

TERMS & TOOLS



DEFINITIONS RELATED TO SPEED

This glossary contains terms, tools, and programs for speed management. It provides information for law enforcement agencies that want to develop or expand special speed enforcement activities. Government officials, concerned citizens, and other individuals interested in supporting these activities can use this information to learn more about speed and enforcement activities.

AERIAL SPEED ENFORCEMENT

A method of speed enforcement using pre-measured distance markers, visible from the air, to determine the speed of vehicles on the ground. A pilot and spotter, in fixed-wing or rotary aircraft, 'clock' vehicles and radio a description of the offender's vehicle to officers on the ground who intercept the vehicle and issue a citation.

AUTOMATED SPEED ENFORCEMENT DEVICES (ASED)

A variety of high-tech devices, e.g., Radar and Lidar-based photographic systems, that monitor the speed of vehicles and create a record of infractions. These devices can operate with or without personnel.



AGGRESSIVE CRIMINAL ENFORCEMENT PROGRAM (ACE)

An officer training program to sharpen skills for detecting criminal violations when stopping motorists for speeding or other traffic infractions. The National Sheriffs' Association developed this program in conjunction with NHTSA in an effort to increase rural traffic enforcement.

COMBINED ENFORCEMENT

An enforcement approach that pools resources among law enforcement agencies. It links enforcement and public information efforts and encourages officers to look for multiple infractions of traffic laws, e.g., impaired driving and safety belt use, speeding, and impaired driving.

CONSUMER PRODUCTS LIST (RADAR)

Provides the name and model of each device that complies with the model performance specifications for police traffic radar devices. Standards are based on model minimum performance specifications and testing protocols developed by the National Institute of Standards and Technology (NIST). Call the International Association of Chiefs of Police (IACP) at 1-800-THE-IACP to obtain the latest list.

COUNTERMEASURES/ INTERVENTIONS

Programs or activities developed to encourage safe driving and discourage unsafe driving behavior. The reinforcement of safe driving behavior is a central element of effective programs.

DETERRENCE

A strategy to achieve greater voluntary compliance with traffic laws by increasing public perception of the risk of being caught and punished for violating these laws.

DRONE RADAR

A device that activates radar detectors, creating the perception that a roadway is being patrolled. Use of drone radar must conform to NHTSA guidelines established in compliance with the Federal Communications Commission's Regulations and Policy.

ENFORCEMENT

Disciplinary actions that encourage compliance with traffic laws and ordinances. These actions include: vehicle stops, verbal or written warnings, citations, and arrest.

INSTANT-ON RADAR

Speed radar, with a standby mode, which only transmits a signal when activated by an officer.

LIGHT DETECTION AND RANGING (LIDAR)

Technology that uses light pulses to measure the speed of a vehicle. These devices are more precise than radar in selecting a target vehicle in dense traffic. They obtain readings in less than a third of a second (radar requires about three to five seconds) and are less vulnerable to atmospheric interference. Lidar distinguishes between approaching and departing target vehicles and is useful for conducting traffic speed surveys.

LOOKING BEYOND THE TRAFFIC TICKET

A procedure for looking for evidence of other violations, including criminal activity, after making a traffic violation stop.

PHOTO RADAR

A system that photographs vehicles exceeding a preset speed threshold. The system imprints the date, time, and location on the picture, which may include the vehicle, license plate, and the driver. Units can be operated with or without personnel, depending on the type of equipment used and other local circumstances. Some units can simultaneously track multiple vehicles in several lanes. This method of speed enforcement has been used in several European countries for over twenty years.

PUBLIC INFORMATION (SPEED)

Messages delivered to the general public through the media, community groups, schools, and the workplace to increase awareness and knowledge of posted speed limits and enforcement activities.

RADAR (RADIO DETECTION AND RANGING)

A speed measurement device that uses microwaves to measure the speed of approaching or departing vehicles. It is effective when used across or down a road.

RADAR DETECTOR

A device that senses the presence of microwave signals emitted by active police radar. Depending on the type of device, they can detect X, K, and Ka band radar, photo radar, and Lidar. Some detectors are effective up to a mile away. These devices are illegal in commercial motor vehicles that are subject to Federal motor carrier regulations. They are also illegal in all vehicles in Virginia and the District of Columbia.

RADAR DETECTOR-DETECTOR

A device used by traffic enforcement agencies to identify drivers illegally using radar detectors. This device senses the faint microwave transmission emitted by active radar detectors.

RADAR TESTING LABORATORIES

Five certified laboratories that: (1) test radar units against the requirements of the Model Minimum Performance Specification for the Consumer Product List; (2) perform Critical Performance Testing; and (3) conduct Recertification Testing. Call the International Association of Chiefs of Police (IACP) at 1-800-THE-IACP for information.

RUMBLE STRIPS

A series of narrow depressed or raised strips on the roadway designed to make noise that alerts drivers that a speed reduction or stop is ahead. Textured surfaces and reflective disks serve the same purpose. They are used in advance of toll booths, construction areas, and hazardous situations.

SATURATION PATROL

An increased enforcement effort, targeting a specific location, to reduce the frequency of an identified traffic safety violation, e.g., speeding, impaired driving, etc. Multiple agencies often combine and concentrate their resources to conduct saturation patrols. When combined with vigorous public information and education campaigns, the impact is greatly increased.

SELECTIVE ENFORCEMENT

Officers are assigned to a specific location to impact a particular traffic safety problem. Selection of enforcement sites is based on the location, time, and day of the week violations most often occur. Resources are allocated to maximize arrests, deterrence, and visible patrol.

SELECTIVE TRAFFIC ENFORCEMENT PROGRAMS (STEP)

Periodic, highly publicized, enforcement efforts supported by community-initiated public education activities. These programs are used for enforcement of speed limit and impaired driving violations, non-compliance with safety belt usage laws, commercial vehicle regulations, and other areas of traffic safety. The program components are problem identification, enforcement activities, public information and education, data collection, and program evaluation.

SPECIAL TRAFFIC ENFORCEMENT PROGRAMS (STEP)

An enhanced enforcement effort designed to increase public awareness of a specific traffic safety problem, such as speeding, impaired driving, and safety belts, intensify related enforcement efforts, and make sure the public is aware of the intensified enforcement.

SPEED

ENFORCEMENT BLITZ

Programs that concentrate police resources for short periods (usually two to three weeks at a time) to apprehend speeders. To maintain their effect, blitzes must be conducted at least every three or four months. Informing the public of the blitz through increased multimedia public information and education is an important part of the program. Media support maintains awareness of the blitz and increases the perceived risk of apprehension.

SPEED HUMP/BUMP

A hump constructed across a street used to slow traffic, usually in residential areas, parking lots, and in approaches to toll booths or construction areas in high-speed lanes. Humps can be permanently constructed of concrete or asphalt or use rubber or metal bolted to the roadway.

SPEED VARIANCE

A measure of the distribution of actual vehicle travel speeds above and below the average travel speed. As the variance increases, traffic fails to move smoothly as faster traffic groups behind slower traffic. Statistical analyses show that crash rates increase as the variance increases.

TIME/DISTANCE

SPEED MEASUREMENT DEVICE

A device that measures speed by dividing the distance traveled by the time it takes to travel that distance.

UNMARKED

(POLICE) VEHICLE

An unmarked, unconventional vehicle used by police to detect speeding or other traffic infractions.

VISIBILITY PATROL (SPEED)

Patrol vehicles driving or parked near the roadway to discourage speeding. Visibility enforcement has a deterrent effect which causes motorists to slow down.

VISIBLE DISPLAY

RADAR AND SIGNING UNIT

Billboard-style devices that use radar to generate a display showing a motorist's actual speed or indicating that a motorist's speed is over a specific limit. The former use is often employed to allow the public to "check their speedometers for accuracy." These devices tend to make the public more aware of speed issues.

VISUAL AVERAGE

SPEED COMPUTER AND RECORDER (VASCAR)

A speed measurement unit which has both distance and time input capability, allowing it to rapidly calculate and display the speed of any vehicle an officer may be tracking.

VOLUNTARY COMPLIANCE

Heeding the speed laws without any fear of enforcement action. If most people voluntarily complied with posted speed limits, it would only be necessary to target enforcement at occasional violators and high-risk drivers.

ZONING

Speed zoning is the establishment of reasonable and safe speed limits based on an engineering study.