

**STATEMENT OF THOMAS LOUIZOU,
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PENNSYLVANIA SENATE TRANSPORTATION COMMITTEE
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Good Morning Chairman Rafferty and honorable members of the Senate Transportation Committee. Thank you for inviting NHTSA to testify today regarding the use of speed timing devices by law enforcement agencies. I am Thomas Louizou, Regional Administrator for the National Highway Traffic Safety Administration, an agency of the Department of Transportation. Our goal at NHTSA is to reduce the annual toll of more than 37,000 fatalities, 2.3 million injuries, and \$230 billion in societal costs due to motor vehicle crashes in America. Pennsylvania pays \$8.2 billion of these costs, amounting to about \$650 for every resident of the state, each year.

Nationally, speeding is a contributing factor in about 30 percent of fatal crashes each year, however in Pennsylvania speed is a contributing factor in nearly 50 percent of fatalities. Speed was a contributing factor in more than 11,000 traffic deaths in the United States in 2008. In that same year, 718 deaths occurred in Pennsylvania in speeding-related crashes. NHTSA considers a crash to be speeding-related if the driver was charged with a speeding-related offense or if an officer indicated that racing, driving too fast for conditions or exceeding the posted speed limit was a contributing factor in the crash. Speeding is often associated with other driving behavioral risks, such as impaired driving, aggressive driving and failure to be properly restrained with a seat belt.

Although speeding is often viewed as a problem on interstate highways and other high speed roads, nationally 88 percent of speeding-related deaths occur on roads other than interstates. That percentage holds true for Pennsylvania as well. Of the 718 speeding related deaths in 2008, 625 occurred on non- interstate roadways with a posted speed limit of 55MPH or less. Although speeding is a national problem, it requires local solutions. NHTSA encourages States to take a comprehensive, balanced approach to speed management involving engineering solutions, aggressive enforcement using proven technology and swift adjudication. Our research shows that high visibility enforcement, accompanied by appropriate messaging, is an effective countermeasure to combat speeding. Effective enforcement practices often include the use of technology to accurately measure vehicle speeds through the use of radar (Radio Detection and Ranging) and lidar (Light Detection and Ranging).

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Radar is well established as a reliable and accurate device to measure speeds. Radar works through the transmission of radio waves that reflect off objects and return to the transmission site. That reflection can be analyzed to calculate the speed of a moving object. Developed in the 1930's for military purposes, the use of radar expanded rapidly for civilian use after the war.

Over that time, there have been continuing improvements in the quality and accuracy of radar units and other speed measurement devices. Recent technological enhancements include the development of laser (Light Amplification by Stimulated Emission of Radiation) and lidar. These devices provide law enforcement with tools that operate on the same principle as radar but using light, rather than radio waves.

We recognize that the motoring public must be assured that speed measurement devices are accurate and reliable. For many years, NHTSA has been involved in the development of technical standards and training associated with the use of radar, laser and lidar technologies for speed measurement. We work with our partners at the International Association of Chiefs of Police (IACP) to maintain the highest performance standards, accuracy, and reliability of radar and lidar equipment used by law enforcement professionals. Jointly, we established a group of law enforcement, industry professionals, engineers and scientists. The work of this group includes regular testing and certification of newly developed and existing speed measuring devices through independent testing laboratories in Florida and California. After rigorous testing, those devices meeting the established criteria are certified and then included on the Certified Product List (CPL) issued through the IACP. Only those devices listed on the Certified Product List are allowable for purchase using Federal highway safety funds.

We also recognize that training is critical to the effective use of radar and lidar. NHTSA works with our law enforcement partners and state law enforcement accreditation organizations to develop training curricula for these technologies and to make the curricula available to law enforcement across the country. These curricula include instruction on the theory and scientific principles on which the devices operate, as well as their operation and maintenance, to ensure that users in the field thoroughly understand the principles and proper use of the devices. Standardized training provides the law enforcement community with enhanced credibility

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derived from greater understanding of the technology, leading to more effective courtroom testimony. This also enhances the public perception of fairness, credibility and the reliability of radar and lidar.

Pennsylvania has enjoyed a history of leadership in highway safety with creative approaches to roadway maintenance and work zone safety, highway safety programming, and enforcement. A comprehensive speed enforcement program has been shown to be a major contributor to improving safety. Enforcement is critical to achieve compliance with speed limits. More than half of all traffic stops result from speeding violations, and public support for speed enforcement activities depends on the confidence of the public that speed enforcement is fair, rational, and motivated by safety concerns.

Conscientious use of technology can be a valuable contributor to improving safety outcomes while also enhancing the public perception of objective, even handed enforcement. Law enforcement agencies across the country make effective use of speed enforcement technology on a daily basis to detect and deter unsafe behavior and keep motorists safe. We believe that Pennsylvania law enforcement is well situated to build on the success of its colleagues around the Nation in effectively and responsibly deploying technology in the effort to keep residents of and travelers through the Keystone State safe.

I thank you for the opportunity to appear before you today and I welcome any questions the committee may have.