rates based on vehicle registrations.
- Occupancy. There may be differences in the number of passengers in PCs compared to SUVs. If SUVs had a greater number of occupants than PCs, clearly more occupants would be fatally injured in the same number crashes for each vehicle type. Clearly, this is not due to the safety of the vehicle type, but rather its occupancy. This differential occupancy issue is not addressed in occupant fatality rates based vehicle registrations. One way to address this is by using only driver fatalities rather than total occupant fatalities in comparing fatality rates among vehicle types.

Table 4a shows driver fatality rate for PCs and SUVs for the years 2003 through 2005. Here again, these rates are obtained by dividing the driver fatality counts in a vehicle type during a particular year by the number of registered vehicles of that type in the same year.

By analyzing only driver fatalities, the effects of occupancy differences between PCs and SUVs are removed. If SUVs had, say, six occupants in every fatal crash and all were fatally injured, while PCs had only a single occupancy, the occupant fatality rate would be six times larger for the SUV, simply because there were more occupants in the vehicle. By only including driver fatalities, the effect of occupancy is removed.

As Table 5 illustrates, when analyzing only driver fatalities, SUVs are safer than passenger cars. In 2005, the driver fatality rate for SUVs was over 5% lower than for PCs $(9.58-9.08)/(9.58) = 5.22\%$.

Table 5 - Driver Fatality Rates* for PCs and SUVs for 1997-2005: All Crashes

<u>Year</u>	<u>PC driver fatality rate</u>	<u>SUV driver fatality rate</u>
1997	11.91	10.43
1998	11.46	10.37
1999	11.18	10.83
2000	11.00	10.17
2001	10.75	9.92
2002	10.84	10.23
2003	10.36	10.01
2004	9.96	9.97
2005	9.58	9.08

* Driver fatalities in all crash modes (frontal, side, rear, and rollover) by vehicle type per 100,000 registered vehicles.

– Crash Involvement. If the drivers of SUVs are involved in more crashes per 100 SUVs than are passenger car driver, a higher occupant fatality rate for SUVs would be found compared to passenger cars simply due to the increased crashes. Again, this higher fatality rate would not be due to intrinsic vehicle safety, but due to the characteristics of SUV driver such that they are involved in more crashes per number of vehicles on the road (e.g., younger drivers in SUVs, more rural high speed driving, more night driving).

If a goal is to assess the safety of a vehicle, what this discussion tells us is that we should try to look at the fatality risk, given that a crash has taken place. Note that this is precisely what NHTSA does in its New Car Assessment Program (NCAP). Here, the agency crashes vehicles and provides a star rating based on the protection afforded test dummies in these crashes. That it, NHTSA is providing a measure of vehicle safety, given a crash occurred.

NHTSA real world crash data allow a calculation of vehicle safety, given a crash. As discussed above, the number of driver fatalities should be used as a measure of crash outcome to address the effects of occupancy. Rather than using registered vehicles, NHTSA also provides data on the number of vehicles involved in crashes. Thus, the number of crash involved vehicles can address the problem of crash involvement differences between SUVs and PCs discussed above.

These crash counts are in NHTSA’s annual Traffic Safety Facts report. These reports provide the number of vehicles involved in all crashes, by vehicle type. Thus, the NHTSA data provide driver fatalities in passenger cars and SUVs and the number of passenger cars and SUVs

5. In all crashes, SUVs are safer than PCs using the measure of driver fatalities per registered vehicle. For 2005 – the last year of available data, the driver fatality rate in SUVs is over 5% lower than PCs. That is, SUVs are over 5% safer than PCs in reducing the risk of fatality.

6. In all crashes, SUVs are safer than PCs using the measure of driver fatalities per crash – a measure of safety analogous to NHTSA’s NCAP Program. In 2005, SUVs are nearly 7% (6.6%) safer than PCs in reducing the risk of a fatality in a crash.

7. Utilizing NHTSA data to calculate fatality risk in terms of driver fatalities per registered vehicle or driver fatalities per crash, SUVs are 5-7% safer than PCs.

II. Occupant Fatalities in Two Vehicle Crashes Involving a Passenger Car and a Light Truck/ Van*

* The light truck van category includes vans, sport utility vehicles and trucks.

An issue that has received some attention is the crash compatibility between PCs and light trucks/vans(LTV). As a general rule, LTVs are higher off the ground and are heavier than PCs. In planar crashes, these characteristics result in a lower risk of injury/fatality to LTV occupants than PC occupants when these two vehicle types collide. As such, in two vehicle crashes between a PC and a LTV, one expects higher number of fatalities in the PC than in the LTV.

While the laws of physics that govern impacts between two objects (in this case, a PC and an LTV) cannot be altered, vehicle manufacturers are taking actions to improve the crash compatibility between PCs and LTVs. The goal is to develop and introduce vehicle designs that will reduce the number of fatalities to the occupants of PCs in these two-vehicle collisions, while not increasing fatalities to occupants of LTVs.

NHTSA, in its annual assessments of motor vehicle fatalities since 2001, has presented information on the occupants killed in two vehicle crashes involving a PC and LTV. These data are presented in Table 7.

Table 7 – Occupant Fatalities in Two Vehicle Crashes Involving a Passenger Car and a Light Truck/ Van

<u>Occupant Fatality</u>	<u>Year</u>				
	2001	2002	2003	2004	2005
Killed in PC	4,405	4,465	4,451	4,411	4,197
Killed in LTV	1,160	1,125	1,096	1,081	1,049
Total Occupants Killed	5,565	5,590	5,547	5,492	5,246

involved in crashes. Note the exact relationship to NCAP. NCAP provides the injury risk, given a crash. The NHTSA real world crash data provide the fatality risk, given a crash. Table 6 present the data for 2003 through 2005.

Note that these rates are different from the previously presented fatality per registered vehicle rates. Here, the rates are the number of driver fatalities in a particular vehicle type (PC or SUV) divided by the number of that vehicle type in all crashes.

Table 6 - Driver Fatality Rates for PCs and SUVs for 2003-2005: All Crashes**

<u>Year</u>	<u>PC driver fatality rate</u>	<u>SUV driver fatality rate</u>
2003	2.09	1.98
2004	2.13	2.00
2005	2.13	1.99

**** Driver Fatalities per 1,000 crashes**

For each year, SUVs are safer than passenger cars.

*In 2003, SUVs were 5.3% safer than passenger cars in all crashes;
In 2004, SUVs were 6.1% safer than passenger cars in all crashes; and
In 2005, SUVs were 6.6% safer than passenger cars in all crashes.*

There is not comprehensive (in that all the non-vehicle factors mentioned above, as well as others) data set within NHTSA that can provide an assessment of vehicle safety, by vehicle type, given a crash. The occupant fatality rates presented above necessarily include effects of vehicle's intrinsic safety, characteristics of the drivers in various vehicle types, in terms of their crash involvement frequency, alcohol and safety belt use, and the driving environment.

The principal conclusions are;

1. In rollover crashes, PCs have a lower occupant fatality rate than SUVs.
2. In planar (frontal, side, rear, and rollover), SUVs have a lower fatality rate than PCs.
3. In the much more prevalent frontal and side and rear crashes (i.e., in PCs, for every rollover crash, there are some 50 frontal, side and rear crashes), SUVs are much safer than PCs. In 2005, SUVs had an occupant fatality rate in these planar crashes that was nearly 50% lower than the rate for PCs – that is, in these crashes, SUV occupants were about twice as safe as PC occupants.
4. In all crashes (i.e., all crash modes), PCs and SUVs provide the same level of occupant safety.



Occupant fatalities in PCs remained fairly constant from 2001 through 2004. From 2004 to 2005, these fatalities declined by 214, or 4.8%. It may be that the changes made by vehicle manufacturers are beginning to make their way into the on-the-road fleet, are having an effect on the risk of a fatality to a PC occupant in these PC to LTV crashes.

Also, the fatalities to LTV occupants have not increased during this period, again with a decline between 2004 and 2005. Inasmuch as a substantial reduction of PC and LTV occupant fatalities in these PC to LTV crashes has only occurred in one year, 2004 to 2005, it is premature to make conclusions from these data. It is encouraging, however, that manufacturers appear to be making improvements in vehicle designs so as to enhance occupant protection in PC to LTV crashes.

ATTACHMENT B

From Insurance Institute for Highway Safety web site:

Computing driver death rates per million registered passenger vehicles allows for comparisons of fatal crash risk across vehicle groups. The computed rates reflect the influence of vehicle designs plus their patterns of use and the demographics of their drivers. Driver death rates are based on 1-3-year-old vehicles only so as to minimize the effects of vehicle aging. Rates based on fewer than 120,000 vehicle registrations are considered unreliable and are not included.

- Since 1978 the overall rates of driver and occupant deaths per million registered vehicles have declined across all passenger vehicle types. Declines in death rates have been largest for SUV occupants.

Occupant deaths per million registered passenger vehicles 1-3 years old, 1978-2005

Year	Drivers				All occupants			
	Cars	Pickups	SUVs	All passenger vehicles	Cars	Pickups	SUVs	All passenger vehicles
1978	155	237	273	169	235	346	438	256
1979	165	246	271	180	244	350	425	265
1980	167	221	287	177	248	316	494	263
1981	177	216	237	182	259	296	389	265
1982	155	188	229	159	231	263	392	236
1983	148	188	225	153	220	263	337	225
1984	147	190	143	151	218	259	218	222
1985	139	182	141	144	208	257	227	213
1986	128	172	134	133	196	239	224	202
1987	130	178	136	136	197	248	232	205
1988	134	186	121	140	206	251	198	211
1989	130	185	116	137	200	255	185	207
1990	122	179	126	131	188	245	201	197
1991	108	169	109	117	169	229	175	178
1992	102	151	88	108	160	200	151	165
1993	97	137	93	102	153	187	141	156
1994	100	134	87	104	160	178	148	161
1995	103	134	102	107	160	180	157	162
1996	107	127	98	108	168	178	150	167
1997	96	118	93	99	153	161	146	153
1998	90	119	86	94	141	158	141	144
1999	91	120	93	96	138	162	139	143
2000	83	117	81	89	127	155	135	134
2001	83	130	74	89	125	170	116	131
2002	84	123	76	88	126	162	122	131
2003	81	116	70	85	122	153	113	126
2004	76	106	64	79	114	146	100	117
2005	79	107	55	78	117	141	87	114

ATTACHMENT C



Standing Up for SUV, Pickup and Van Owners of America

www.suvoa.com

For Immediate Release
January 22, 2007

Contact: Ron DeFore
877-44-SUVOA (877-447-8862)

99% of Car Towing Capacity Lost Since 1970s SUV Owners Group Releases New Consumer Towing Guide

Washington, DC—The shift in consumer preference to SUVs and light trucks for family transportation was driven not just by the desire for better comfort and safety—since 1970 fuel economy mandates that resulted in downsized vehicles caused 99 percent of cars to lose their ability to tow basic recreational equipment, Sport Utility Vehicle Owners of America (SUVOA) announced today.

“The gutting of car towing capacity should be a wake up call that major lifestyle consequences could loom large as the nation contemplates the next wave of energy policy changes,” SUVOA President Barry W. McCahill said. “The threat is on several fronts – California’s carbon dioxide law and the 10 states that have chosen to follow suit; the Supreme Court’s upcoming decision on the regulation of carbon dioxide; and proposed federal legislation to increase federal fuel economy standards.”

“Achieving better fuel economy and energy independence are critical national imperatives. But let’s do it in a thoughtful, balanced way that ensures millions of Americans won’t lose their outdoor lifestyle,” he added. It is estimated that there are more than 20 million recreation and utility towables in the United States.

In the 1970s, before the federal program to regulate automotive fuel economy was enacted, some 70 percent of domestic passenger car models could tow a small fishing boat or camping trailer weighing 2,100 pounds. Today, just one percent of cars can handle that load, and many popular recreational tows weigh considerably more.

“If towing a boat or camp trailer is part of your lifestyle, or may be in the future, you need to consider carefully what vehicle you purchase. Cars and even many of the popular new crossover SUVs can’t do the job,” he said.

SUVOA posted a new towing guide on its web site (www.suvoa.com) complete with illustrations to help consumers match 2007 tow vehicles to popular RVs, boats and other recreational equipment that need to be towed. The guide is the first of its kind in that it also includes all 2007 passenger vehicles, safety tips and illustrations, links to other towing-related sites, and is available free to the public at www.suvoa.com.

“Regrettably, federal auto policy doesn’t always consider the tradeoffs that exist among national goals. One day the focus is on new safety requirements. The next, it’s on tougher emissions controls. Today, it’s on both those and improving fuel economy and they are often at odds with each other,” McCahill said.

“All are important. But meeting them creates performance and design conflicts and tradeoffs,” he continued. “The loss of car towing capacity and reductions in safety because of vehicle downsizing are unfortunate historical evidence of what can happen.”

Derrick Crandall, President and CEO of the American Recreation Coalition agreed that while fuel prices and the desire to decrease dependence on imported oil are now center stage, decisions being made today, if too extreme, could have serious consequences for outdoor recreation.

“If the poll question is, ‘Do you want better fuel economy?’ who doesn’t?” But if you ask if they are willing to give up vehicles that can transport the whole family comfortably and safely, and pull a boat or other RV on weekends, you likely will get a very different answer,” Crandall said.

“Ironically, the only vehicles left that enable people to enjoy the great outdoors—SUVs and pickups—are under attack and could also lose towing capacity. Nobody intended to kill off the station wagon that was the mainstay for family transportation and recreation. But it happened,” Crandall said.

“Federal policies should encourage outdoor recreation, and a big part of it is making sure that we preserve the kinds of vehicles that can carry people, gear and the various RVs, boats and other towables that people enjoy to their favorite outdoor destinations,” Crandall said.

He pointed to Centers for Disease Control and Prevention (CDC) data showing dramatic increases over the past 20 years in obesity and diabetes, attributed mainly to eating habits and lack of exercise. The Transportation Research Board states: “...physical inactivity is a major, largely preventable threat to health.”

According to Richard Coon, President of the Recreational Vehicle Industry Association (RVIA), towing ability is part of the outdoor lifestyle and must be preserved. “Even with higher fuel prices, American families are buying RVs in record numbers. Why? Because they want to stay closer to home and avoid commercial travel hassles, and have discovered the value. For about the price of one or two traditional family vacations, they can have fun adventures in their RV whenever and wherever they choose, and for many years to come. And, towed RVs are the most popular choice.”

Coon said there are more than 11 million trailer boats and 5 million trailer RVs in use in the U.S. There are millions more horse, snowmobile, ATV and personal watercraft trailers. Safe towing demands attention to the vehicle manufacturer’s stated towing capacity; number of occupants in the tow vehicle; total weight of what is being towed (including fuel, water, and gear); and proper hitch configuration.

The SUVOA Towing Guide points out that more consumer education on towing is needed because many towing situations dangerously exceed motor vehicle manufacturer and RV dealer recommendations. For example, according to the RV

Safety & Education Foundation, 49 percent of travel trailers are towed in excess of the tow vehicle's recommended maximum capacity, also known as gross combined weight rating.

In addition to the towing guide on www.suvoa.com, there are a number of web sites to help consumers make informed purchase decisions to meet their towing needs. Attached is a list of other web sites that provide information on safe towing.

#