

**INPUT TO NHTSA'S STRATEGIC PLAN FOR 2005-2010
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Submitter Information

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QUESTION	COMMENTS/SUGGESTIONS	RECOMMENDATIONS
A. Future Factors and Issues		
(A1) What are the critical highway safety issues facing the nation?	<p>Traffic volume and density will continue to divert driver attention from the driving task. Volume and density will increase annually and at a rate that outpaces the ability to construct new roads to reduce volumes.</p> <p>How to keep pace with the aging population of bridges continues to be an issue.</p> <p>There is a general lack of adequate funding for transportation improvements. Costs associated with transportation improvements continue to grow and significant growth in travel demand continues to outpace our ability to improve the transportation system. Congestion continues to rise on major & alternate routes, negatively affecting crash rates (particularly secondary incidents) & emergency responses. In an era of heightened security, there are also concerns over the transportation systems ability to handle major evacuations. The significant growth of the trucking industry and the rise in commercial drivers with limited English proficiency also presents concerns for safety on major trucking routes. The aging population and their transportation needs will become a factor facing all transportation areas.</p> <p>Change in the vehicle fleet continues to be an issue; for example, crash worthiness of roadside devices, visibility concerns, crashes with differing size and weight vehicles. We will see more work zones in the future which will require a change in driver expectancies with an increased emphasis on maintenance activities. There is a need to have better inventory data that can be used to conduct better safety analyses. There continues to be a need to have minimum visibility requirements.</p>	<p>Additional funding be allocated to bridge repair, rehab and replacement.</p> <p>Seek more funding for safety programs. In addition to new infrastructure capacity, look at more effective system management that includes access management control measures. Consider extra capacity for efficiently evacuating urban areas, such as reversible lanes or a travelable shoulder. Promote programs to recruit, train and educate qualified commercial drivers.</p>
(A2) What will future key demographic and social influences be on highway safety (e.g., novice and older drivers, gender, cultural diversity, geographic distribution, alcohol consumption)?	<p>Virginia's population as a whole and it's mean age is growing older as is the nation as a whole. Older drivers pose unique challenges to highway safety due to their reaction times, vision, perception and similar characteristics. In addition to those already mentioned, prescription drug use among the elderly and particularly the interactions among drugs, since most older persons have multiple health problems. Enhance policies and programs to educate and recertify our aging population and to assist in identifying individuals who may pose a safety risk. Issues involving rage and aggressive driving are not being abated with current laws and penalties. Also, programs for new immigrant groups when they reach the US and wish to drive need to be developed. Significant responsibility will be placed on the total traffic safety community, but most of all law enforcement, to address this problem and bring some form of remedy to enhance highway safety.</p>	<p>Study effect of instituting driver's license fees older driver or youths (</= ~ 18 years of age) and elders (>/= ~ 65). Study making regular and commercial license test more rigorous &/or frequent for youths and elders. Study the crash history of the elderly and current cases, and determine what are reasonable and practicable limitations that could/should apply.</p>

(A3) In general, how will driving behaviors change in the United States? How will demographic and social factors change driving behaviors and impact highway safety?	It appears driving behaviors will grow worse in the United States in the future. There will be required significant social influence to modify the negative driving behavior already manifested in many drivers in many segments of society. Maturity and driving experience can positively effect highway safety. Society will have to make 42,000 highway deaths a year an important issue to influence appropriate laws and penalties that will strengthen highway safety.	
	Compliance with traffic laws will probably keep falling, so more automated enforcement efforts will be necessary to leverage enforcement funding. Literacy will decline as a traffic safety problem. Use of ITS countermeasures among elderly drivers may be problematic. The expectation of constant stimulation and the lack of patience/vigilance (in the perceptual sense) may emerge as a problem for young persons entering the driving population.	
(A4) What changes in the auto fleet, including size and mix, will impact highway safety?	Technology has already proven to be the greatest influence on highway safety through the development of airbags, safety belt systems, crumple zones etc. As the highways become more congested it is foreseeable to have designated lanes for certain vehicle types to promote highway safety and traffic flow.	
	More and more vehicles will be purchased that operate on some type of alternative fuel such as propane, compressed natural gas, ethanol and methanol as well as hydrogen fuel cells. The "black boxes" or "in car computers" will become more important in crash investigations.	
	Increasing contrast in vehicle weights (lightweight hybrids and heavy SUVs) will likely contribute to a marked increase in crash severity. This concern may be offset in part by improvements in vehicle safety features.	Enhance research and development programs for vehicle safety. Continue to support the development and implementation of ITS systems that improve emergency response times and crash identification.
	Vehicle size and power to weight rate ratios may increase fatality rates. We continue to see an increased average age for larger vehicles, but the resultant nighttime visibility for these vehicles and existing traffic control devices is reduced. If there continues to be an increase in size and weight, this will require the test vehicles currently in NCHRP 350 to be redefined.	
(A5) What changes in commercial vehicle use will impact highway safety?	It is foreseeable to have designated travel lanes for commercial traffic.	
	Increased emissions standards/regulations can temporarily effect the commercial vehicle age profile. Increased use of intermodal container trucks will likely change the demographics of the commercial vehicle population. Additionally, more powerful heavy trucks are in development, which could have both positive (reduce delays & back ups on inclines) and negative (increase frequency or severity of accidents) effects on the roadway.	Promote and support heavy-truck safety maintenance and safety enforcement. Nationally, promote areas where truckers can park and rest (for roadway safety if not other reasons).
(A6) What international trends and technologies will influence future developments in the American automotive industry?	Mass transportation similar to those used in other countries will certainly have an impact on highway travel in larger metropolitan areas. Smart highways with real time information exchanges with vehicle traffic will enhance the movement of traffic around congested areas and/or impediments.	
	New fuel technologies and possibly smaller vehicles will be influential.	
	The use of smart cruise control and safety belts will be standard. Computer failure combined with increased dependence on automotive computers may result in problems that are just now beginning to emerge.	
	In-vehicle collision avoidance systems whether vehicle based, infrastructure based, or a joint cooperative system have the potential to significantly reduce the number and severity of crashes. In addition, visibility enhancement systems, such as infrared (passive or active), have the potential to reduce crashes involving pedestrians and animal, and assist the motorist in navigating the roadway in inclement weather. European lighting systems hold promise to reduce glare and enhance visibility.	

(A7) What changes in energy and environmental issues will impact public policy and highway safety? How will these changes impact vehicle use?	The development of alternate energy sources will impact highway safety. As the dependency on oil changes, alternate sources will be essential. Products that do not harm the environment either in daily use or when involved in a crash will temper highway use in the future.	
	Growth is outpacing transportation improvements. Costs of fuel and pollution controls will continue to consume dollars otherwise available/potentially available to improve highway & safety programs.	Advocate sufficient highway funding consistent with growing costs, considering energy and environmental issues.
	To meet changes in environmental policy, vehicle size and weight will change the dynamics of the vehicle fleet. There will likely be increased use of hybrid vehicles particularly in urban areas and on HOV travel lanes.	
(A8) What change in the highway or energy distribution infrastructures will either affect or be needed for improved highway safety?	Due to population growth mass transportation and highways may share the same immediate area/highway in the future.	
(A9) What changes in auto and medical insurance might affect highway safety?	The costs of auto and medical insurance could influence the determination of an individual to use a highway or use an alternative transportation source. It will also effect how that individual will take more seriously the use of available safety devices and defensive driving procedures.	
	Insurance costs may need to be based on driver behavior - for example racing. There may need to be an increase in current costs to have a positive affect on safety.	
(A10) What changes in the national, state and local economies will impact public policy and highway safety? Will these changes require modification in Federal funding programs or delivery systems for highway safety?	Local economies will not be able to meet public demands for new highways. Increased traffic volumes will have an effect on highway safety and enforcement will be key to preventing crashes and their resulting consequences.	
	Reductions in traffic enforcement personnel, especially in urban areas will require new enforcement technologies to improve single officer efficiency.	
	A reduction in the transportation revenue stream will detrimentally impact highway safety. Again, growth is outpacing the ability to fund transportation improvements. This makes cost-effectiveness and efficiency in programs much more important. Expect greater congestion and accidents in the larger urban and port areas. This will compete with efforts to attend to small urban/rural transportation safety and economic needs.	Seek additional funding. Prioritize programs and project selections with criteria including service, safety and cost effectiveness. Consider promoting the economy-business environment of small urban/rural locations that may have lesser-utilized but inner-connected transportation facilities. This could help "flatten-out" traffic.
	With the aging infrastructure, maintenance costs will increase. New construction and the deployment of new technologies will slow. Greater emphasis on deploying congestion	
(A11) How might changes in vehicle theft and odometer fraud impact NHTSA's future program efforts in these areas?	Increase funding for maintenance, operations and new technologies.	

(A12) What are new and emerging areas of automotive safety research that would enable NHTSA and the auto industry to improve motor vehicle safety?	GPS and more advanced driver communication systems will most certainly have a positive influence on motor vehicle safety.	
	Consider methods to install locators and GPS coordinates that are coordinated with local emergency service operator-dispatch centers for all vehicles.	
	NHTSA and the automobile industry should consider recent developments in head lamp designs, lighting technologies, visibility enhancement systems (e.g. Infrared heads-up displays), collision avoidance, and Pre-failure warning systems (e.g. Tire pressure on large trucks) to enhance vehicle safety.	
(A13) What additional analytical data need to be collected with respect to motor vehicle and highway safety? How might data and information be combined for more effective and valuable results? How might these data be collected, linked, analyzed and made available in a more efficient and cost-effective manner?	The "black box" data will be essential in crash investigations to better improve vehicles, highway engineering and better understand human behavior and reaction to certain situations. The integration of timely, accurate and appropriate citation and conviction data as well as pre, during and post crash data will be needed so states can make those critical decisions on how to apply limited resources and to measure their impact on highway safety.	
	Arrest and adjudication data linked to previous driving record and crash data, allowing clinicians to follow individuals from arrest to disposition and release (and beyond), and allowing researchers to aggregate these data.	
	Detailed road inventory (cross-sections, horizontal and vertical curves, explicit crash location data and traffic information (not just a diagram), timeliness of data entry, and interoperability with other data sources (traffic volume, weather, etc...)) would improve safety enhancements.	
(A14) How can crash avoidance data be gathered?	"Black Boxes" could provide data as could traffic monitoring systems and human research and studies.	
	Review data event recorders. The continuance of the naturalistic driving study with funding of FSHRP will provide additional data.	
(A15) What role will public education and consumer information play in the future of highway safety? What other cost effective tools should NHTSA use to promote motor vehicle and highway safety programs?	High visibility enforcement which addresses specific driver behaviors and age groups has proven effective in all phases of highway safety in the recent past. It should be expected that it will be essential in the future as well.	
	Public education has proven effective in all phases of highway safety in the past. It should be expected that it will be essential in the future as well.	
(A16) What changes in the area of Federal, state and local legislation are appropriate and how might that legislation affect traffic safety in the future?	Laws such as those that make use of current and emerging technology will be important if there will be any behavior modifications to benefit highway safety.	
	Changes to the primary safety belt enforcement, nighttime curfews for drivers under 18, limitations on number and age of passengers of underage drivers, increasing the driving age to 17 for licensing may lead to reduced crashes. Legislation and judicial recognition for variable speed limits, photo-radar, and other automated enforcement methods would improve enforcement capabilities. Other areas require the same emphasis as that being placed on the Open Container Law.	
	Seek additional transportation funding that is consistent with growing costs and challenges. Officials need to "think like a fire marshal" with new programs for evacuating the more urbanized areas. Consider new capacity or reserve capacity for efficiently leaving an urban area, such as reversible lanes or a travelable shoulder. Strongly promote and fund strategic statewide safety programs. Promote camera/video enforcement.	Investigate ways to increase funding such that highway funding is more consistent with growing costs. Look for methods to balance competing issues for transportation improvements.

(A17) How might homeland security affect traffic safety in the future?	There will be increased surveillance and monitoring of highway and other transportation modes. This will enable dual use for Intelligent Traffic System purposes, as well as reduction in criminal associated traffic activity.	
	The sharing of information among public safety entities will be a controlling factor in the future with regards to homeland security and traffic safety.	
	Rerouting and incident management strategies may have an effect on safety in congestion.	
B. Technology		
(B1) How will vehicle-related technologies impact the future of motor vehicle and highway safety?	Advances in vehicle technology will continue to influence highway safety through smart cars, passenger safety, and crash avoidance systems. Radar systems installed in the front of vehicles that trigger alarms could reduce the number of rear-end crashes.	
(B2) What future technologies should be researched and encouraged to enhance highway safety?	Continue to research "in-vehicle" crash avoidance systems, as well as heated bridge decks and anti-icing chemical spray systems for bridge decks.	Additional research be funded in these areas. (S&B)
(B3) What changes in roadway design and infrastructure are needed? How might these changes impact motor vehicle and highway safety?	Smart highways and the ability to exchange real-time information with drivers can greatly impact highway safety.	
	Greater intersection corner radii for commercial vehicles in right turns will reduce delay at intersections and could potentially reduce rear-end crashes. Continue to promote roadside-shoulder rumble strips.	
	Continue to update the AASHTO design standards to reflect existing vehicle fleet.	
(B4) What technological changes are necessary in other modes of passenger and freight transportation to positively impact motor vehicle and highway safety?	Control access to railroad rights of way at-grade crossing locations to minimize the potential for vehicles going around gates. Also, add low cost warning systems for lightly used grade crossings and improve reflectorization at crossings to impact safety. One of the largest problems is trespassing and enforcement of laws.	Study the effectiveness of gating technologies.
	Greater implementation of ITS technologies such as: vehicle component monitoring systems that help avoid breakdowns, AVL so that vehicles can be located quickly in the event the operator cannot radio for help, countdown warning systems at grade crossings that predict when the train will be at the crossing, systems that can track the contents of freight vehicles so that emergency services will know how to respond (i.e. haz mat) in case of an incident, etc. will increase safety.	
	Increased truck visibility (night and weather) for turning and stopping. Controlling vehicle spray during conditions of rain, sleet, snow. Increase pedestrian and warning systems at light rail transit, bus rapid transit, and heavy rail grade crossings.	
(B5) What changes in medical technology and emergency medical services will impact motor vehicle and highway safety and health outcomes?	Trauma units have proven vital in the role they serve in providing effective medical treatment. This type of medical treatment will continue to be essential.	

(B6) What changes do you envision in automation, information management and workplace alternatives (e.g., telecommuting)? How will these activities impact highway safety and commuting and travel behaviors?	Telecommuting will continue to grow as a means to increase productivity and reduce traffic congestion. This will have a positive influence on traffic safety.	
	The increase of onboard tech-info services (computers, maps, GPS, traffic reports) would allow more effective use of highway system. At the same time, however, it may provide another driver distraction hazard (like cell phone or player-radio).	Enhance education on driver distraction hazard.
B7) What changes in law enforcement practices and technologies might impact highway safety?	"In car technologies" that enhance the ability of a police officer to quickly locate information/contact in a stopped vehicle to enhance officer safety. Additionally, systems that enable an officer to produce a crash report, summons or other form in a paper-less environment and immediately transmit the data to all necessary parties will influence highway safety.	
C. Institutional Relationships		
(C1) How do you and/or your organization (include organization's name) interact with NHTSA? Please explain the dynamics of this relationship.	State Police receives highway safety funds for enforcement purposes, and participates on panels and committees to shape policies for the enhancement of highway safety. The Commissioner for DMV is the Governor's Representative for Highways Safety and has an excellent relationship with NHTSA. As well as KEY state agencies (VSP, VDOT, DMV, Health, Education, VASAP) and NHTSA, FHWA, FMCSA are all a part of the State Safety Management System Committee. VDOT works with DMV, Federal Highway, Federal Motor Carrier and NHTSA through the penalty transfer funding (USC Sect 154).	
(C2) How could NHTSA improve its relationship with your organization and with other organizations and institutions?	Take a more active role with the state's Safety Management System committee and the FHWA Divisional Offices. NHTSA should continue to provide states with valuable information on such things as best practices, status of federal legislation, new funding opportunities for states to seek and to provide additional training.	
D. NHTSA's Role and Mission		
(D1) In your view, should there be major changes in NHTSA's role/mission in the future?	No.	
(D2) What are NHTSA's strengths? Weaknesses?	They are strong in their efforts to assist agencies, but are not always receptive to the knowledge and experience offered.	
(D3) How can NHTSA have a greater impact in the reduction of injury and loss of life on the nation's highways?	Continue funding for enhancement initiatives.	
(D4) What is NHTSA doing well? Not so well? How can NHTSA improve the way it does business? Please identify possible improvements or ideas for doing better.	They are very strong at promoting ideas and brainstorming. They should continue to hold summits and conferences where ideas can be exchanged or new ideas be presented for assessment. They should continue to offer states best practices and set national goals and strategies.	