July 20, 2015

Office of Information and Regulatory Affairs
Office of Management and Budget
725 17th Street NW
Washington, DC 20503

Re: Docket Number NHTSA-2015-0049, OMB Information Request, Crash Report Sampling System

This note comments on the National Highway Traffic Safety Administration's Information Collection Request (ICR) concerning the information to be collected in the National Highway Traffic Safety Administration's (NHTSA's) proposed Crash Report Sampling System (CRSS). This system will replace the National Accident Sampling System (NASS) that has been in operation since the late 1970s.

The question posed in the *Federal Register* notice (Vol. 80, No. 101) is:

> Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; the accuracy of the Department's estimate of the burden of the proposed information collection; ways to enhance the quality, utility and clarity of the information to be collected; and ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

NHTSA must have accurate crash data to issue effective safety standards and to identify safety defects in time to prevent loss of life and major recalls. The revised crash investigation and data collection system is, at best, a modest upgrade of NASS, but continues the serious deficiencies and inefficiencies of the present system.

The basic deficiency of NHTSA's crash investigation and data systems are that they are completely dependent on Police Accident Reports (PARs) produced by state and local police to document motor vehicle crashes occurring on public roads. These reports sometimes have errors or omissions (such as not indicating that a fire was involved in a crash or incorrectly noting whether air bags deployed) and have very limited indications of the severity of the crash or of personal injuries (the KABCO scale for indicating injury provides a completely inadequate description of crash injuries). PARs rarely have photographs that could be used to deduce crash severity or confirm details of the crash.

NHTSA must have substantially more and better quality crash data because: (1) many of the obvious improvements in motor vehicle and road safety have been

implemented and diagnosis of further problems will be increasingly difficult; (2) motor vehicle design and technology are changing rapidly because of advancements in materials and technology and increasingly stringent fuel economy requirements; (3) America's road system is rapidly deteriorating and, in many areas is seriously overburdened; and (4) the agency failed to detect obvious safety defects such as the Firestone tire/Ford Explorer tire defect, the Jeep fuel tank vulnerability, Toyota unintended acceleration, General Motors ignition failures, and Takata air bag explosions for far too long. The cost to the public and to automakers of these defects was far higher than the cost to seriously upgrade NHTSA's crash data systems.

Both the old and new NHTSA crash investigation and reporting systems have the following deficiencies:

- They are, and will probably continue to be underfunded in relation to the National Highway Traffic Safety Administration's need for detailed, comprehensive information on the more serious crashes and crash injuries occurring across the nation.

- They continue to focus primarily on passenger cars and light trucks – where there have already been major reductions in crash fatalities and injuries – mostly ignoring pedestrians, pedal cyclists, motor cyclists, and larger trucks.

- They have a limited mechanism for identifying and selecting crashes of the highest interest: those that are have the greatest potential to cause human death and injury and where safety improvements can most dramatically demonstrate success. This is because selection is based on PARs that lack adequate accurate information on crash and injury severity. Most crashes of consequence are investigated and reported on by police investigators and information not collected at this time and place of a crash is likely to be lost.

Since the vast majority of crashes are not particularly serious, the consequence is that a substantial majority of the crashes selected for investigation provide little insight into (1) the conditions that produce fatalities and the most severe crash injuries and (2) how improved vehicle and road designs may be reducing the occurrence and severity of crashes and of crash casualties. The systems that simply collect data from PARs such as the Fatality Analysis Reporting System (FARS) and the General Estimates System (GES) have little detail that would give insight into specific causes of crashes and crash injuries.

The roadblock is that most local and state police crash investigators are still doing their investigations and reports in essentially the same way they were at the time NHTSA was formed nearly a half century ago. In the meantime, there have been major developments in digital photography, computer systems, artificial intelligence, and internet communications; many of which are being adopted in other areas of law enforcement. Indeed, traffic officers have more modern and efficient devices to digitally write and record traffic violations than police officers assigned to investigate and report on crashes.

What the nation now needs is a revolution in the way that local and state police crash investigators conduct and report on significant crashes. This is critical because

investigating officers have unique access to the freshest and most complete information on a crash. At present, NHTSA loses roughly ten percent of the data on crashes it investigates because its investigations begin only days to a week after the crash occurred.

Specifically, investigating officers should have laptop computers or tablets with software to facilitate their work. These systems would specifically:

- Provide guidance in responding to a crash (contacting EMS and tow trucks, clearing scene) and conducting investigations,

- Provide templates for direct input of data in electronic format,

- Directly read licenses, registrations, and insurance cards; and pinpoint crash location from a GPS (this technology would save a considerable amount of time and improve accuracy),

- Provide a simple app with which pre-crash speed, pre-crash braking, and restraint use can be downloaded from the vehicle's crash recorder[1] (an officer's access using simple equipment would require a change in the design of future vehicle crash recorders to permit such readings),

- Direct the officer on taking a modest number of photographs of the scene and vehicles (concentrating on the crash damage areas of the vehicles from which artificial intelligence software can make an estimate of the Collision Deformation Classification that is critical to estimating the severity of the crash), and

- Provide a template for the officer to complete a simple questionnaire concerning the condition of the various people involved in the crash (artificial intelligence software would make a reasonably sophisticated estimate of the nature and severity of their injuries, including the Abbreviated Injury Scale classification that would be a major improvement over the present *KABCO* description of injury).

The assessment of crash and injury severity could also improve treatment of crash victims by providing advanced information to emergency medical technicians on the level of care required for them.

Assuming that a uniform standard can be developed and agreed upon for crash reporting, these electronic records of crashes that are sufficiently severe to trigger a police report, could all be assembled within days in a state computer. The results could be assessed on a monthly basis by software designed to identify patterns to provide a highly useful, comprehensive picture of the state of traffic safety in each state, virtually in real time.

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[1] The National Transportation Safety Bureau, which is responsible for investigations of all types of transportation crashes, is well-acquainted with crash recorders because of their value in air and rail crashes. Such crash recorders are in virtually all recent model vehicles on the road, but at present, the data not available because it can be accessed only by trained personnel using expensive equipment.

Such data bases could probably have identified the most severe and widespread safety defects of recent years. More important, these records could also have identified the problems with SUV rollovers and weak roofs and other more widespread safety challenges.

The costs of a more advanced system would be more than offset by the savings in time and resources to create the existing paper PARs. If needed, the initial funds are available in the half-billion dollar State Highway Safety Program Grants. Because the laptop software could guide an officer through an investigation, only minimal additional training would be necessary. The increase in efficiency from such a system would mean that officers would spend less time on modern crash investigations than they do at present.

NHTSA's National Center for Statistics and Analysis has refused to even entertain the possibility that local and state police might be induced to bring their work into the Twenty-First Century. They cannot conceive of the possibility that photographs could be taken by at least the police agencies in their Primary Sampling Units, where Federal crash investigations are conducted, that would make it possible to "separate the wheat (crashes worthy of Federal investigation) from the chaff (mostly fender benders and relatively minor crashes)."

The Government Accountability Office recently completed a study of NHTSA's crash investigation program.[2] However, this agency basically accepted NHTSA's conclusion – which we do not – that state and local police agencies could not or would not adopt modern technologies for their crash investigation and reporting.

The upgrade proposed by NHTSA would provide only a marginal improvement in its systems, and does not begin to address the agency's needs for crash data to support its programs. We urge that OMB not approve NHTSA's Information Collection Request unless the agency provides a proposal for encouraging state and local police agencies to bring their crash investigation and reporting systems into the twenty-first century as discussed above, and to incorporate the additional data into its data collection programs.

We request a meeting with the appropriate officials of the Office of Information and Regulatory Affairs to discuss these matters further.

Sincerely,

Clarence M. Ditlow
Executive Director

Carl E. Nash, Ph.D.
Chief Scientist

cc: Terry T. Shelton, *Associate Administrator, National Center for Statistics and Analysis*, National Highway Traffic Safety Administration

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[2] Auto Safety: *Status of NHTSA's Redesign of Its Crashworthiness Data System*, GAO-15-334: Washington, D.C.: Mar 6, 2015.