

# ILEA



Emergency  
Vehicle  
Operations

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## *Preface*

This manual has been prepared to serve as a source of information for police officers enrolled in the emergency vehicle operator's course. It is designed to be a resource in fulfilling the need for professional driving knowledge among law enforcement officers, as well as to reduce motor vehicle accident frequency by improving the officer's attitude and skills. It is hoped that this manual will provide the officer with a better understanding of the aspects of law enforcement driving, the legal ramifications, the vehicle capacities, and most importantly, the individual skills necessary to safely operate an emergency vehicle.

Many sources of information have been used in producing this manual. Consequently, it is a refined product of the many experienced and dedicated minds of leading individuals in the field of driver education and police administration.

The value of a good driver education program has long been recognized. It is with this in mind that every effort is being made to conduct a training course that will aid in the reduction of departmental vehicle accidents and assist officers in presenting an example of true professionalism behind the wheel.

## ***ILEA DRIVING RANGE (EVOC) PROCEDURES, RULES, AND REGULATIONS***

1. All students will conduct themselves in a professional, orderly manner, displaying conduct becoming to law enforcement personnel.
2. NO student is to leave his or her assigned group for any reason without direct authorization from an instructor.
3. Breaks from class will be taken in designated areas only.
4. NO weapons or ammunition will be allowed on the driving range at any time.
5. NO personal items, including books, are permitted in vehicles
6. There will be no smoking or chewing tobacco on the range or in the vehicles by students.
7. There will be NO DRIVING on the range except for scheduled classes or by direct approval of the range coordinator.
8. ALL students will wear safety belts when in the vehicles. Helmets must be worn by students unless otherwise directed by the range coordinator.
9. At no time will a student project hands, arms, or head, or other objects from a moving vehicle.
10. All vehicle's windows should either be completely opened or closed. Windows partially opened will only be permitted when directed by range coordinator.
11. At no time will a student use excessive speed on the driving range.

***Management of Emergency  
Driving Operational Risk***

**INDIANA LAW ENFORCEMENT ACADEMY  
LESSON PLAN**

Course Level:            Basic X   In-Service X   Supervision    Management    Specialized

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Lesson No            Title: Laws and Liabilities-Risk Management            Hrs. Required: 2   of   2

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Scope of Lesson Coverage: The student will understand why discipline is necessary in the driving of an emergency vehicle during an emergency response. The student will understand that due regard must be exercised while driving and which actions may result in liability for themselves and their department.

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Specific Objectives:

1. Given a lecture students will identify what constitutes an emergency.
  2. Given a lecture students will identify the three types of liabilities.
  3. Given a lecture students will identify how an emergency response is legally performed.
  4. Given a lecture students will identify the three defined situations that are considered an emergency in the State of Indiana IC Code Manual.
  5. Given a lecture students will define the phrase "Due Regard" in reference to the officer's operation of an emergency vehicle during an emergency run.
  6. Given a lecture students will identify the three types of driving law enforcement officers perform that pose a liability situation.
  7. Given a lecture student will identify the proper procedures used on an emergency run in various situations.
  8. Given a lecture students will be able to provide the definition of "Emergency" according to Indiana State Courts.
  9. Given a lecture students will be able to provide the definition of "Negligence."
  10. Given a lecture students will be able to provide the definition and interpretation of the 4th Amendment as it relates to emergency vehicle operations.
  11. Given a lecture students will be able to provide the definition and interpretation of the 14th Amendment as it relates to emergency vehicle operations.
  12. Given a lecture students will identify what constitutes policy-created duties.
  13. Given a lecture students will be able to provide the definition for "Risk Management."
  14. Given a lecture students will be able to identify the means for reducing liability during all types of law enforcement driving.
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Training Aids, equipment, etc., required:

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Material for issue: ILEA Driver Training Manual

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References: ILEA Driver Training Manual

Law Enforcement Driver Training Reference Guide, 2000

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Prepared by: Lt. Nick Schiavarelli

Date: 06/17

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ILEA/180



# Emergency Vehicle Operations Laws and Liabilities

## INTRODUCTION

All traffic laws that govern the general public apply with equal force to on-duty law enforcement officers in non-emergency driving. NO state gives its law enforcement officers authority to disregard all traffic laws in performing emergency services.

## CONTENT

Non-emergency driving is all law enforcement driving that does not comply with the provisions of emergency exemption statutes. Typical emergency exemptions statutes have two (2) primary requirements: (1) warning lights and/or siren must be activated; and (2) the officer must be engaged in enforcing the law. If warning devices are not activated, or if the officer is not enforcing the law, the emergency exemption statute does not protect the officer.

Negligence is the failure of duty or obligation, recognized by law, requiring the law enforcement officer to conform his or her conduct to the standard, which a reasonable law enforcement officer would have conformed to under the same or similar circumstances. A failure on the person's part to conform to the standard is a breach of duty.

### 1. CIVIL LAWSUITS MAY ARISE IN ONE OF THE FOLLOWING

- a. Non-emergency mode.
- b. Emergency mode.
- c. Intentional act in pursuit mode.
- d. Agency's failure to provide adequate training.

YOU will be held responsible for YOUR actions

### 2. BASIS FOR LIABILITY

- a. Can be brought in State or Federal court.
- b. Actions: brought in a State court are considered "Tort" violations
- c. Actions brought in a Federal court are considered "Constitutional" violations (Title 42, Section 1983 of US Code)
- d. In either case, plaintiff, MUST establish responsibility on the part of the emergency vehicle operator or the police agency.

### 3. STATE TORT ACTIONS

- a. Typically based on an allegation of negligence.
- b. State tort actions do not necessarily involved violations of Federal Constitutional rights.
- c. Tort-Private or civil wrong against a person for which a court may award money.
- d. Negligence most common allegation.
- e. Plaintiff will try to prove you were responsible for their injury or a survivor of a deceased individual will try to be compensated through damages.

### 4. NEGLIGENCE IN EMERGENCY VEHICLE OPERATIONS

- a. In EVO, negligence generally arises from one of the following:

- (1) Violation of State Statutes
- (2) Violation of Department Policy
- (3) Violation of General Duty to drive with Due Regard

The term "duty" means that there was some degree of real obligation to behave in a particular fashion towards the person(s) who were injured.

### 5. TYPES OF LIABILITY

- a. Direct Liability
- b. Vicarious Liability
- c. Municipal Liability
- d. Definitions

- (1) Direct Liability

- (a) Based on Canton vs. Harris in 1989
- (b) Officer's negligence or intentional wrongdoing directly caused the injuries to the person(s) involved.
- (c) All based on "What is reasonable?"

Reasonable-Definition: 1. able to reason 2. Amendable to reason; just  
3. using or showing sound judgment; sensible 4. A) not extreme, immoderate, or excessive B) not expensive-Synonym. See RATIONAL

## (2) Vicarious Liability

- (a) Someone else is held responsible for the action(s) of another
- (b) A supervisor or another officer cannot, with impunity, allow a subordinate, to whom a duty of supervision is owed, to commit constitutional violations or take part in the unconstitutional behavior either through direct participation or ratification. This includes, but not limited to the following:
  - (i) Supervisors
  - (ii) Senior officers
  - (iii) Training officers
  - (iv) Driving instructors
  - (v) Firearms instructors

## (3) Municipal Liability

- (a) Not the mere employment of an officer will necessitate this liability
- (b) MUST show that a policy of the municipality was the moving force behind the injury by:
  - Show inadequate or lack of training
  - Flawed policies
  - Show no real guidelines

## 6. NEGLIGENCE

- a. Simple - failure to conform your conduct to a reasonable standard
- b. Gross - you "should have" known that an injury was likely to occur
- c. Reckless Behavior - above and beyond "Gross negligence" but not the next level
- d. Willful Misconduct - conscious decision to engage if YOU knew your behavior was wrong but continued anyway
- e. Deliberate Indifference - substantial due process violation
- f. Shock the Conscious - life, liberty, or property has been deprived

## 7. 4<sup>th</sup> AND 14<sup>th</sup> AMENDMENTS

The Fourth Amendment to the United States Constitution prohibits unreasonable searches and seizures. For emergency vehicle operation purposes, only concentrate on claims for unreasonable "seizures." This claim has typically been brought by a "suspect" who has fled law enforcement and suffered an injury.

The Fourteenth Amendment states "No State shall .... deprive any person of life, liberty, or property without due process of the law ....." This claim has typically been brought by innocent third parties that were injured or survivors of killed individuals arising from emergency response or pursuit situations by either a fleeing suspect or law enforcement vehicle(s).

## 8. DUTIES REGARDING EMERGENCY RESPONSE

The concept of protecting oneself by taking appropriate precautionary steps before embarking on a potentially hazardous undertaking is neither novel nor earthshaking, it is a common sense proposition. Most of us would agree that the better we prepare ourselves for a likely adverse eventuality, the better we will be able to deal with it should it occur. In its most basic form, this is an operating definition of the concept known as risk management. The goal of effective risk management is to accurately and prospectively identify potential hazards prior to their occurrence, and to put into place reasonable and cost-effective protective measures which will prevent the hazards from becoming actual occurrences.

a. What requires our officers to drive with due regard for the safety of others on the roadway?

### (1) State Statutes

- (a) Responding to an emergency call
- (b) In the pursuit of an actual or suspected violator of the law
- (c) Responding to, but not returning from, a fire alarm.

### (2) Agency Policy

### (3) Constitutional Provisions

- (a) 4th Amendment
- (b) 14th Amendment.

Authorized driving procedures for person(s) driving an authorized emergency vehicle does not do the following:

- (1) Relieve that person who drives an authorized emergency vehicle from the duty to drive with due regard for the safety of all persons operating on the roadway or
- (2) Protect that person who drives an authorized emergency vehicle from the consequences of that person's reckless disregard for the safety of others.

## 9 WHAT IS AN EMERGENCY

An emergency, by State definition must have one of the following:

- (1) If there is high probability of death or serious bodily injury or
- (2) If there is high probability of significant or substantial property damage

### SUMMARY

State emergency exemption provisions offer authorized emergency vehicles driver's limited exemptions from ordinary traffic laws. To enjoy these exemptions, law enforcement officers engaged in emergency driving must comply with the warning device requirements.

Moreover even when complying with the warning device requirement, law enforcement officers engaged in emergency driving must still exercise due regard for the safety of others. Consequently, law enforcement officers engaged in emergency driving must become familiar with the requirements of their agency's policies regarding emergency calls and pursuits. Significantly, violation of agency policy may be considered evidence of negligence.

## ***Legal Aspects of Law Enforcement Driving***

### **Case One: The Inattentive Traffic Officer.**

CITY OF WAKARUSA v. HOLDEMAN, 582 N.E.2d 802 (Indiana Sup.Ct. 1991)

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*Officer A was checking for invalid registration in an area where he recently cited a number of motorists for invalid registration. As he drove along a city street at 35 mph; Officer A looked in his outside driver's side mirror to check on cars as they passed in the opposite direction. Officer A did not notice that traffic in his travel lane had stopped until it was too late. He hit the rear of the car ahead of him.*

*The driver of the damaged car brought a civil law suit against Officer A and the City that employed him. The law suit alleged negligence - failure to use reasonable care under the circumstances. Under a rule of tort law called vicarious liability, an employer is also liable if an employee is negligent and causes the injury while working within the course and scope of employment. Both the city and Officer A would be liable if Officer A failed to use reasonable care while on patrol.*

*The Supreme Court of Indiana said:*

*"It is undisputed that a person operating a motor vehicle on a public roadway has a duty to operate such vehicle with reasonable care. A question of fact exists as to whether or not Officer A exercised such care under the circumstances."*

*The Indiana Supreme Court rejected Officer A's claim he was immune from a negligence law suit because he was on-duty and engaged in the enforcement of the criminal law at the time of the accident. The Indiana immunity statute is restricted to arrest activities, not general law enforcement activities like traffic patrol. The immunities statute does not prevent liability for "willful and wanton" negligence, or a possible jury verdict in this case.*

## Case Two: The Negligent Transportation Officer

AIKENS v. MORRIS, 145 Ill.2d 273, 583 N.E.2d 487 (1991)

*A city officer in Illinois was transporting a prisoner from a neighboring town to a detention facility in his city. The officer was not in a hurry and was not using warning lights or sirens. The officer's car collided at an intersection with a car being driven by a lady who later filed a negligence law suit.*

*The officer claimed he was protected from civil liability under the terms of the Illinois immunity statute for governmental activity. Transporting a prisoner was an essential part of law enforcement activity and should be covered by governmental immunity, the officer claimed.*

*The Illinois Supreme Court rejected the officer's claim of immunity. The court noted the officer was not in an emergency since he did not activate warning lights or siren. The officer testified he was in "no hurry."*

*The Illinois immunity statute does not protect officers from negligent driving while transporting a prisoner. The statute prevents negligence liability only for conduct in the execution of enforcement of the law, which does not include transporting prisoners.*

### AGENCY POLICY

Many law enforcement agencies have standard policy manuals covering emergency and non-emergency driving. A typical written policy on non-emergency driving may require officers to obey all traffic laws and drive with due care at all times unless otherwise authorized by law or other provisions in the policy.

The written policy of an agency is a statement of rules set by the employer to guide officers in the performance of duty. Sometimes a rule in agency policy incorporates a rule of law. Some policy rules have nothing to do with rules of law. Many agencies have a policy rule prohibiting speeds over 15 mph above the posted speed limit while driving to the scene of a call. Speed exemption statutes prohibit unsafe speeds, but do not specify a maximum speed limit for emergency driving. Driving 16 mph in excess of the speed limit may violate agency policy but is not a violation of state law.

Violation of agency policy can lead to disciplinary action, including job loss. Even if state law is not violated, a violation of agency policy in many agencies is insubordination – failure to obey orders. Officers have been fired for violating policy related to emergency and non-emergency driving. Disciplinary action may be taken for violating agency policy even though the officer was not charged or convicted of violating state or local traffic law.

Even though agency policy is not law, a violation of agency policy may be evidence of negligence in a civil or criminal trial. Agency policy sets a standard of due care which a jury is entitled to consider. An injured party bringing a law suit will argue the officer's violation of agency policy shows a disregard for the safety of the public.

On the other side, the officer may try to minimize a violation of policy by offering evidence that many other officers violated the same policy on a regular basis without suffering any disciplinary action. Essentially, the officer claims the written policy is not followed in the field. That effort is not always successful. Agency written policy is powerful evidence in court if it appears an officer ignored it with disastrous consequences.

### Case Three: Three Fatalities at an Intersection

STATE v. FLAHERTY, 55 N.C. App. 14, 284 S.E.2d 565 (1981)

*A Charlotte N.C. officer responding to an "assist officer" call collided with a car at an intersection, killing three of the four occupants. The officer testified he was going 45 to 50 mph and had a green light as he approached an intersection. Other witnesses estimated his speed at 60 to 70 mph and said the officer had a red light on his travel lane.*

*The posted limit at the intersection was 35 mph. The Charlotte Police Department had a General Order prohibiting speeds more than 10 mph over the limit. The officer testified that officers routinely ignored this 10 mph speed cap when going to assist another officer. North Carolina's emergency exemption statute for speed did not have a maximum speed limit but did require officers to drive with due regard for the safety of others.*

*The officer was convicted of involuntary manslaughter and sentenced to three years in prison. The Court of Appeals reversed the conviction and ordered a new trial because of an error in the injury instructions. To be guilty, the officer's driving must be in reckless disregard of the consequences, a higher standard than simple negligence. At trial after remand, the jury may conclude the officer was guilty of involuntary manslaughter even with a correct instruction on the law.*

*(After remand for a new trial, the officer pled guilty in exchange for a probated sentence instead of imprisonment.)*

Usually agency policy restricts officers in the exercise of authority given by state law. But occasionally agency policy fails to consider the requirements of state law. In many states, emergency warning equipment must be activated to claim the emergency exemption from speed or right-of-way laws. Agency policy that authorizes speeding over the limit without activating required emergency equipment cannot justify a violation of the statute. A policy of responding to a robbery in progress without activating emergency equipment violates traffic laws and may expose the agency and officer to liability.



## Case Four: Silent Run Policy Violates the Law

BROWN v. KREUSER, 38 Colo. App: 554, 560 P.2d.105 (Colo. Ct. App. 1977)

*Officer A was dispatched to a robbery in progress. Although the officer was exceeding the speed limit, he did not activate warning lights or siren. A lady pulled out of a parking lot and made a left turn across the officer's travel lane. The officer collided with the lady, who sued for damages.*

*At trial, the lady claimed she saw Officer A's car but did not realize he was driving so fast since none of his emergency equipment was operating.*

*A departmental policy required officers to drive without activating warning lights or siren in responding to a crime in progress. Officer A tried to get the silent run policy admitted into evidence at his civil liability trial but the trial court refused to allow its admission.*

*On appeal following a jury verdict for the lady, the officer claimed the trial court committed reversible error when it refused to permit the jury to consider the silent run policy. The Colorado Court of Appeals affirmed the trial court's exclusion of the silent run policy and allowed the jury verdict to stand.*

*The court said:*

*“Exclusion of this testimony was not error as such a policy could not supersede either the city traffic ordinance or state statutes. Since (the officer) was not using his lights and siren, ... he was subject to all the same traffic provisions as all other drivers... and his reasons for exceeding the speed limit were immaterial with respect to the issue of negligence.”*

### SUMMARY

All traffic laws that govern the general public apply with equal force to on-duty law enforcement officers in non-emergency driving. NO state gives its law enforcement officers authority to disregard all traffic laws in performing emergency services. Typical emergency exemption statutes have two primary requirements: (1) warning lights and/or a siren must be activated and (2) the officer must be engaged in enforcing the law. If warning devices are not activated, or if the officer is not enforcing the law, the emergency exemption statute does not protect an officer from civil liability.

## Identify statutory law, case law, agency policy, and principles of liability governing emergency driving.

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### Emergency Driving Under State Law

#### INTRODUCTION

All states give officers a limited exemption from certain traffic laws for emergency driving. This exemption recognizes the social importance of rapid response and apprehension of fleeing criminals. Any driving at high-speeds and contrary to normal rules of the road carries a risk of injury to others. That risk of injury is weighed against the need for quick response and arrest of violators. Emergency exemption statutes reflect this balancing of competing social needs: safety on public roadways balanced against protecting against criminals.

#### EMERGENCY EXEMPTION STATUTES

Pursuit of a violator and going to the scene of an emergency are the two categories of emergency driving most common to law enforcement. Important differences exist for each category, but state statutory law usually covers both categories in a single emergency exemption statute. A typical emergency exemption statute is patterned after §11-106 of the Uniform Vehicle Code and has these features:

1. The vehicle must be an authorized emergency vehicle equipped with specified warning lights and siren. Law enforcement vehicles often are given the exclusive right to display colored lights, but many states specify red lights for fire, rescue, ambulance, and law enforcement vehicles.
2. To claim the exemption, the authorized emergency vehicle must be responding to an emergency call or in pursuit of an actual or suspected violator of the law.
3. The exemption may allow the authorized emergency vehicle to park or stand, exceed speed limits, proceed past red traffic signals and stop signs, and disregard rules governing direction of travel or turning.
4. The exemption applies only if required warning devices are being operated. Depending on the state, the required warning devices may be BOTH warning lights and a siren, or warning lights but not a siren, or a siren but not warning lights. In a few states, the speed exemption does not require either warning lights or a siren, but the right-of-way exemption requires activation of both warning lights and a siren.
5. Nearly all emergency exemption statutes provide for a "*duty to drive with due regard for the safety of others,*" and many of the statutes go on to deny protection from the consequences of a reckless disregard for the safety of others. In many states, the statute grants the privilege to disregard speed limits but "*so long as the driver does not endanger life or property,*" and grants the privilege to proceed past red traffic lights and stop signals, "*but only after slowing down as necessary for safe operation.*"

Two conditions found in a typical state emergency exemption statute are critically important for law enforcement drivers:

1. Failure to activate required warning devices - warning lights and/or a siren - often disqualifies an officer from the exemption.
2. Even if required warning devices are activated, driving that disregards a clear danger to the safety of others may subject the officer to liability.

## **WARNING DEVICES**

State emergency exemption statutes differ on the warning devices required during law enforcement emergency driving. Some states, like Alabama and New York, require both warning lights and a siren. Other states, such as Arizona and Connecticut, require activation of a siren but not warning lights. And still other states, such as Illinois and Indiana, require activation of either warning lights or a siren. Finally, a few states, such as North Carolina, require one or both for claiming the right-of-way at intersections but do not require either lights or a siren for the speed limit exemption. A listing of emergency exemption provisions for the 50 states and the District of Columbia appears in **Appendix A**.

For those states requiring some form of warning devices, failure to activate the requisite warning devices may cause the officer to lose the protection of the emergency exemption statute.

## **Case Twelve: Responding to Call Without Lights or Siren**

MATTERA v. AVIS RENT A CAR SYSTEM, INC., 245 A.D.2d 274, 665 N.Y.S.2d 94 (N.Y. App. Div. 1997).

*“Two New York detectives were responding to the scene of a buy-and-bust operation where a suspect was being held. The detective who was driving made a left turn and collided with an oncoming car. The driver of that car sustained personal injuries.*

*Observing that the record showed the detective was not operating lights or a siren at the time of the collision and that his car was unmarked, the-New York appellate court stated:*

*“On these facts, the privilege afforded to operators of authorized emergency vehicles engaged in an emergency operation pursuant to Vehicle and Traffic Law §1104 is inapplicable ...this was not such an emergency operation.”*

*The court found the detective negligent as a matter of law.*

See also *Williams v. Crook*, 741 So.2d 1074 (Ala. 1999) (holding that officer responding to domestic disturbance report loses immunity since he exceeded speed limit without complying with audible and visual signal requirements of state emergency exemption statute)

## **Case Thirteen: Passing Motorist Without Lights Or Siren**

JOHNSON V. GONZALEZ, 223 Ga. App. 646,478 S.E.2d 410 (Ga Ct. App. 1996), cert. denied; 1997 Ga. LEXIS 322 (Ga. 1997).

*While on routine patrol, a county police officer received an urgent "Code2" call to respond to a scene of domestic disturbance. The officer attempted to pass a motorist on the left as the motorist began making a left turn. The officer struck and injured the motorist. The motorist sued the county and the police officer, alleging that the officer was operating his vehicle with reckless disregard for the safety of others at the time of the collision. The Court of Appeals of Georgia departed from earlier appellate decisions which held that an officer's failure to use both lights and sirens when responding to calls did not amount to an act of reckless disregard. The court held:*

*“A jury must decide whether [the officer’s] decision to overtake [the motorist’s] vehicle, without activating his emergency lights or siren, was merely negligent or whether it constituted a reckless disregard for the safety of others.”*

See also *Beatty v. Charles*, 936 S.W.2d 28 (Tex. Ct. App. 1996) (holding that jury must resolve factual dispute over whether officer ran red light without lights and siren while responding to request to assist shot officer). But see *Young v. Woodall*, 343 N.C. 459, 471 S.E.2d 357 (N.C. 1996) (holding evidence that officer exceeded speed limit and failed to activate lights and siren while in pursuit of vehicle with only one working headlight did not amount to gross negligence).

In those states requiring that emergency vehicles use both lights and sirens, courts typically find the use of one without the other does not meet the requirements of the state emergency exemption statute. In the next case, a St. Louis police officer loses the protection of the Missouri emergency vehicle statute, which requires both lights and a siren, when he activates his lights but fails to use his siren during an emergency run.

#### **Case Fourteen: Running Red Light With Lights But No Siren**

**MCGUCKIN v. CITY OF ST. LOUIS**, 910 S.W.2d 842 (Mo. Ct. App. 1995).

*Responding to an emergency call, St. Louis police officer proceeded through an intersection with the intention of making a left turn when he struck a motorist driving through the intersection. The motorist sustained multiple injuries and sued.*

*At trial, the motorist's evidence showed that the officer proceeded through an intersection against a red light with his emergency lights flashing but without any siren sounding. The officer, on the other hand, claimed that he had both lights and sirens activated and that he proceeded through the intersection with a green light. The jury returned a verdict for the motorist, and the St. Louis board of police commissioners appealed.*

*The Missouri Court of Appeals examined the Missouri emergency vehicle statute and found that "an emergency vehicle can proceed past a red stop signal, after slowing as may be necessary to ensure safety; while operating both its flashing lights and its audible signal." The court further stated:*

*"The statute thus places limitation on an officer's ability to operate his vehicle in whatever manner he deems necessary, as it requires he use both light and siren before he can disregard traffic rules that bind all drivers ... Once an officer complies with those two mandates, he brings himself under the protective umbrella of the statute and can then exercise his judgment in responding to the situation as the circumstances may warrant. However, until an officer is in compliance with the statute, he is bound by the same rules of the road as other drivers, and is afforded no special immunity for negligent acts or omissions committed by him."*

*The court held that, in finding for the motorist, the jury believed the evidence showing the officer proceeded through a red traffic signal without the use of his audible signal. Therefore, the officer was not protected by the exemptions of the emergency vehicle statute, and the motorist properly recovered against the board of police commissioners.*

See also *Bradshaw v. City of Metropolis*, 293 Ill. App. 3d 389, 688 N.E.2d 332 (Ill. App. Ct. 1997) (holding that officer responding to 9-1-1 call with lights but no siren may be liable for negligence); *Taylor v. City of Oklahoma City*, 914 P.2d 1073 (Okla. Ct. App. 1995) (holding that officer responding to emergency call with lights but possibly without a siren may be liable for negligence); *Berz v. Ohio Department of Highway Safety*, 66 Ohio Misc.2d 66, 643 N.E.2d 181 (Ohio Ct. CL 1992) (holding officer partially at fault for injuries to motorist struck by patrol car where officer turned on lights but not siren in high-speed response to collision).

States differ in how soon the officer engaged in an emergency run or pursuit needs to begin activating warning devices to be protected by the state emergency exemption statute. In the next case, the Alabama Supreme Court ruled that the exemption statute requiring operation of warning lights and siren also applies during the initial “catch-up” phase of a pursuit.

### **Case Fifteen: Fatality during Catch-Up**

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SMITH v: BRADFORD, 512 Sci.2d 50 (Ala. 19.87).

*An Alabama officer struck and killed a 13-year-old child on a bicycle after the officer turned around and sped up to catch a violator in the opposite travel lane. The officer was not operating warning lights or a siren at the time of the collision.*

*The estate of the deceased child brought a lawsuit against the officer on two counts: negligence and wantonness.*

*At trial, the officer was allowed to prove that he was trained by his agency to delay activating warning lights and a siren until the officer could read the violator's license plate. This “catch-up” policy was intended to reduce the likelihood a violator would try to flee upon seeing distant warning lights. The jury returned a verdict for the officer on both counts.*

*The child's estate appealed to the Alabama Supreme Court, Claiming that the delay in activating the warning devices could not be justified by training or policy of the law enforcement agency.*

*The court agreed that Alabama statutory law on emergency driving was violated by not activating required audible and visual signals. The exemption from normal speed limits applies only if both warning lights and an audible signal are being used. Not activating this equipment could constitute wantonness. The child's estate argued that evidence of the catch-up policy was irrelevant to wantonness. The court agreed and ruled that the admission of the evidence was prejudicial:*

*"We fail to see how the evidence of 'catch-up' training or instruction could be at all relevant to this count of wantonness. The prejudice which can result from the admission of such evidence is obvious."*

*The court reversed the judgment of the trial court and remanded.*

Similarly, an Ohio court held that an officer's "eleventh hour" activation of his cruiser's lights and siren was too late to be of any use in warning other motorists.

### **Case Sixteen: Eleventh Hour Activation of Lights and Siren**

MCGUIRE v. LOVELL, 128 Ohio App. 3d 473, 715 N.E.2d 587 (Ohio Ct. App. 1998), *discretionary appeal allowed*, 82 Ohio St. 3d 1482, 696 N.E.2d 1088 (Ohio 1998), appeal dismissed, 85 Ohio St. 3d 1216, 709 N.E.2d 841 (Ohio 1999).

While off duty and on the way to work, an Ohio officer overheard a dispatch on his police radio concerning a burglary in progress. The officer called dispatch and offered assistance. Even though dispatch did not answer, the officer considered himself on duty and responding to an emergency call

The officer proceeded to the scene of the burglary in progress. A few blocks before an intersection, the officer accelerated in speed and turned on his flashing lights and siren. Upon entering the intersection against a red light, the officer collided with a pickup truck. A passenger in the pickup truck brought a suit in negligence.

The Ohio Court of Appeals held that a jury must decide whether the officer was on an emergency call or not since there is a question as to whether the officer was actually called to duty. However, even if it is determined that the officer was engaged in an emergency call, there is a question of fact as to whether the officer's conduct in response to the emergency call was wanton or willful conduct. The court stated:

*“Here, when viewing the evidence most strongly in favor of [the plaintiff], a trier of fact could conclude that [the officer’s] eleventh hour activation of his emergency lights and siren, just prior to entering the intersection, was too late to be of any use to [the plaintiff] or the other truck occupants. Though it appears undisputed that [the officer] did activate his warning devices; the circumstances under which they were employed could lead to different conclusion.”*

However, some states such as Ohio do not always require activation of warning devices for the run or pursuit to be deemed an emergency. See *Moore v. City of Columbus*, 98 Ohio App. 3d 701, 649 NE.2a 850 (Ohio Ct. App. 1994), *discretionary appeal not allowed*, 72 Ohio St. 3d 1422, 648 N.R2d 514 (Ohio 1995) and *Hall-Pearson v. City of South Euclid*, 1998 Ohio App. LEXIS4796 (Ohio Ct. App. 1998). *Moore* is discussed in Objective 1.1. Moreover several states including Michigan and Texas have formally recognized the necessity for a silent run in certain emergency situations. For example the Michigan emergency exemption statute specifically allows an officer to retain the emergency exemption without sounding an audible signal “if the police vehicle is engaged in an emergency run in which silence is required.” Mich. Comp. Laws §257.603(5).



## **DUE REGARD/RECKLESS DISREGARD STANDARD**

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The state emergency exemption statutes impose a duty to drive with due regard for the safety of others and typically do not protect emergency drivers from the consequences of a reckless disregard of the safety of others. Even if warning lights and siren are operating, an officer cannot drive in a manner that unduly risks death or serious injury for others. Many factors directly influence the risk created by emergency driving, and these factors include:

1. Speed of vehicles
2. Traffic density
3. Weather conditions
4. Obstructions to vision
5. Road surface and design
6. Frequency of signaled street and highway intersections
7. Condition of emergency vehicle's brakes, steering, and suspension
8. Training and experience of the emergency driver

A pursuit that starts under reasonably safe conditions can become willfully reckless if speeds are too high, traffic density increases, major intersections are approached, and rain or snow begins to fall. A change in any one or more of these variables may change the reasonableness of the pursuit.

Even if lights and sirens are activated, excessive speed may create an undue risk of injury to the public, as the following two cases demonstrate.

### **Case Seventeen: Excessive Speed in Swerving to Exit Ramp •**

**TUCKER v. TOWN OF BRANFORD, 1998 Conn. Super. LEXIS 1139 (Conn. Super. Ct. 1998):**

*An officer joined the pursuit of a fleeing stolen car and soon became the primary chase vehicle.*

*The dispatcher informed the chase vehicles that a weapon was involved and that the car was wanted for a shooting. Going eastbound on an interstate, the pursuit reached speeds of approximately 80 mph in the vicinity of Exit 58,*

*A motorist traveling eastbound in the right lane of the interstate saw the flashing lights of the police cars in her rearview mirror. Aware of her obligation to move as close as possible to the right-hand edge of the roadway, the motorist decided to enter Exit.58.*

*At this moment, the fleeing car was traveling in the left lane of the interstate in front of the officer. The fleeing car suddenly turned right in front of a tractor trailer to attempt to exit at Exit 58. The fleeing car struck the motorist in the gore area of Exit 58 before she could stop or exit. The motorist's vehicle spun out of control down the exit ramp and struck the metal guard of the breakdown lane.*

*Seconds later, the officer attempted to turn across the right lane of the interstate to pursue the fleeing car into Exit 58. Confronted with the dust and debris from the collision, the officer lost control of his vehicle and skidded into the breakdown lane; striking the motorist's vehicle. The impact of this collision caused the motorist's car to roll over an embankment, coming to rest upside down on its roof in an object of water. The motorist was rescued and subsequently brought suit against the officer and his employing town.*

*In his defense, the officer claimed that he was exempted from the motor vehicle statutes and regulations cited by the motorist because at the time of the collision he was operating an emergency vehicle with its*



lights and siren activated in compliance with the state emergency vehicle statute. In ruling for the motorist, the Superior Court of Connecticut stated:

*“... [the officer] was traveling at approximately 80 miles per hour, entering a ramp, which was limited to a 25 mile per hour entry speed ... [The officer] was authorized to exceed the speed limit imposed by law only so long as he did not endanger life or property before so doing ...Due regard for the safety of all persons was required of him by [the state emergency exemption statute]. The officer was negligent in that he failed to keep and maintain a proper lookout with regard to his speed and with regard to the weather, traffic and road conditions there obtaining. The officer was also negligent in that his speed exceeded the speed which a reasonably prudent police officer engaged in a high speed chase would have maintained in making such a sudden turn across traffic.”*

See also *City of Worthington v. O'Dea*, 115 Ohio App. 375, 185 N.E.2d 323 (Ohio Ct. App. 1962) (holding officer's speed of 65 mph in approaching flashing yellow light to be excessive and beyond reasonable control).

### **Case Eighteen: Excessive Speed In Responding To Alarm**

**KAPLAN v. LLOYDS INS. CO.**, 479 So.2d 961 (La. Ct. App. 1985).

*A deputy received a radio call informing him that a silent alarm had gone off at a local nightclub. Another sheriff's department unit had already been dispatched as the primary unit, and the deputy was to be the backup. The dispatcher ordered him to proceed to the nightclub under "Code 2" which required the use of flashing lights with only intermittent use of the siren.*

*Traveling at a high rate of speed, the deputy spotted plaintiff's car stopped in the turn lane across an approaching interstation. When plaintiff began to turn out of the center line, the deputy applied his brakes but the speed of his patrol car prevented him from braking in time. The plaintiff sued the deputy, the sheriff's department, and the department's insurer.*

*At trial, the deputy testified that he was traveling between 50 and 60 mph. However, a credible eyewitness testified that the deputy was traveling in excess of 75 mph right before the collision. The posted speed limit on that street where the collision occurred is 40 mph, and the sheriff's department's own policy does not allow the operation of a patrol car at more than 20 mph above the posted speed limit.*

*The Louisiana Court of Appeals held that the deputy breached his duty to drive his patrol car with due regard for the safety of others by "driving at an excessive rate of speed even for an emergency vehicle responding to an emergency call."*

Even in criminal cases where the state emergency exemption statute is not specifically at issue, excessive speed during a fatal pursuit may be a factor in a jury's decision to convict a pursuing officer for reckless homicide.

### **Case Nineteen: Reckless Homicide Conviction for Excessive Speed**

COMMONWEALTH OF KENTUCKY v: ALEXANDER; 5 S.W.3d 104 (Ky. 1999),

*While responding to an emergency call, a county deputy activated his cruiser's lights and siren and traveled at a high rate of speed. A motorist failed to yield the right-of-way to the deputy by not stopping at a stop sign before turning left onto the road on which the deputy was traveling. The cruiser and the motorist's vehicle collided, and the motorist was killed.*

*At the time of the collision, the dispatcher and the county police department had canceled the emergency call, but it was disputed whether the deputy heard the radio transmissions of the cancellation.*

*At trial, a jury convicted the deputy of reckless homicide. An appellate court reversed, but the Supreme Court of Kentucky reinstated the judgment of the trial court.*

*The court reviewed the evidence, in particular, reports and testimony from members of the county accident reconstruction unit (ARU) who investigated the collision:*

*"After reviewing the videotape from [the deputy's] cruiser, which had recorded the events leading up to the accident, the ARU concluded that [the deputy] had been traveling between 95 and 100 miles per hour at the time he approached the intersection ...Therefore, [the deputy] caused the collision due to his excessive speed."*

*The court also recounted the testimony of several ARU members who stated their belief that the deputy "was at fault due to his excessive speed in an urban area." The court disagreed with the appellate court and held that this opinion did not go to the ultimate issue of whether the deputy was guilty of reckless homicide and therefore the opinion did not invade the province of the jury.*

Failure to slow down, particularly before proceeding against a red light or stop sign as cautioned by many state emergency exemption statutes, may also create undue risk of injury to others.

### **Case Twenty: Failure to Slow in Approaching Red Light**

GORDON v. COUNTY OF NASSAU, 689 N.Y.S.2d 192(N.Y. App. Div. 1999).

*A New York officer heard a broadcast over the police radio that a fellow officer and an ambulance had been dispatched to a medical emergency at a nearby church. Since he was in the vicinity, the officer proceeded towards the scene at a high rate of speed and collided with the plaintiff's car. Plaintiff suffered personal injuries and sued.*

*The New York appellate court held that, in light of the facts that the officer "did not engage his emergency siren before colliding with plaintiff's car, and although he was approaching a red light he did not attempt to decelerate...a rational juror could conclude that the officer acted with reckless disregard for the safety of others."*

See also *Andrews v. Jitney Jungle Stores of America, Inc.* 537 So.2d 447 (Miss. 1989) (holding that officer had duty to slow down as necessary for safety upon approaching red light at intersection).

Buildings, trees, signs, or hills may prevent motorists from seeing an approaching emergency vehicle. No matter how many flashing lights are activated, a blind intersection is dangerous. Large buildings or other obstructions can also make a siren difficult to hear. Emergency lights and sirens are much less effective as a warning to others when used in an urban setting or on roadways with hills and curves that could block views and muffle sounds.

### **Case Twenty-One: Obstructed Vision at an Intersection**

HORN v. CITY OF LAFAYETTE, 578 So.2d 232 (La. Ct. App. 3d Cir. 1991), *writ of error denied*, 584 So.2d 1165, 1167 (La, 1991).

*A Louisiana officer on an emergency call was operating warning lights and a siren as he approached an intersection controlled by a traffic light. The traffic light was yellow as the officer approached but turned to red before the officer entered the intersection.*

*A motorist on the intersecting street with the green light proceeded into the intersection and collided with the officer*

*A tall building on a corner of the intersection obstructed the vision of both the officer and the motorist, "The motorist with the green light could not see or hear the approaching police car with its flashing lights and siren. The officer did not see the motorist until just before impact.*

*The Louisiana Court of Appeals ruled the officer was negligent in proceeding through the intersection without being able to see whether or not cars were approaching. The officer's failure to see the motorist before entering against a red light was the cause of the collision.*

*The court observed:*

*"[The officer] approached a blind corner on a red light and failed to drive with due regard for the safety of others... [The officer] should have proceeded with extreme caution due to the high degree of risk created by entering an intersection against a red light."*

## Case Twenty-Two: Obstructed Vision around a Curve

BUTCHER v. CITY OF MONROE, 737 So.2d 189 (La. Ct. App. 2d. Cir. 1999), writ of error denied, 1999 La. LEXIS 2714 (La. 1999)

*While responding to an emergency dispatch call for all units for a burglary in progress, an officer was rounding a curve at over 60 miles per hour when he struck a cyclist crossing the street.*

*At the time of the collision, the officer had activated the blue strobe light on his dashboard and was manually blinking his headlights. The cyclist suffered extensive injuries and sued the city and the officer.*

*The Louisiana Court of Appeals was less concerned with the fact that the patrol car was not equipped with overhead lights and did not have the siren activated than with the officer's failure to reduce his rate of speed until he could see that his path was clear:*

*“When responding to a burglary in progress, both speed and silence are important as a police officer approaches the scene. Therefore, a police officer should be ever alert and observant to insure that his way is clear. Responding to an emergency call does not relieve a police officer of his duty to drive with due regard for the safety of others.”*

*The court ruled that the officer “breached the duty to [the cyclist] to drive with due regard for the safety of others by driving at an excessive speed around a curve without determining that his path was clear.”*

See also *Wright v. City of Knoxville*, 898 S.W.2d 177 (Tenn. 1995) (holding that officer's diagonal turn at red light at congested intersection made it difficult for other motorists to see her approaching police car despite her use of lights and sirens and her moderate rate of speed).

Most emergency exemption statutes allow officers a limited right to disregard certain traffic laws bearing on speed limits, parking, and direction of travel and turn lanes. But does the typical state emergency exemption also allow an officer to pass where passing is otherwise prohibited? The next case answers that question.

## Case Twenty-Three: Passing in a No-Passing Zone

PHILLIPS v. COMMONWEALTH OF VIRGINIA, 25 Va. App. 144, 487 S.E.2d 235 (Va. Ct. App. 1997)

While on duty, an officer observed a vehicle whose driver he suspected was driving with a suspended license. The officer confirmed his suspicion with the dispatcher and, after following the vehicle for some distance, the officer activated his emergency equipment.

As the officer passed a tractor-trailer that was between him and the suspect vehicle, he noticed a car approaching in the oncoming lane. The driver of that oncoming car testified that the police car missed hitting him by a foot or two.

The trial court convicted the officer of reckless driving. The officer appealed, claiming that the trial court erred in not applying the higher standard of gross negligence applicable to drivers of authorized emergency vehicles under the state emergency exemption statute.

The Virginia Court of Appeals disagreed with the officer and stated:

“The conduct at issue, passing on a double yellow line, is not exempted behavior. Thus, the officer is subject to criminal prosecution as would be any other citizen ...Further, no heightened standard of care is merited in a situation where no exemption applies.”

See also *State v. Simpson*, 11 Kan. App. 2d 666, 732 P.2d 788 (Kan. Ct. App. 1987) (holding officer not entitled to exemptions and upholding conviction for reckless driving and passing in no-passing zone during pursuit of speeder).

## ***AGENCY POLICIES REGARDING EMERGENCY DRIVING***

Many law enforcement agencies have standard policy manuals covering emergency and non-emergency driving. The written policy of an agency is a statement of rules set by the employer to guide officers in the performance of duty. Sometimes a rule in agency policy incorporates a rule of law. Some policy rules have nothing to do with rules of law. Many agencies have a policy rule prohibiting speeds over 15 mph above the posted speed limit while driving to the scene of a call.

Speed exemption statutes prohibit unsafe speeds, but do not always specify a maximum speed limit for emergency driving. Therefore, driving 16 mph in excess of the speed limit may violate agency policy but may not violate state law.

Violation of agency policy can lead to disciplinary action, including job loss. Even if state law is not violated, a violation of agency policy in many agencies is insubordination - failure to obey orders. Officers have been fired for violating policy related to emergency and non-emergency driving. Disciplinary action may be taken for violating agency policy even though the officer was not charged or convicted of violating state or local traffic law.

Even though agency policy is not law, a violation of agency policy may be evidence of negligence in a civil or criminal trial. Agency policy sets a standard of due care which a jury is entitled to consider. An injured party bringing a lawsuit will argue the officer's violation of agency policy shows a disregard for the safety of the public. See *City of Pharr v. Ruiz*, 944 S.W.2d 709 (Tex. Ct. App. 1997) (evidence that police officers failed to adhere to department pursuit policy countered officers' evidence of good faith).

On the other side, the officer may try to minimize a violation of policy by offering evidence that many other officers violated the same policy on a regular basis without suffering any disciplinary action. Essentially, the officer claims the written policy is not followed in the field. That effort is not always successful. As the following case demonstrates, agency written policy is powerful evidence in court if it appears an officer ignored it with disastrous consequences.

### **Case Twenty-Four: Agency Speed Cap Policy Violated In Fatal Collision**

STATE v. FLAHERTY, 55 N.C. App. 14, 284 S.E.2d 565 (N.C. Ct. App. 1981).

*A Charlotte, N.C., officer responding to an "assist officer" call collided with a car at an intersection, killing three of the four occupants. The officer testified he was going 45 to 50 mph and had a green light as he approached an intersection. Other witnesses' estimated his speed at 60 to 70 mph and said the officer had a red light on his travel lane.*

*The posted speed limit at the intersection was 35 mph. The Charlotte Police Department had a General Order prohibiting speeds more than 10 mph over the limit. The officer testified that officers routinely ignored this 10 mph speed cap when going to assist another officer. North Carolina's emergency exemption statute for speed did not have a maximum speed limit but did require officers to drive with due regard for the safety of others.*

*The officer was convicted of involuntary manslaughter and sentenced to three years in prison. The North Carolina Court of Appeals reversed the conviction and ordered a new trial because of an error in jury instructions. To be guilty, the officer's driving must be in reckless disregard of the consequences, a higher standard than simple negligence. At trial after remand, the jury may conclude the officer was guilty of involuntary manslaughter even with a correct instruction on the law.*

*(After remand for a new trial, the officer pled guilty in exchange for a probated sentence instead of imprisonment.)*

Usually agency policy restricts officers in the exercise of authority given by state law. But occasionally agency policy fails to consider the requirements of state law. In many states, emergency warning equipment must be activated to claim the emergency exemption from speed or right-of-way laws. Agency policy that authorizes speeding over the limit without activating required emergency equipment cannot justify a violation of the statute. See *Smith v. Bradford*, 512 Sp.2d 50 (Ala. 1987) discussed earlier and *Brown v. Kreuser*, 38 Colo. App. 554, 560 P.2d 105 (Co. Ct. App. 1977) (holding that trial court did not err in excluding evidence of departmental silent run policy that required officers to respond to crimes in progress without activating warning lights or siren).

## ***COLLISIONS BETWEEN FLEEING SUSPECTS AND INNOCENT BYSTANDERS***

Courts increasingly are finding pursuing officers civilly liable for injuries suffered by a member of the public who is struck by the fleeing suspect in these cases, courts hold that the officer's decision to continue a pursuit under dangerous conditions is negligence. A negligent failure to terminate a pursuit has been deemed by the court to be a joint cause of the collision between the fleeing suspect and the innocent bystander.

### **Case Twenty-Five: Liability For Suspect's Collision With Innocent Bystanders**

DAY v. STATE OF UTAH BY AND THROUGH UTAH DEPT OF PUBLIC SAFETY, 1999 Utah 46, 980 P.2d 1171 (Utah 1999);

*While monitoring traffic on an interstate, a Utah Highway Patrol (UHP) officer clocked a passing motorist at 10 mph over the speed limit. Intending to stop the motorist, the UHP drove up behind the vehicle. The motorist increased his speed and exited the interstate, ignored a stop sign and turned onto a heavily traveled two-lane road, and proceeded through several towns at speeds up to 120 mph. The UHP officer and other officers followed in close pursuit.*

*At one point, the fleeing motorist drove onto a freeway exit ramp and collided with a semi-trailer truck. The fleeing motorist's vehicle spun 240 degrees and temporarily came to a stop. Close behind, the UHP officer also stopped but did not draw his gun or otherwise disable the fleeing motorist's vehicle. The UHP officer did get close enough to read the vehicle's license plate number.*

*The fleeing motorist eluded the UHP officer and again entered the freeway traveling at speeds in excess of 100 mph. After entering an off-ramp at high speed, the fleeing motorist ran a red light and struck another vehicle. The driver of that vehicle died and his wife sustained severe injuries. The wife sued the Utah Department of Public Safety, the UHF, the UHP officer, several other law enforcement officers, and several cities for wrongful death.*

*The trial court granted summary judgment against the wife on the ground that her claims for severe personal injuries and the death of her husband were barred by a now repealed provision of the Utah Governmental immunity Act. The Utah Court of Appeals affirmed but the Utah Supreme Court reversed and remanded. For the first time, the Utah Supreme Court recognized a cause of action for negligent pursuit where the pursued vehicle strikes and injures an innocent third party. The court first stated:*

*“Although law enforcement officers have a general duty to apprehend those who break the law, that duty is not absolute, especially where the violation is only a misdemeanor or an infraction—such as driving ten miles per hour over the speed limit—and the attempt to ‘apprehend the person creates a serious risk of death or injury to third persons or the fugitive.”*



*The court went on to state:*

*“After initially clocking [the fleeing motorist] at ten miles per hour above the speed limit, [the UHP officer] commenced pursuit and also inquired over the radio whether [the] vehicle was stolen. The dispatcher reported that there was no indication it was stolen, yet [the UHP officer] continued the pursuit at speeds on and off the freeway in urban areas up to 120 miles per hour. The fact finder on remand will have to determine whether it was or should have been reasonably foreseeable to [the UHP officer] that the high-speed pursuit thorough highly populated areas would endanger the lives of others on the road and whether, if he had terminated the pursuit, [the fleeing motorist] would likely have substantially reduced his speed and terminated his otherwise reckless driving. [The UHP officer] had a statutory duty to use care for the safety of other persons on the road ... Whether he failed to comply with the statute and breached his duty is a question for the jury...”*

In *Day*, the Utah Supreme Court emphasized that its decision should not be read to suggest that police officers are never justified in engaging in high-speed pursuits. Rather, the court cautioned that pursuing officers must always weigh the need to apprehend a suspect against the risks that a high-speed pursuit poses to innocent third parties

### **Case Twenty-Six: Liability For Suspect's Collision With. Innocent Bystanders**

HAYNES v. HAMILTON COUNTY, 883 S.W.2d 606 (Tenn. 1994).

*At 7 p.m. on a highway fronting a commercial strip, a Tennessee officer pulled in-behind a Corvette with no taillights. The officer watched the Corvette accelerate to 55 mph in a 45 mph zone as it passed a car. When the officer activated his blue lights and siren, the Corvette increased its speed, reaching 100 mph or more. The pursuing officer and the fleeing suspect passed a number of cars, oncoming and in the same travel lane.*

*The officer slowed when they encountered heavy traffic about three miles into the pursuit. At that point, the officer saw a burst of flames ahead of him. The Corvette had crossed the center line and struck a car head-on. Three teenagers in an oncoming car were killed. The trial court dismissed a law suit filed by the estates of the victims against the Tennessee officer on a claim the officer was negligent in continuing a pursuit that a reasonably careful officer would have terminated.*

*On appeal, the Supreme Court of Tennessee reversed the trial court and remanded the case for retrial. For the first time, Tennessee recognized the possibility that a Tennessee officer might be liable, along with the fleeing suspect, far negligence that causes injury to a third person who collides with a fleeing suspect: The court stated:*

*“Accordingly, we conclude that an officer’s decision to commence or continue a high-speed chase is encompassed within the statutory term “conduct” and may form the basis of liability in an action brought by a third party who is injured by the fleeing suspect, if the officer’s decision was unreasonable.”*

In *Haynes*, the Supreme Court of Tennessee discussed the factors an officer should consider in deciding to start and stop a pursuit. These factors include:

1. speed
2. area of the pursuit
3. weather and road conditions
4. vehicular and pedestrian traffic
5. alternative methods of apprehension
6. danger posed to the public by the suspect being pursued
7. applicable police regulations



A decision to continue a high-speed pursuit can be negligence like a failure to brake or careless steering. A decision to continue a pursuit is negligent if a reasonably careful officer would not do so under like circumstances. Unusual circumstances may justify a high-speed pursuit at great risk to the public but, as the courts in *Day* and *Haynes* and other similar cases recognize, the need to arrest that violator must be sufficient to justify the danger to the public.

With *Day* and *Haynes*, Utah and Tennessee join the growing ranks of states that recognize a claim against a police officer for the injuries sustained by innocent bystanders in collisions with pursued vehicles. Courts in the following jurisdictions have recognized a cause of action for negligent conduct of a high-speed chase where the pursued vehicle strikes and injures an innocent third party: Alabama, Arizona, Arkansas, Connecticut, District of Columbia, Florida, Michigan, Mississippi, Nebraska, Oregon, Pennsylvania, Tennessee, Texas, Utah, and Washington. A number of other jurisdictions also recognize such a claim but allow recovery only if the officer is grossly negligent or reckless: Colorado, Georgia (by statute), Illinois, Iowa, Maryland, New York, North Carolina, and West Virginia. Several states that have addressed the issue but have yet to recognize liability for such a claim include: Kansas, Kentucky, Minnesota, Missouri, New Jersey, Ohio, Oklahoma, Wisconsin; and Wyoming. For a listing of jurisdictions along with citations to cases or statutes, see **Appendix B**.

In those states which require a showing of gross negligence, a high-speed pursuit ending in a fatal crash may not create liability.

### **Case Twenty-Seven: No Reckless Disregard In Pursuit Fatal To Bystanders**

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BULLINS v. SCHMIDT, 322 N.C. 580, 369 S.E.2d 60i (1988).

A pursuit started in Greensboro, NC, early in the morning when a car weaving in the travel lane refused to stop for blue lights and siren. The fleeing suspect continued on for eighteen miles at speeds up to 100 mph, forcing several cars off the two lane rural road north of the city. Traffic was light and the road surface dry.

Two officers continued the pursuit at a distance of about 100 yards behind the suspect's car. By radio, a supervisor authorized continuing the chase.

The suspect pulled into the opposing travel lane to pass a car and collided with an oncoming vehicle, killing its driver. At the time, the suspect was driving with headlights off.

The Supreme Court of North Carolina reversed a jury verdict for the driver of the oncoming car and ruled that the pursuing officers were not negligent.

First, the court concluded the appropriate standard for liability if a suspect collides with an innocent bystander is gross negligence or reckless disregard of the safety of others, not simply negligence, the failure to use due care. The emergency exemption statute expresses a policy of permitting pursuits except those that show a reckless disregard of the safety of others. A collision between a suspect and an innocent bystander is not a failure by the officer to control the officer's vehicle.

Second, the officers did not violate any of the rules of the road in this pursuit. The suspect was unknown to the officers and acting in a manner consistent with drunk driving, a serious threat to public safety requiring an immediate arrest. Although the pursuit was conducted at high speeds over a long distance; traffic was light over the rural road early in the morning. The officers continually operated their emergency equipment and kept their vehicles under control at all times. They held that there was no evidence of negligence, let alone gross negligence.

Central to the decision to terminate a pursuit is a balancing process. *Given all the prevailing conditions - speed, traffic density, weather, intersections, etc. - how likely is it that an innocent third person will be injured?* That likelihood must be weighed against the need to protect the public by making an immediate arrest of the violator. As speed, traffic density, and intersections increase, the danger to innocent bystanders increases. As the seriousness of the crimes-committed by the violator increases, the need to protect the public by making an immediate arrest also increases. That decision may be difficult for any officer.

Significantly, even where an officer terminates a pursuit, the officer may still be liable for injuries to third parties in collisions with the fleeing suspect that occur shortly after termination of the pursuit. See *Creamer v. Sampson*, 700 So.2d 711 (Fla. Ct. App. 1997) (holding that fatal collision between fleeing suspect and innocent motorist that occurred 45 seconds after pursuing officer terminated pursuit of car displaying improper tag have been proximately caused by officer's negligence conducting pursuit for minor infraction at high speed over crowded city streets).

In addition to filing claims under state law, third parties injured in collisions with fleeing vehicles sometimes bring suit against the pursuing officers and their agencies under federal law as well. A very different and much higher standard applies in these federal cases.

### **DUTY TO OCCUPANTS OF FLEEING CAR**

Although courts increasingly are finding pursuing officers civilly liable for injuries suffered by an innocent third party who is struck by the *fleeing suspect*, courts remain less willing to find pursuing officers liable for injuries sustained by the fleeing suspect where there is no contact between the police car and the fleeing vehicle. See *Tyree v. City of Pittsburgh*, 669 A.2d 487 (Pa: Commw. Ct. 1995) (holding that pursuing officer owed no duty to fleeing suspect who ran red light and drove at excessive speed before fatally crashing into utility pole); *Estate of Day by Strosin v. Willis*, 897 P.2d 78 (Ala. 1995) (holding that pursuing officer owed no duty to fleeing suspect wanted for assault and battery and stop sign violation where suspect ran off road and fatally crashed after officer terminated pursuit). See also *Vince v. City of Canton*, 1998 Ohio App. LEXIS 1989 (Ohio- Ct. App. 1998) (holding that, while duty to refrain from operating police car in willful and wanton manner extends to persons being pursued, pursuit of motorcycle which ended with motorcyclist fatally crashing was not willful or wanton). For discussion of cases involving collisions between police cars and fleeing vehicles, see Objective 1.4 which addresses roadblocks and ramming.

However, courts are less united on the issue of whether officers owe a duty to passengers in fleeing vehicles injured in collision with structures or other vehicles during high-speed pursuits and, if so, what standard applies: Some courts hold a pursuing officer liable for death or injury to passengers of fleeing cars only where gross negligence or wanton and willful misconduct is shown. See *Parish v. Hill*, 350 N.C. 231, 513 S.E.2d 547 (N.C. 1999); *Jackson v. Poland Township*, 1999 Ohio App. LEXIS 4703 (Ohio Ct. App. 1999); *Urban v. Village of Lincolnshire*, 272 Ill. App.3d 1087, 651 N.E.2d 683 (Ill. App. Ct. 1995), appeal denied, 163 Ill.2d 591, 657 N.E.2d 641 (Ill. 1995); *Jones v. Ahlberg*, 489 N.W.2d 576 (N.D. 1992).

Other courts hold that the duty of pursuing officers to drive with due regard to "all persons" is owed to passengers of fleeing vehicles as well. See *City of Lancaster v. Chambers*, 883 S.W.2d 6SO (Tex. 1994). And other courts hold that police owe no duty to a voluntary passenger in a fleeing car. See *In Re Estate of Henderson v. City of Detroit*, 225 Mich. App. 14, 571 N. W.2d 34 (Mich. Ct. App. 1997), application granted, 458 Mich. 861, 587 N.W.2d 637 (Mich. 1998).

## **AGENCY PURSUIT POLICIES**

Many police agencies have recognized the high risk of harm to the public posed by high-speed chases consequently have adopted specific policies regarding police pursuits. As the next case demonstrates, violation of an agency pursuit policy may provide evidence of a negligent pursuit

### **Case Twenty Eight: Violation of Hot Pursuit Policy Evidence of Negligence**

ESTATE OF ATEN v. CITY OF TUCSON; 169 Ariz. 147, S17 P.2d 951 (Ariz. Ct App. 1991).

*For several miles and on several streets, two police cars engaged in a high-speed chase of a reckless driver suspected in a hit and-run collision earlier. At some point during the chase, a police helicopter arrived at the scene. After running a red light, the pursued vehicle collided with another vehicle and killed the driver*

*The estate of the decedent filed a wrongful death action against the city, alleging that the police failed to comply with department procedures regarding hot pursuits. The trial court granted summary judgment to the city, but the Arizona Court of Appeals reversed.*

*The Arizona Court of Appeals held that there was a question of material fact on the issue of whether the police pursuit of the fleeing vehicle was conducted in a negligent manner. Among the items of evidence offered by decedent's estate that precluded summary judgment was evidence that the officers violated specific departmental policy in continuing pursuit after the arrival of the helicopter.*

*The section on air support unit assistance in the city department procedures manual section on hot pursuits provided that, once ground units are advised that the air support unit has visual contact with the suspect vehicle, then the air support unit will coordinate the remainder of the pursuit and pursuing ground units are to immediately slow down and respond to the directions of the air support unit.*

See also *D'Alessandro v. Westhall*, 972 F. Supp. 965 (W.D. N.C. 1997) (holding that pursuing officers' admitted violation of departmental rules regarding pursuits may be evidence of negligence or even gross negligence). However, other courts are more reluctant to consider an officer's violation of agency pursuit policy as evidence of negligence: See *Morton v. City of Chicago*, 286 Ill. App.3d 444, 676 N.E.2d 985 (Ill. App. Ct. 1997), appeal denied, 173 Ill.2d 527, 684 N.E.2d 1336 (Ill. 1997) (holding that violation of internal guidelines does not impose a legal duty, let alone constitute evidence of negligence).

Several states, including California, Utah, and Wisconsin have a statutorily imposed requirement that agencies adopt pursuit policies. California Vehicle Code §17004.7, for example, conditions governmental immunity on an agency's adoption of a written pursuit policy and provides minimum standards for such pursuit policies.

In cases involving police pursuits, California courts closely examine agency pursuit policies to determine whether they adhere to the statutory requirements of California Vehicle Code §17004.7(c). See *McGee v. City of Laguna Beach*, 56 Cal. App. 4th 537, 65 Cal. Rptr. 2d 506 (Cal. Ct. App. 1997), review denied by 1997 Cal. LEXIS 7612 (Cal. 1997) (holding that pursuit policy complied with minimum standards of statute so officer was immunized from liability for striking motorist and leaving young boy a quadriplegic); *Payne v. City of Perris*, 12 Cal. App. 4th 1738, 16 Cal. Rptr. 2d 143 (Cal. Ct. App. 1993), review denied by; (Apr. 29, 1993) (holding that pursuit policy failed to provide detailed objective guidelines so officer was not immunized from liability for death of third party killed by fleeing suspect); *Berman v. City of Daly City*, 21 Cal. App. 4th 276, 26 Cal. Rptr. 2d 493 (Cal. Ct. App. 1993) (holding that pursuit policy was deficient in giving nearly complete discretion to officers to initiate and terminate high-speed pursuit and therefore could not invoke governmental immunity).

## SUMMARY

State emergency exemption provisions offer authorized emergency vehicles limited exemptions from ordinary traffic laws. To enjoy these exemptions, law enforcement officers engaged in emergency driving must comply with the warning device requirements of these provisions. Moreover, even when complying with the warning device requirements, law enforcement officers engaged in emergency driving must still exercise due regard for the safety of others or risk liability. Under the law of many states, law enforcement officers engaged in emergency driving are not only potentially liable to a third party injured or killed in collisions with police cruisers but also to third parties injured or killed in collisions with fleeing suspects. Consequently, law enforcement officers engaged in emergency driving must become familiar with the requirements of their state emergency exemption provisions. In addition, law enforcement officers engaged in emergency driving should know and understand their agency's policies regarding emergency calls and pursuits. Significantly, violation of agency policy may be considered evidence of negligence.

Identify constitutional law, statutory law, and case law governing civil liability for emergency driving that "shocks the conscience" in its deprivation of federal constitutional rights:

### *Emergency Driving That Shocks The Conscience*

## INTRODUCTION

The federal constitution may impose liability on officers who conduct police pursuits in a manner that "shocks the conscience" in the risk created for the public. The officer's degree of fault must exceed mere recklessness before liability is created under the "shocks the conscience" standard adopted by the United States Supreme Court in *County of Sacramento v. Lewis*, 523 U.S. 833, 140 L. Ed. 2d 1043, 118 S. Ct. 1708 (1998) which is discussed at **Case Twenty-Nine** below. Pursuits that "shock the conscience" may also give rise to liability of the governmental employer or the supervising officer for an unconstitutional policy or custom or for failure to train.

## HISTORICAL CONTEXT

As discussed in Objectives 1.1 and 1.2, law enforcement officers must be mindful of various state laws that bear on emergency and non-emergency law enforcement driving. State tort laws may apply to non-emergency law enforcement driving. State laws often grant emergency driving exemptions and limited immunities to law enforcement officers. These state emergency exemption statutes may impose special duties on law enforcement emergency driving. Each state is largely free to legislate as it sees fit in defining the conditions that govern emergency vehicle operation.

The federal constitution and federal statutes define another set of legal rights and obligations. Law enforcement officers employ by state and local governments cannot, under the authority of state law, violate rights secured to people under the federal constitution. Section 1983 of title 42 of the U.S. code allows persons to sue governmental defendants, such as law enforcement officers and agencies, for deprivation of rights, privileges or immunities under the federal constitution. The Fourteenth Amendment of the federal constitution, in particular, guarantees the right to substantive due process. The Fourteenth Amendment provides, in part, that 'no State shall...deprive any person of life, liberty, or property, without due process of law. Persons injured during a police pursuit may claim that the pursuit deprived them of their right to substantive due process under the Fourteenth Amendment.

Over the years, several U.S. Supreme Court decisions have paved the way for individuals to sue law enforcement officers and their employing towns, cities, or counties for deprivation of federal constitutional rights. In 1961, the Supreme Court ruled that an individual could sue state and local law enforcement officers who violated a right guaranteed by the federal constitution. *Monroe v. Pape*, 365 U.S. 167, 5 L. Ed. 2d 492, 81 S. Ct. 473 (1961), *overruled by Monell v. Dep't of Social Services*, 436 U.S. 658, 56 L. Ed. 2d 611, 98 S. Ct. 2018 (1978), *overruled in part by Canton v. Harris*, 489 U.S. 378, 103 L. Ed. 2d 412, 109 S. Ct. 1197 (1989). For the first time, money damages could be recovered from individual officers who violate federal rights.

In 1978, the Supreme Court extended the right to recover money damages for a constitutional deprivation to allow suits against towns, cities, and counties with a policy or custom that violated a federal constitutional right. *Monell v. Dep't of Social Services*, 436 U.S. 658, 56 L. Ed. 2d 611, 98 S. Ct. 2018 (1978). Under *Monell*, liability is imposed on a town, city, or county government only if the injured party can prove an official policy or unofficial custom caused the deprivation of a federal right. However, a local governmental employer is not liable simply because one of its law enforcement officers violates a federal right. The constitutional deprivation must be the product of a governmental policy or custom.

In 1989, the Supreme Court recognized a suit against a town, city, or county for having a policy of deliberate indifference to inadequate training of its law enforcement officers. *City of Canton v. Harris*, 489 U.S. 378, 103 L. Ed. 2d 412, 109 S. Ct. 1197 (1989). If officers receive little or no training to the point constitutional violations are almost inevitable, the employing town, city, or county may be liable for "failure to train."

## **SUBSTANTIVE DUE PROCESS CLAIMS**

By 1998, it was well-established that persons injured or killed in high speed pursuits could bring suits against police officers and municipalities alleging violation of substantive due process rights under the Fourteenth Amendment. However, federal courts were divided on what standard of culpability should apply to the conduct of the police in these pursuit cases. Most circuit courts had adopted one of the following standards: (1) gross negligence; (2) reckless or deliberate indifference; or (3) shocks the conscience. Compare *Jones v. Sherrill*, 827 F.2d 1102 (6<sup>th</sup> Cir. 1987), *later proceeding*. 1991 Tenn. App. LEXIS 372 (1991) (gross negligence); *Medina v. City & Cty of Denver*, 960 F.2d 1493 (10<sup>th</sup> Cir. 1992) (recklessness or deliberate indifference); *Medeiros v. Town of South Kingstown*, 821 F. Supp. 823 (D.R.I. 1993) (recklessness or deliberate indifference); *Temkin v. Frederick Cty Comm'rs*, 945 F.2d 716 (4<sup>th</sup> Cir. 1991), *cert. denied*, 502 U.S. 1095; 117 L. Ed. 2d 417, 112 S. Ct. 1172 (1992) (shocks the conscience); *Fagan v. Vineland*, 22 F.3d 1296 (3<sup>d</sup> Cir. 1994) (shocks the conscience); *Evans v. Avery*, 100 F.3d 1033 (3<sup>rd</sup> Cir. 1996), *cert. denied*, 520 U.S. 1210, 137 L. Ed. 2d 820, 117 S Ct. 1193 (1997) (shocks the conscience).

In 1998, the Supreme Court decided *County of Sacramento v. Lewis* and settled the issue: the shocks the conscience standard applies to police conduct in pursuit cases brought under the Fourteenth Amendment.

## **SHOCKS THE CONSCIENCE TEST**

In *County of Sacramento v. Lewis*, the Supreme Court addressed when high speed pursuits may constitute substantive due process violations. The Court held that an office is liable for a substantive due process violation for persons injured in high speed chases only where the officer's conduct "shocks the conscience." Conscience-shocking behavior for pursuits can be found only where the officer has "an intent to harm suspects physically or to worsen their legal plight."



## Case Twenty-Nine: Fatal Pursuit Doesn't Shock the Conscience

COUNTY OF SACRAMENTO v. LEWIS; 523 U.S. 833, 140 L. Ed. 2d 1043, 118 S. Ct. 1708 (1998), *on remand*, 150 F.3d 1223 (1998).

*Returning to their patrol cars after responding to a call regarding a fight in progress, a deputy sheriff and a police officer saw a motorcycle approaching at a high rate of speed. An 18-year-old was driving the motorcycle with the 16-year-old owner of the motorcycle as his passenger. The officer activated his cruiser's emergency lights, yelled at the boys to halt, and pulled his cruise; closer to the other patrol car in an attempt to block the path of the motorcycle. Instead of stopping, the drivers slowed down, maneuvered the motorcycle between the patrol cars, and then sped away. The deputy turned on his cruiser's siren and emergency lights and pursued the motorcycle.*

*During the chase, the motorcycle wove in and out of oncoming traffic for 75 seconds over 1.3 miles in a residential neighborhood forcing a bicyclist and at least two cars to veer off the road. The motorcycle also made three sharp left turns and ran four stop lights. Both the motorcycle and the patrol car reached speeds of up to 100 mph, and the deputy followed as close as 100 feet. The pursuit ended when the drive lost control while trying to make a sharp left turn and the motorcycle flipped over. Although the deputy slammed on his brakes, he was unable to stop and crashed into the motorcycle. The patrol car skidded and hit the passenger who suffered extensive injuries and died at the scene. The driver managed to get out of the way and was not hit by the patrol car.*

*The passenger's parents brought suit against the county, the county sheriff's department, and the deputy alleging a deprivation of their son's substantive due process rights under the Fourteenth Amendment in violation of 42 U.S.C. §1983.*

*The Ninth Circuit Court of Appeals held that the appropriate standard of conduct to apply to law enforcement officers in the context of high-speed vehicular pursuits was "deliberate indifference" or "reckless disregard" for an individual's right to life and liberty. Reversing the Ninth Circuit, the Supreme Court held that a much higher standard of fault than "deliberate indifference" must be shown for officer liability in a police pursuit. The Court adopted the "shocks the conscience" standard and stated:*

*"Accordingly, we hold that high-speed chases with no intent to harm suspects physically or to worsen their plight do not give rise to liability under the Fourteenth Amendment, redressible (sic) by an action under §1983;"*

*The Court then explained why the deputy's fault failed to meet the "shocks the conscience" test:*

*"[The deputy] was faced with a course of lawless behavior for which the police were not to blame. They had done nothing to cause [the driver's] high-speed-driving in the first place, nothing to excuse his flouting of the commonly understood law enforcement authority to control traffic, and nothing (beyond a refusal to call off the chase) to encourage him to race through traffic at breakneck speed forcing other drivers out of their travel lanes: [The driver's] outrageous behavior was practically instantaneous, and so was [the deputy's] instinctive response. While prudence would have repressed the reaction, [the deputy's] instinct was to do his job as a law enforcement officer, not to induce [the driver's] lawlessness, or to terrorize, cause harm, or kill. Prudence, that is, was subject to countervailing considerations, and while [the deputy] exaggerated their demands there is no reason to believe that they were tainted by an improper or malicious motive on his part."*

The "shocks the conscience" test adopted in *Lewis* poses a high standard for plaintiffs in police pursuit cases brought under the Fourteenth Amendment. Since *Lewis*, several federal and state courts have addressed the issue of whether a police pursuit violated the injured party's substantive due process rights under the Fourteenth Amendment. These courts have applied the "shocks the conscience" test, and most have found that a reasonable jury could not find that the officer's conduct shocks the conscience. For example, see *Courville v. City of Lake Charles*, 720 So.2d 789. (La. Ct. App. 3d. Cir. 1998) (late night high speed chase of suspected burglar which ended with suspect crashing into telephone pole did not shock the conscience); *Davis v. Township of Hillside*, 190 F.3d 16.7 (3rd Cir. 1999), *cert. denied*, 120 S. Ct. 982, 200 U.S. LEXIS 863 (2000) (high speed chase which ended with suspect colliding with two other cars and one of those cars hitting and severely injuring pedestrian did not shock the conscience).

Several federal courts have also held that the "shocks the conscience" test applies not only to harm caused to those pursued in a high speed chase but also to harm caused to other drivers or pedestrians. See the *Davis* case above, and *Onossian v. Black*, 175 F.3d 1169 (9th Cir. 1999), *cert. denied*, *Torres v. Bonilla*, 145 L. Ed. 2d 385, 120 S. Ct. 498, 1999 U.S. LEXIS 7543 (1999) (high speed chase of reckless driver which ended with reckless driver crashing into another car and injuring occupants did not shock the conscience). And at least one federal court has suggested that the *Lewis* decision and its "shocks the conscience" standard applies not only in pursuits but also in other emergency driving situations. See *Gillyard v. Stylios*, 1998 U.S. District LEXIS 20251 (E.D. Pa. 1998) ("shocks the conscience standard applied where officers responding to fellow officer's request for emergency assistance hit and killed pedestrian and his 7-month old son).

While the "shocks the conscience" test may pose a difficult hurdle for plaintiffs in pursuit cases brought under the Fourteenth Amendment, the standard is not impossible to meet as evidenced by the district court decision in the next case.

### **Case Thirty: Fatal Pursuit May Shock the Conscience**

**FEIST v. SIMONSON**, 36 E Supp. 2d 1136 (D. Minn. 1999).

*A Minneapolis police officer stopped a car fitting the reported description of a stolen vehicle. When the officer requested the suspect and his passenger put their hands in the air, the driver refused and sped away. The officer pursued the suspect through the streets of Minneapolis as the suspect turned the wrong way down one-way streets and nearly caused several collisions. At one point, the suspect entered a highway, exited the highway over a grassy median, and then re-entered the highway going in the opposite direction of traffic. The driver drove erratically, forcing several cars off the road to avoid being hit. The officer along with three other patrol cars that had joined the pursuit, shadowed the suspect's driving pattern.*

*The pursuing officers were no longer calling out the traffic conditions and, concerned that the chase had gone on so long under dangerous conditions, the chase supervisor left the precinct and headed for the highway. The chase supervisor claimed that he was about to call off the chase because of the dangers of an upcoming tunnel. Before the chase could be called off, however, crash occurred. As traffic on the highway slowed to a halt, a limousine driver swerved onto a shoulder to avoid hitting the car in front of him. As he turned onto the shoulder, the suspect struck the limousine driver at a closing speed estimated at 97-104 mph. The limousine driver was crushed and killed in the crash. The limousine driver's mother filed suit against the officers and the city, alleging deprivation of her son's substantive due process rights under the Fourteenth Amendment in violation of 42 U.S.C. §1983.*

*The Minnesota district court applied the “shocks the conscience” test from Lewis, but. Distinguished the facts of this case from the facts of Lewis. The district court held that, while the initial decision to pursue was justified, the situation “escalated into one of greater and greater potential for harm to the general public.” The court stated:*

*“What began as a chase down residential roads soon escalated to a high-speed run through stop lights and down the wrong way of busy one-way streets. What then became a dangerous pursuit entering a busy interstate eventually became a deadly pursuit back onto the same interstate; this time heading at break-neck speeds the wrong direction against heavy traffic”*

*The court went on to say that the officer had many opportunities during the chase to balance the need to catch the suspect against the threat to the public. The court pointed out that there was no indication that, had the officer suspended the chase, the police department would not have eventually apprehended the suspect. The court held that the officer’s conduct reveals genuine issues of material fact as to whether his actions “shocks the conscience” for the purpose of a substantive due process claim.*

## **GOVERNMENTAL OR SUPERVISORY LIABILITY**

Police pursuits that “shock the conscience” may not only expose the pursuing officers to liability but also may expose the governmental employer and the pursuit supervisor to liability. An employing town, city, or county may be directly responsible under 42 U.S.C. §1983 when an employee executes a governmental policy or custom that inflicts constitutional injury. See *Monell v. Dep’t of Social Services*, 436 U. 658, 56 L. Ed. 2d 611, 98 S. Ct. 2018 (1978), also discussed earlier. Third parties injured in collisions during a police pursuit may claim that the police department had an official policy or an unofficial custom of encouraging high-speed chases of suspects at the expense of the safety of the public, that is, that the policy, or custom was a product of deliberate or reckless indifference: . .

To succeed on a claim based on an unconstitutional policy or custom, the plaintiff must prove the following: (1) an official policy or unofficial custom of unconstitutional misconduct, (2) a deliberate indifference to or tacit authorized of such misconduct; and (3) the policy or custom was the moving force behind the constitutional violation. *Feist v. Simonson*, 36 F. Supp. 2d 1136, 1149 (D. Minn.1999), also discussed earlier at **Case Thirty**. These requirements present a formidable burden for plaintiffs. See *Feist v. Simonson*, 36 F. Supp. 2d 1136 (D. Minn. 1999) (“statistics regarding the number of past pursuits and the lack of resulting disciplinary action is not sufficient to prove a policy or custom”); *Fulkerson v. City of Lancaster*, 801 F. Supp. 1476 (E.D. Pa. 1992), *affirmed without opinion*, 993 F.2d 876 (3d Cir. 1993)(simply citing fact that department’s officers have pursued minor traffic offenders at high speeds in past without evidence of injuries or collisions is not sufficient). But see *Gillyard v. Stylios*, 1998 U.S. Dist. LEXIS. 20251 (E.D. Pa. 1998) (plaintiff’s evidence of large number of preventable collisions during pursuits, failure of police department to discipline officers causing preventable collisions, violation of city directive on safe driving and state traffic laws; and ignored internal requests to enforce safe driving techniques more strictly held sufficient evidence of implicit policy sanctioning reckless driving to present a jury issue).

A governmental employer (or a supervising police officer) may also be liable under 42 U.S.C. §1983 for constitutional injuries caused by the failure to train police officers. Third parties injured in collisions during a police pursuit may claim that the employing town, city, or county, and/or the police officer supervising the pursuit failed to train the pursuing officers in high-speed chases.



However, an action for failure to train will lie “only where the failure amounts to deliberate indifference to the rights of persons with whom the police come into contact” The failure to train must be coupled with a deliberate or conscious choice in order to rise to the level of a governmental policy or custom. In other words, “the need for more or different training is so obvious, and the inadequacy so likely to result in the violation of constitutional rights, that the policy-makers of the city can reasonably be said to have been deliberately indifferent to the need.” Finally, the failure to train must be the cause of the constitutional violation. See *City of Canton v. Harris*, 489 U.S. 378, 389-390, 103 L. Ed. 2d 412; 109 S. Ct. 1197 (1989), also discussed earlier.

Again, this deliberate indifference standard can be difficult for plaintiffs to meet. In *Canton*, the Supreme Court was careful to note that governmental liability for failure to train will not be had merely because an individual officer is insufficiently trained or because an individual officer makes a mistake. See *Williams v. Musser*; 1997 U.S. Dist. LEXIS 10388 (N.D. Ill. 1997) (where written pursuit policy prohibits intentionally damaging suspect's car and lists factors to consider during pursuits, and officers received basic police training in compliance with state law, plaintiff's assertion that city should have provided practical training on how to interpret and apply pursuit policy is insufficient evidence of failure to train); *Smith v. City of New Baltimore*, 1999 U.S. Dist. LEXIS 20196 (E.D.S.D. Mich. 1999) (plaintiff's assertions that department failed to discipline pursuing officer for previous collisions and failed to give dispatcher copy of pursuit policy were not sufficient to state a claim for failure to train).

Whether the liability of a governmental employer for failure to train or for an unconstitutional policy or custom depends on the liability of the pursuing officer is in dispute. Some courts hold that a governmental employer can only be liable for failure to train or for an unconstitutional policy or custom if the police officer violates the federal constitution. That is, if a pursuing officer's conduct during a pursuit does not shock the conscience, then the officer has not violated the constitution and the officer's governmental employer cannot be held liable for an unconstitutional policy or custom or for failure to train. For example, see *Hildebrandt v. City of Fairbanks*, 957 P.2d 974 (Ala. 1998) (pursuing officer's conduct did not shock the conscience so employing city cannot be held liable for failure to train). Other courts hold that independent claims for failure to train and for unconstitutional policy or custom can be maintained against a governmental employer despite the exoneration of the involved police officer. See *Smith v. City of New Baltimore*, 1999 U.S. Dist. LEXIS Z0196 (E.D.S.D. Mich. 1999) (plaintiff's cause of action for failure to train is not automatically terminated by the officer's exoneration); *Gillyard v. Stylios*, 1998 U.S. Dist. LEXIS 20251 (E.D. Pa. 1998) (governmental employer can be liable for failure to train even if no individual officer participating in the pursuit violated the federal constitution).

## GENERAL PRINCIPLES

General principles of federal constitutional law relating to law enforcement emergency driving include the following:

1. Law enforcement driving that is negligent or reckless under state tort law is not necessarily a deprivation of federal constitutional rights under the Fourth Amendment.
2. A collision between officer and bystander, or between officer and suspect, or between suspect and bystander, is not a deprivation of constitutional rights unless the conduct of the officer is so outrageously dangerous as to “shock the conscience,” the substantive due process standard. Plaintiffs find that standard difficult to prove since it requires almost intentional disregard of a near unavoidable risk of serious injury.

3. A governmental employer may not be liable for an unconstitutional policy or custom simply because departmental policy allows high-speed chases. Constitutional liability requires that the policy or custom require or implicitly sanction unconstitutional conduct.
4. A local governmental employer or supervisory officer may not be liable for failure to train simply because a particular officer was inadequately trained in pursuit driving. Constitutional liability requires deliberate indifference to the need for more or better training.

In addition to filing state claims, persons injured during police pursuits may also seek redress against the pursuing officers and their agency under federal constitutional law. These plaintiffs argue that the pursuit deprived them of their right to substantive due process under the Fourteenth Amendment. However, a much higher standard—the “shocks the conscience” standard applies in these federal cases. Under the “shocks the conscience” standard, the officer's conduct must exceed mere recklessness before liability is created. Police pursuits that “shocks the conscience” may not only expose the pursuing officers to liability but also may expose the governmental employer and the supervisory officer to liability for failure to train or for an unconstitutional policy or custom.

# ***NON-EMERGENCY DRIVING***

## INDIANA LAW ENFORCEMENT ACADEMY LESSON PLAN

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Course Level:      Basic X In-Service X      Supervision      Management      Specialized

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Lesson      No.      Title      : Non -Emergency Driving      Hrs. Required: 4 of 4

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Scope of Lesson Coverage: Develop accepted attitudes for safe driving and decision-making for collision avoidance while learning to simultaneously integrate the tasks of driving and law enforcement.

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Specific Objectives: Students will learn the aspects associated with law enforcement driving and the effects attitudes/emotions have upon law enforcement.

1. Given a lecture students will explain and identify the reasons for law enforcement driver training.
2. Given a lecture students will identify the unique characteristics of law enforcement driving.
3. Given a lecture students will identify the effects that attitudes and emotions have upon law enforcement driving.
4. Given a lecture students will identify common psychological factors that contribute to law enforcement collisions.
5. Given a lecture students will identify the components of driving that lay the foundation for the development of good driving habits.
6. Given a lecture students will identify vehicle defects that contribute to law enforcement collisions.
7. Given a lecture students will identify elements of an acceptable law enforcement vehicle inspection.
8. Given a lecture students will identify the importance of safety belts and other occupant protection devices.
9. In a practical driving situation students will demonstrate acceptable use of safety belts and other occupant protection devices.
10. Given a lecture students will identify common environmental factors that contribute to law enforcement collisions.
11. Given a lecture students will identify factors that affect handling, steering, and braking to include ABS systems.
12. Given a lecture students will identify factors that influence the stopping distance of a vehicle.
13. Given a lecture students will identify driving movements that frequently contribute to law enforcement collisions.
14. Given a lecture students will identify acceptable vehicle control methods.
15. Given a lecture students will identify methods for skid avoidance.
16. Given a lecture students will identify acceptable methods for the use of the communications radio.
17. In a practical driving situation students will demonstrate acceptable skid control methods.

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Training Aids, equipment, etc., required:

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Material for issue: ILEA Driver Training Manual

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References: ILEA Driver Training Manual  
Law Enforcement Driver Training Reference Guide, 2000

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Prepared by: Lt. Nick Schiavarelli Date:      06/17

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ILEA/180

## *Limitations of Driver and Vehicle*

### **INTRODUCTION**

The police driver training discussed in our EVO manual is designed to improve techniques of driving for "maximum performance with safety." It is the intent of this course of instruction to provide you with the skills, professional attitude, and knowledge needed to improve your driving techniques.

Maximum performance with safety can only be attained through training.

"Safety Through Training" is a saying that has proved to be of great value in every phase of life. Training in safety is especially important in the operation of a motor vehicle. Since both driver and vehicle are being dealt with, we must remember that both have limitations:

### **DRIVER LIMITATIONS**

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1. Vision
2. Emotions
3. Reflexes
4. Hearing
5. Over-confidence
6. Physical health
7. Attitude

### **VEHICLE LIMITATIONS**

1. Brakes
2. Tires
3. Suspension
4. Steering
5. Engine
6. Lights
7. Wipers

It must be emphasized that our aim is not to develop race drivers or expect pursuit drivers, but to improve individual driving ability. In pursuit driving, it is more important to drive well than to drive fast. The fact that officers are engaged in pursuits of violators does not protect them from the consequences of a reckless disregard for the safety of others. Every precaution must be taken to protect innocent motorists, pedestrians, and police drivers themselves.

Does your department have S.O.P.'s on pursuit driving? If so, what do they say about pursuit driving and pursuits in general? Make sure you read them so you will be familiar with your department's particular policy.

## **SUMMARY**

The instruction in this course is designed to develop competent, safe drivers. Pursuit and emergency driving are different from normal driving, but both require a competent, safe driver behind the wheel.

The following factors are more important in emergency or pursuit driving than normal driving due to the higher speed.

1. Mechanical skills
2. Knowledge of law governing motor vehicle operation
3. Good eyesight
4. Normal reactions of physical reflexes
5. Knowledge of highways, roads, and streets in your patrol area
6. Mature judgment
7. Attitude

The importance of these factors will be emphasized during the course.

## Vehicle Inspections

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The student must realize the importance of a vehicle inspection. A properly inspected vehicle will ensure a greater degree of confidence, reliability; and functionality with respect to vehicle performance and condition. The inspection would include, but not limit itself to, the following categories: ·

1. Mechanical
2. Interior conditions
3. Exterior conditions

### CONTENT

AN INSPECTION CHECKLIST FOR EACH OF THE CATEGORIES:

1. Mechanical
  - a. Fluids: brake, oil, transmission, radiator, batter, windshield wipers, power steering
  - b. Belts and hoses
  - c. Wires
  - d. Loose, worn, or broken items
2. Interior
  - a. Brakes and emergency brake
  - b. Horn, P.A. system and siren(s)
  - c. Gauges and warning devices
  - d. Windshield wipers
  - e. Fuel
  - f. Occupant protection systems
  - g. Mirrors
  - h. Seat adjustment and security
  - i. Doors locks
3. Exterior
  - a. Tire, air pressure, tread/speed rating\*
  - b. Locks
  - c. Mirrors, windows, and lights

- d. Headlights, tail lights, emergency lights, and spotlights
- e. Damage to the vehicle
- f. Hood and door latches

## SUMMARY

Vehicle inspections reduce the possibility of vehicle malfunction. The likelihood of a student conducting a vehicle inspection will be increased with knowledge of the benefits of preventive maintenance, and the use of a checklist.



## **Driver Emotions**

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### **INTRODUCTION**

When the student realizes the effects that attitude and emotion have upon driving habits and the decision making process, there will be changes in performance that result in safer and more effective driving. To accomplish this realization, a student will need to be led through an evaluation of current habits and values and be taught how to change these.

1. Emotions
2. Attentiveness
3. Willingness to improve

### **CONTENT**

#### **1. EMOTIONS**

- (a) Emotions such as fear, love, hate, anxiety, surprise, joy, and excitement have a profound effect on behavior in general, and driving in particular. Emotions can affect the part of the brain which controls thought, reason, and judgment. Strong emotions affect certain bodily functions same effects are temporary: heart beats faster, face flushes, breathing speeds up, blood pressure rises, muscles become tense. Repeated extreme emotions can lead to long term dysfunctions such as changes in appetite, digestive chemical changes, and ulcers. Emotions can have a distracting and paralyzing effect upon driving. These effects can include:
  - (1) dim or blind powers of observation
  - (2) delay or distortion of ability to interpret events
  - (3) reduction of powers to assess and predict the actions of other highway users
  - (4) production of faulty judgment and high-risk decisions
  - (5) reduced ability to perform precisely timed skills
- (b) Emotion can be a positive force in determining driving behavior.
  - (1) Reasoned fear of crash or legal consequences helps to restrain unsafe tendencies
  - (2) Love that an officer has for family and friends can motivate one to drive safely
  - (3) Desire to perform successfully can result in safer driving
- (c) The degree to which a driver is beset by emotional problems, along with the effectiveness of the means used to cope with these problems, has a bearing on the potential for a collision.

## 2. ATTENTIVENESS CAUSES OF DISTRACTIONS

(a) There are many distracting factors that compete for the driver's attention. Driving a law enforcement vehicle is demanding in and of itself because the officer is performing the task of driving and the duties of an officer at the same time. It is important that good habits be developed to allow for safe movement through a traffic situation during the performance of police-related duties.

(b) Distraction from the driving task is caused by:

- (1) Thinking of something other than driving
- (2) Having the vehicle distractions which requires the driver's attention
- (3) Situations outside the vehicle that attract the operator's attention
- (4) Environmental factors
- (5) Vehicle factors
- (6) Route problems in unfamiliar areas
- (7) Seeing one potential collision hazard at the traffic scene while failing to see another

(c) How to minimize the distractions

To minimize the distracting factors and to maximize the driver's attention of the most critical elements of the traffic scene requires:

- (1) Attention to be distributed over large areas without concentrating on any one part for more than two seconds
- (2) The ability to search ahead of the vehicle and the ability to recognize traffic scenes that have deteriorated or that reduce space control such as the following:
  - (A) Brake lights ahead
  - (B) Traffic ahead switches lanes
  - (C) Traffic light changes from green to red
  - (D) Crossing traffic at an intersection
  - (E) Pedestrians or bicycles alongside the road
  - (F) Vehicle backing out of driveway
  - (G) Child running toward the street

### 3. WILLINGNESS TO IMPROVE THERE WILL BE NO CHANGE UNLESS THERE IS MOTIVATION

The most important part of training is the transfer of learning activities into a real-world situation by the students. For the driving training process to have any positive effect, there must be a clear understanding of what driving behavior is desirable. A plan needs to be devised to develop in each student the concepts and skills of good driving habits. Practice on the part of the student must take place often enough to allow the recommended behaviors to replace poor driving habits. Without a willingness to improve, very few positive results will take place from the training.

## **SUMMARY**

### THE NEED FOR CHANGE

The effects of emotions, the attentiveness of the driver, and the willingness to improve are central themes underlying the positive result of the driver training course. It is important for the student to understand that a willingness to change habits is necessary in order to change high-risk actions into low-risk habits.

## Six Elements of Defensive Driving

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### INTRODUCTION

Attitude is the key to avoiding most accidents and plays an important role in all types of driving, whether pursuing a suspected violator of the law or going to and from work. A driver's attitude is his/her mental or emotional regard for himself/herself, others, his/her vehicle and for surrounding conditions.

1. Attitude
2. Knowledge
3. Attentiveness
4. Foresight
5. Judgment
6. Skills

### CONTENT

#### I. ATTITUDE

- (a) “We drive as we are.” If we are egotistical, over-aggressive, impolite, irrational, nonconforming, impulsive, domineering, combative, intolerant or “hotheaded” person while driving we are likely to display this same trait in other social situations. The “style of life” theory simply proposes that high correlation exists between our behavior on and off the highway
  - (1) Research studies investigating characteristics of accident repeaters tend to support the “style of life” theory. Many chronic offenders seem to be characterized by social maladjustments, such as anti-social attitudes, a record of court appearances, etc. In short, the accident repeater is not a special breed, but rather a disturbed person whose bad driving is merely a symptom of his broader problem
  - (2) Research strongly indicates that problem drivers are problem people – or rather, people with problems, including problems of which they often are not aware
  - (3) The psychology of problem drivers is essentially the psychology of problem people.
- (b) What, specifically, makes drivers act the way they do? Why do they have accidents, pay heavy fines, and mistreat each other on the road? These are questions which psychologists have been studying very carefully for more than twenty (20) years. And now, the results of their research form a pattern which fits together like the pieces of a jigsaw puzzle.
  - (1) It cannot be said that chronic violators and accident repeaters, for the most part, don't know any better, or don't have the skills required for driving. For example, in the situation where an obviously impatient driver attempts to pass on a curve

or cross a solid line in order to pass another vehicle, it is apparent that he/she is skillful by the way he/she performs the maneuvers and probably, if questioned, could they why the maneuver is dangerous or unlawful. It is in these psychological traits that he/she may be distinguished from more commendable drivers.

- (2) Charles A. Charyne, a former General Motors Engineering Vice President, has stated that, "Attitudes, not reflexes, should be blamed for accidents." Safety designs and devices notwithstanding, traffic safety is a direct function of the driver's basic sense of responsibility, attitude, self-discipline, psychology or whatever one wishes to call it.
- (c) Scientific studies conducted at New York University, Northwestern University, North Carolina State College, and the University of Western Ontario, among other institutions and agencies, indicate the following characteristics are particularly significant among chronic violators and accident repeaters.
- (1) They are apt to be aggressive and intolerant of others
  - (2) They tend to resent authority.
  - (3) They are inclined to have an exaggerated opinion of their importance and their abilities
  - (4) There are likely to be lacking in responsibility and often they act impulsively
- (d) The behavior patterns evidenced in reckless driving, driving while intoxicated, frequent speeding and other moving violations are not shown to be due, usually, to some basic fault in the individual's personality, or emotion instability or maladjustment stemming, from unhappiness at work, at home or with other people.

Police officers are as likely as anyone to develop the following faulty driving attitudes:

- (1) Overconfidence, taking too much for granted
- (2) Minimizing the seriousness of minor accidents
- (3) Pride in past record, feeling secure because of a no-accident record
- (4) Faith in experience
- (5) False ideas, misconceptions about stopping in time (You cannot stop on a dime)
- (6) Self-righteousness
- (7) Impatience, taking needless chances and getting into tight situations

The important point is to recognize our attitudes and change them when necessary.

A right attitude stems from the right philosophy of life and is not a luxury item, but an investment that everyone can afford. The physical techniques must be mastered, but more important is the need to establish a positive sense of social responsibility.

Given the necessary knowledge and skills through proper education, police officer will consciously or instinctively, use these skills to anticipate or out-manuever any threat. Police officers may also be expected to use their knowledge and skills not only for their own safety, but also for the protection of others.

(e) The three (3) E's of Good Driving and Safe highways

- (1) Enforcement
- (2) Education
- (3) Engineering

## II. KNOWLEDGE

Know the laws in the Motor Vehicle Law Manual. It is our job as police officers and good drivers to know these laws.

Knowledge of physics and mechanics of the patrol vehicle which deal with centrifugal force, momentum, inertia, coefficient of friction, kinetic energy, dynamics, gravitational force, hydroplaning, skid control and braking is also important.

There are three (3) basic driving environments that you will encounter. These environments and their problem areas are stated below:

(a) Parking Areas – A high percentage of minor accidents happen here because:

- (1) Backing - back into parking spaces
- (2) No marked lanes
- (3) No speed limits or lack of enforcement
- (4) More obstacles, carts, people, other vehicles, etc.

(b) Unlimited Access Roadway (city streets)

- (1) Most commonly encountered roadway
- (2) Primary danger at intersection

(c) Limited Access roadways

- (1) Do not impede traffic flow
- (2) Space cushion
- (3) Maintain travel in your lane
- (4) Stay in right lane except to pass
- (5) Do not pass on right

(6) On and off ramps

(d) Route Selection Factors

- (1) Space management is most directly affected by traffic density. Avoid roads where heavy or hazardous traffic patterns exist, especially commercially zoned areas. Avoid roads frequented by slow moving or large vehicles such as tractor-trailers or farm equipment
- (2) Avoid locations of heavy pedestrian traffic such as school zones, busy intersections, loading and unloading zones, and parking areas.
- (3) Avoid slow moving traffic conditions, such as construction zones, special entertainment events, bumper-to-bumper traffic, and rough pavement roads or roads that have potholes, multiple bumps, and non-paved surfaces
- (4) Select roads having acceptable line-of sight conditions. Avoid roads with hills and curves, poor visibility at intersections, or poor visibility due to parked vehicles
- (5) One-way streets offer the advantage of avoiding oncoming traffic, but the disadvantage of approaching all vehicles from the rear, the area in which drivers tend to be least aware.
- (6) Traffic density, day-of-the-week, road, weather, and visibility conditions are other factors to be considered.

A professional driver should never stop learning about safety and safe driving practices

### III. ATTENTIVENESS

There are many distracting factors that compete for a driver's attention. Driving a law enforcement vehicle is demanding in and of itself because the officer is performing the task of driving and the duties of an officer at the same time. It is important that good habits be developed so there can be safe movement through a traffic situation during the performance of police-related duties.

Distraction from the driving task is caused by:

1. Thinking of things other than driving
2. Having in the vehicle “distractors” which require the driver's attention
3. Situations outside the vehicle that attract the operator's attention
4. Environmental factors
5. Vehicle factors
6. Route problems in unfamiliar areas



7. Seeing one potential collision hazard in the traffic scene while failing to see another

#### IV. FORESIGHT

Foresight is the ability to anticipate and prepare for most eventualities. This can be long range or immediate foresight.

Give an example of long range foresight - \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Give an example of immediate foresight - \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

A good defensive driver needs both Long range and immediate foresight.

#### V. JUDGEMENT

Judgment is the ability to recognize the alternatives present in any traffic situation and the ability to then arrive at a wise choice of action to avoid an accident.

Just using good old COMMON SENSE will prove helpful in most situations.

#### VI. SKILLS

Skill is the ability to manipulate the controls of a vehicle to successfully perform basic traffic maneuvers such as making turns, passing, lane changes, backing, braking, and parking.

These skills will be covered later in the text and practiced on the EVO track until each driver is proficient. Learn to do them right every time.

#### SUMMARY

Adding these elements together will make a better defensive driver. Defensive driving is the ability to operate your vehicle in such a manner as to be able to avoid involvement in a preventable accidents.

### **INTRODUCTION**

While an emergency vehicle is a sophisticated piece of equipment, it is really more than a tool. Just like any other tool, it can be used well or it can be used improperly. In order to maximize a law enforcement vehicle's effectiveness, the operator must be in good shape, both mentally and physically.

### **OVERCOMING DANGEROUS ATTITUDES**

One's mental approach to driving depends a great deal on one's attitude. This attitude is affected by many different factors, many of which can foster a state of mind that poses a risk to the officer's ability to operate the emergency vehicle. A person does not have to be angry or uncooperative to be in a hazardous frame of mind. There are several different types of attitudes that affect emergency vehicle operation; some of which are very subtle. It is possible that an officer might exhibit traits of one of these and not even know it.

### **CONTENT**

Psychological factors that need to be controlled to maximize vehicle operation capabilities include the following:

#### **1. AGGRESSIVENESS**

Aggressiveness is an emotional display of energy that generally impairs judgment. Aggressive behavior often times manifest is itself in "high-risk, low-gain" driving maneuvers that greatly enhance the potential for mistakes or crashes. Common characteristics of aggressive behavior are:

- a. Over-confidence - which fosters an attitude that allows the officer to "show-off" his or her driving skills and promotes a feeling of invincibility.
- b. Self-righteousness - which fosters a belief that the law applies to others, but not to the officer, or that everyone will get out of the way because you are a law enforcement officer.
- c. Impatience - which is displayed in officers acting as though they are always in a hurry and a belief that others are preventing them from getting to where they wants to go.

#### **2. ASSERTIVENESS**

Assertiveness is usually a show of confidence in knowing that the skills that have been taught will be successfully applied to the driving experience while operating the emergency vehicle. One can be assertive without being aggressive. Assertive officers are characterized by exercising the right of way, regardless of the situation or circumstances.

#### **3. ATTITUDES AND VALUES**

Attitudes and values are generally cultivated within each individual at an early age. These attitude and values are carried into the law enforcement career and generally are manifested in a critical incident. Due to the fact that the "Value System" of the officer may not be reflective of the promulgated policies within the department, agencies are encouraged to expose any improper attitudes in a controlled environment where they can be modified prior to entering the law enforcement vehicle.

#### **4. EMOTIONS**

Emotions are an overwhelming factor in decision-making. Many emotions are carried to the emergency vehicle from home or other employment. Common emotions that manifest themselves in the officer's driving behavior are:

- a. Stress - The nature of law enforcement work frequently subjects the officer to highly stressful situations. These situations usually occur without warning and may be preceded by a period of relative inactivity. Some stress is good. During intense situations, there is an injection of adrenalin into the bloodstream which can increase physical performance. It is possible to become more aware of surroundings and be able to think more clearly.
- b. Stress does have a cumulative effect, however. It increased blood pressure and causes irregular breathing. Over time, the nervous system may be affected to the extent that the ability to think rationally is impaired. When the officer reaches that threshold, the ability to perform effectively will decrease rapidly.
- c. Anger - Anger may be the result of a totally unrelated experience; however, when carried into the emergency vehicle it can promote aggressive behavior and diminish the ability to make rational decisions.
- d. Depression - Irregular state of affairs in the officer's personal or professional life can be translated to depression. This emotion may be displayed with an "I don't care."

#### **5. PATIENCE**

Patience is an individual's ability to look at a situation logically. Patience promotes a "low-risk, high-gain" attitude while impatience inversely promotes a "low-risk, high-gain" attitude

#### **6. FATIGUE**

Rotating shifts, secondary employment, lack of physical exercise, and other related factors contribute to fatigue. Fatigued drivers often become irritable and discourteous, causing them to overreact to minor irritations. More importantly fatigue affects visual efficiency and tends to lengthen perception, decision and reaction times

#### **SUMMARY**

Knowing one's own behavior and limitations can influence the outcome of an emergency response. Actions taken by a law enforcement driver have an impact on the general public. They can have an impact on fellow officers as well. Having a good attitude and exhibiting quality behavior in emergency situations will serve everyone.

When the officer concentrates on the various psychological factors affecting the emergency response, the chances increase for vehicle control and acceptable decision-making. The end result is an officer who not only arrives at a desired destination without incident, but who also arrives psychologically in control.

### INTRODUCTION

An officer in a vehicle six to eight or more hours a day has a higher potential for being involved in a collision than the general motoring public. In addition, there are physiological factors which increase the potential for collisions. When a driver is experiencing certain physiological problems, the performance of the driving task is more difficult.

### CONTENT

#### 1. VISION

- a. Acuity - Sharpness of vision or ability to focus. Ideal visual acuity for example is 20/20.
- b. Depth perception - Ability to distinguish dimensions of depth which objects are closer than others.
- c. Field of vision - The range of peripheral vision possessed by each individual. This is affected by speed. The faster the speed of the person or vehicle, the smaller the field of peripheral vision.
- d. Color vision - The ability to distinguish one color from another.
- e. Night vision - The ability of the eye to maximize the available light after dark. Visual distance or range is reduced during night driving.

#### 2. HEARING

Hearing is the audio capability of each individual. Impairment of "funnel hearing" is oftentimes caused by the stress of an emergency response. Certain sounds are tuned out and are no longer audible.

#### 3. SENSORY

- a. Equilibrium - The body's center of balance is located in the inner ear, which maintains the body's state of equilibrium or balance.
- b. Touch - A physiological sense which provides input to the brain. This input which can be called "feel", assists in making driving-related decisions.

#### 4. SMELL

Smell is an additional sense which provides input to the brain and assists in making driving related decisions. Common odors that indicate a hazard include: gasoline, fire, chemicals, burning rubber or brake metal.

#### 5. TIMING

Timing is the coordination of hands, eyes, and feet in the maneuvering of a vehicle. The coordination varies from person to person and can be affected by stress, fatigue, or distraction. Reaction time is most often associated with timing.

## **6. PHYSICAL STATURE**

Physical stature refers to the height and weight of the individual driver. Driver size can affect driving capabilities and should receive attention and compensation to ensure maximum effectiveness.

## **7. MEDICAL CONDITION**

Medical condition refers to the overall physiological state of the body. The influence of medications, alcohol, or drugs can greatly impair the reaction capabilities of an individual as well as impair visual acuity. Drivers should be screened and cautioned against operating an emergency vehicle while under the influence of any substance that might create an impairment.

## **SUMMARY**

Officers operating an emergency vehicle encounter many distractions from the routine of driving. These distractions include, but are not limited to, surveillance, use of radio and other equipment, high rates of speed, long time spans in the vehicle, and fatigue caused by job-related stress. In order to minimize the effect of these distractions, officer should engage in the following:

8. Obtain adequate sleep (8 hours daily) prior to going to shift.
9. Abstain from any form of alcohol at least 8 hours prior to beginning shift. (Alcohol burn-off rates should be considered)
10. Abstain from the ingestion of any controlled substance.
11. Exercise additional caution any time the speed limit is compromised.
12. Participate in a regular physical exercise program.
13. Minimize the potential for stress.
14. Abstain from medications that affect alertness or reaction time.

By having a knowledge of the physiological factors that influence driving decisions and physical performance, the officer can better prepare for the operation of the emergency vehicle. Knowledge of such factors should reduce the incidence of collisions; however, the applications of such knowledge is generally the key to success.

### INTRODUCTION

An officer needs to develop a style of driving while yields the highest level of results with the lowest level of risk. A student comes into a driver-training course with a style of driving and a set of habits. Some are high-risk, low gain while others are low-risk, high-gain. A driver very seldom has all good habits or all bad habits. If a student has some habits that need to be modified or replaced, it will take a well-designed plan and a highly motivated driver to achieve the changes.

A major objective of a driver-training course is to set a standard for a successful driving style. To help the student acquire that style, a set of low-risk and high-gain habits must be developed. In order to help a student develop effective driving habits, the desirable behaviors must be clearly understood and practiced by the student often enough to replace the less desirable habits.

To precisely establish recommended driving procedures for the officer, the training must describe specific driver actions. For example, if it is determined that an officer should have the skill for searching twelve (12) seconds ahead of the vehicle, then training should provide for the practice and testing of "why" and "how" to search twelve (12) seconds ahead.

The more realistic the training, the better the learning experience for the student.

### CONTENT

#### THREE COMPONENTS OF DRIVING

1. Awareness - Recognition of changes to the traffic environment that could disrupt the vehicle's movement.
2. Space Management - Planning ahead of the vehicle so as to get, and keep, the best control of the actual or intended path of travel.
3. Collision Avoidance - Quickly and efficiently placing the vehicle into an alternative path of travel because the intended path of travel is no longer manageable. This action will help minimize potential collisions or avoid actual collisions.

#### SYSTEMS OF DRIVING

- 1 There are several different systems of driving. Any one of the systems could be helpful to recognize that drivers' need to learn perceptual skills as well as manipulative skills.
- 2 Popular systems of driving include:
  - a. The Smith System - developed by Harold L. Smith. This system was the first to recognize that drivers need to learn perceptual skills as well as manipulative skills.
  - b. S.I.P.D.E. System - Search, Identify, Predict, Decide, and Execute. Was developed by a committee of traffic safety educators. The system is used to describe the decision-making process of a driver involved in the driving task.

### 3 The Smith System

- a. The Smith System features five steps. The driver must practice all the steps until they become routine. The five steps are:
  - (1) "Aim high in driving" - Look as far ahead as possible or at least one block ahead in city traffic. The purpose is to keep the driver's view "up" rather than looking "down" at the area in front of the car.
  - (2) "Keep your eyes moving" - To establish an orderly search pattern, the driver needs to look near and far, to the left and right, in the mirrors, and at the instrument panel.
  - (3) "Get the big picture" - Become aware of the whole traffic scene. It is the mental process of putting together the clues received from "aiming high" and "keeping your eyes moving."
  - (4) "Leave yourself an out" - Avoid being boxed-in; one needs to adjust to traffic conditions. Have a space cushion surrounding the vehicle.
  - (5) "Make sure they see you" - A communication mode for getting drivers to be aware of one another's presence to avoid surprise situations.

### 4 S.I.P.D.E.

**S.I.P.D.E.** is a method used to gather sensory information to process and perceive a clear, complete, and accurate mental sensory picture of a driving situation.

- a. **Search:** Look for a point ahead, steer toward it, check mirrors and instruments, and anticipate visual lead time
- b. **Identify:** Look for hazards. Determine what and how they will develop; calculate their effect on you and other traffic.
- c. **Predict:** Relate to past experience, recognize hazards, and evaluate risks.
- d. **Decide:** Choose a course of action.
- e. **Execute:** Avoid a collision.

### SUMMARY

The development of perceptual skills is critical. Practice awareness and having insight as to what will or may happen based on what you see.

### INTRODUCTION

Statistics show that traffic collisions kill or injure approximately seven Americans each minute. That amounts to one death every twelve (12) seconds and one injury every ten (10) seconds. Traffic collisions account for approximately one-third of officer deaths and are the leading cause of injury and disability to police officers. Occupant protection is the most important and basic safety measure for reducing these officer deaths and injuries.

Officers are even more vulnerable to injury or death from vehicle collisions because of the number of hours spent in law enforcement vehicles and the varying conditions they encounter. Developing a habit of wearing restraint systems will significantly increase body protection and control of the vehicle. Officers should become more aware of the types of occupant protection devices inside the vehicle and the ways to be protected while in the vehicle. Officers need to understand the importance of wearing restraint systems, not only for protection from death and injury in the event of a collision, but also for reducing the chances of becoming involved in a collision and staying alive in the driver's seat.

### CONTENT

#### ADVANTAGES FOR WEARING SAFETY BELTS BY OFFICERS ON AND OFF THE JOB

- 1 Better vehicle control thereby reducing the chances of becoming involved in a collision
- 2 Less chance of injury or death if involved in a collision while using the restraint systems
- 3 Lower medical cost to self and community if involved in a collision while using the restraint system
- 4 Less time lost from work due to the reduction in the severity of injuries
- 5 Role model to community

#### TWO TYPES OF OCCUPANT PROTECTION DEVICES

- 1 Active Restraint Systems
  - a. Head restraints - Adjust to the middle of the head, level with the ears, they protect the neck from whiplash
  - b. Door locks - Lock all doors. Can provide better protection in a collision, preventing occupants from being ejected
  - c. Shoulder harness and lap belt
  - d. Body armor
- 2 Passive Restraint Systems
  - a. Collapsible steering columns - Collapses in a collision so that a driver's chest is protected from injury. The steering column absorbs some of the impact forces in a collision



- b. Padded dashboard - Designed to cushion the occupant if contact is made with the dashboard
- c. Recessed knobs and door handles - Designed to be recessed and smooth to minimize injury if contact is made by occupants
- d. Air bags - An air bag is a porous fabric bag designed to supplement the restraint system in a collision. It is installed in the steering wheel hub for the driver and in the dashboard of most vehicles for the front passenger. The bag is activated in a serious frontal collision. The bag is activated by a collision sensor or switch that can discriminate between a collision severe enough to cause injury-and a fender-bender or panic stop. Sealed within the system is a small amount of sodium azide decomposes into nitrogen; a harmless gas. In 1125 of a second, the bag is inflated and creates a protective cushion between the occupant and the steering wheel, dashboard, and windshield. It begins to deflate immediately after deployment. Once deployed, the air bag cannot be used again.

## **SUMMARY**

Officers are exposed to great risk while driving a patrol vehicle. One of the easiest ways to minimize that risk is to take advantage of the protection equipment in the vehicle.

## **Environmental Factors**

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### **INTRODUCTION**

An officer is more likely to be exposed to all types of environmental factors due to the nature of the job. During inclement weather, when other drivers are normally not driving, the officer may have no other option than to operate their vehicle.

Reduced control of the vehicle as a result of a diminished driving environment can result from:

- 1 weather conditions
- 2 night driving
- 3 traffic density
- 4 road conditions

### **CONTENT**

#### **Weather Conditions**

Ice, snow, fog, sleet, rain, wind, heat, humidity, cold, smoke, and hazy conditions may reduce visibility as well as alter an officer's ability to effectively operate the vehicle.

- 1 Snow and ice conditions
  - a. The edge of the road, lane markings, or even traffic signs may not be visible.
  - b. Stopping distance on ice and snow increases exponentially with increased speed
  - c. Have snow tires on the vehicle, shovel, and chains available. Make certain that the vehicle's heater and defroster are in good working order. Brakes should be properly adjusted so they pull evenly.

- d. Stay aware of the temperature: wet roads with ice and freezing rain are the most treacherous of all driving conditions.
- e. Remember that bridges and roadway shaded areas freeze first.
- f. Do not make any sudden moves with the steering wheel, brakes, or accelerator.
- g. Slowdown in advance of intersections, curves, and down-grades sooner than normally. Keep at least a four-second following distance.
- h. If using chains on rear-wheel drive vehicles, drive with them until the road surface is appreciably clear of ice and snow.
- i. Straighten the front wheels when starting the car on a snow covered or slippery surface.
- j. When driving through deep snow, shift into lower gear before entering the snow and attempt to keep the car moving through the snow.
- k. When stopped or stuck in deep snow or in a snow drift, be aware that Carbon Monoxide may seep back into the vehicle.

## 2 Rain Considerations

- a. During rainy conditions, tires may start hydroplaning, which will affect steering and braking.
- b. Driving through large areas of water can affect brake performance and the vehicle's electrical system

### (1) Precautions:

- (a) Slow down before hitting water
  - (b) Turn wipers on before hitting water
  - (c) Tap brakes as you exit
- c. Use caution in checking outside mirrors. Rain can distort or obliterate images
  - d. Turn headlights on during the daytime.

## 3 Wind considerations:

- a. Fog, haze, and mist can affect visibility greatly.
  - (1) Turn on low-beam headlights and the wipers if needed. Never drive with only parking lights on.
  - (2) Watch for slow-moving and stopped vehicles. Also, watch rear-view mirrors frequently for vehicles approaching from the rear
  - (3) Be alert for patches of fog in valleys and low-lying areas.

- (4) Drive slowly, but keep moving.
- (5) If conditions are too bad, pull over as far as possible, stop, leave lights on, and activate hazard lights

## **NIGHT DRIVING**

- 1 In addition to reducing detail, darkness conceals hazards, i.e., pedestrians, two-wheeled vehicles, stalled cars, and other objects or conditions. The driver makes the decision on the basis of a sketchy and incomplete picture.
- 2 It is more difficult to judge the speed and position of another vehicle.
- 3 Drivers must depend largely on their headlights, which illuminate only a relatively short and narrow path ahead. Light does not bend around corners.
- 4 Adequate highway lighting may be limited.
- 5 Glare from roadside lighting and the headlights of oncoming vehicles impair visibility.
- 6 Keep panel lights dim for better vision, but always have enough panel light to read the speedometer.
- 7 Reduce speed so that you can stop within the visible distance.
- 8 Increase sight distance by keeping the headlights clean and properly aimed, and the windshield clean.
- 9 Watch beyond the headlights on or near the roadway for slow-moving or unlighted vehicles, curves, T-intersections, road obstructions or defects, trains, pedestrians, and animals.
- 10 Avoid looking directly into glaring headlights of oncoming vehicles.
- 11 Keep at least a four-second following distance.
- 12 Allow a greater margin of safety when overtaking and passing.
- 13 Do not wear sunglasses or motorcycle-tinted face shields at night.
- 14 Avoid staring at bright lights. Headlight glare is a particular hazard. The human eye takes about seven seconds to fully recover from being blinded by bright light. At 60 mph, the car would travel 616 feet in seven seconds.

## **TRAFFIC DENSITY**

1. Rural Areas - Be alert for loose livestock, pets, bicyclists, school buses, children waiting for buses, slow-moving vehicles such as tractors, farm implements, trucks, horse and buggies.
2. Urban Areas - Be alert for traffic entering the roadway from alleys, parking lots, driveways, intersections, children playing in the streets, people exiting delivery vehicles, drivers opening doors to exit parked vehicles, pedestrians at school crossings and crosswalks.

3. Interstate and Highway Areas - Drive with the flow of traffic. An officer is justified to drive differently from the flow of traffic only in on an emergency run and not driving in such a manner as to endanger other drivers.

## **ROAD CONDITIONS**

- 1 Officers need to learn how to "read the road," since so much time is spent on various roadways.
  - a. From time-to-time the driver will notice a clear path in the center of the roadway followed by a dark spot. This particular pattern is caused by a bump in the road surface.
    - (1) As the vehicles travel over the bump, oil is knocked off that might not otherwise land on the road surface for several minutes.
    - (2) A concentration of various fluids causes the darker area.
    - (3) The bump itself is in the clear area, since the bump is hit before the droplet is knocked loose.
- 2 At night, there are a number of signs that can help tell if the road is changing:
  - a. Light travels in a straight line
  - b. Drivers can learn a lesson at night about the road from the headlights: if the roadway in front appears dark with headlights on, the road is dropping or curving out of this line of the headlights. If the road appears brighter as you approach an area, the road is rising.
- 3 Basic rules for reading the road:
  - a. Drive according to what you see. If you cannot see over a crest of the hill, slow down. If you are rounding a crest of the hill, slow down. If you are rounding a bend and cannot see in front of you, slow down.
  - b. Do not travel any faster that your ability to stop in the distance you can see.
- 4 Road conditions to be aware of:
  - a. Water
    - (1) As little as 1/16th of an inch of water could cause hydroplaning.
    - (2) If the water is concentrated on one portion of the road and only one side the vehicle goes through the water, the vehicle will tend to pull in that direction. The factor of the pull is dependent on the depth of the water and the speed of the vehicle.
  - b. Mud - Two basic problems can occur:
    - (1) The mud can fill in the tread pattern of the tire, making the reaction ability of the tire very slow
    - (2) Sliding sideways in the mud - the mud can build up against the side of the tire; until there is sufficient resistance to cause the vehicle to roll

- c. Potholes - Potholes create a great danger to patrol vehicles. It is best to drive around the pothole. Use the following procedure if you cannot avoid hitting a pothole.
  - (1) Just as you get to the pothole, release the brakes. If you fail to do so, your front tire can actually stop as you cross the leading edge of the pothole. By the time the vehicles gets to the other side, the wheel is no longer turning and the impact can tear the tire apart
  - (2) Hit the pothole squarely, rather than on the side of the tire. The face of the tire can take considerably more impact that the sidewall.
- d. Animals, tree limbs, and miscellaneous objects - The size of the object will determine the correct action.
  - (1) If it is a small object and you don't have the time to check for other traffic do not cause a larger collision by swerving into another lane or oncoming traffic. Hit the object head on.
  - (2) If it is a large animal or large object, hit it with a glancing blow hitting an object squarely with the front of the vehicle increases the collision impact; it may increase the amount of damage and the potential loss of vehicle control.

## 5 Road Surfaces

- a. Gravel - Because of the irregular shape, size, and weight of the stones on an uneven surface, gravel moves about easily. This movement can cause a vehicle to slide easily. When following another vehicle, especially at high speed, stay back to increase visibility and avoid flying stones.
- b. Blacktop
  - (1) Will bleed oil to the surface during hot, humid days causing slick conditions.
  - (2) Can also roll up into a washboard effect with heavy use during extremely hot days.
- c. Concrete
  - (1) This surface may explode at joints during hot weather
  - (2) Can develop severe dips as earth settles under it. Concrete is heavy and settles more than other surfaces.
  - (3) Concrete can glaze over very quickly in freezing conditions.

### SUMMARY

The content of this section can be used to meet the needs of any driver-training course. The officer has a high exposure rate to adverse environmental driving conditions created by weather conditions, night driving, traffic density, and road conditions. Awareness of these environmental conditions can help the student overcome the negative impact they may have upon driving performance.

## Vehicle Hydroplaning

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### INTRODUCTION

Until now, no one but a few racers have really known how to stay out of skids - or what to do when one occurs. All that is changing. Recent dramatic discoveries now point the way to sudden emergency stops without the senseless "panic skid" or spin. And if a skid does begin, these discoveries help control it before it becomes a "hair-raising" spinout. Most of all, these discoveries reveal some traps that had not been suspected.

Did you know, for example, that in heavy rain or slush the front wheels of a vehicle leave the road? They actually climb up on a tough film of water and the car hydroplanes.

Scientists at the National Aeronautics and Space Administration made this discovery at Hampton, Virginia where NASA had been doing research on plane landing and ground-handling problems. NASA's research was triggered specifically by the near crash of a Boeing 707 departing on a slush covered runway at New York's John F. Kennedy Airport. The aircraft had reached critical speed, just shy of rotation and takeoff and refused to go any faster. The pilot finally yanked it free and the plane staggered into the air - barely. Walter Home, Assistant to the Chief on NASA's Landing and Impact Branch, remembers the incident vividly.

"We thought at first that we had a serious operational bug that might ground all the jets," he said, "and then we began to think about the possibility of tire hydroplaning."

It's now known from that research, that a car may be driven for miles on the verge of a skid without the driver knowing it. A puff of wind, or a gust from a truck, may send the vehicle spinning. On wet roads, a vehicle becomes a "boat." Most people think vehicles slip on wet roads because water is "slippery." But NASA engineers, studying the plane skids, learned that this is only part of the problem.

### CONTENT

Two types of hydroplaning

- 1 Dynamic Hydroplaning
  - a. Most common type
  - b. A "stagnation pressure" of water builds up ahead of the tire.
  - c. Hydroplaning speed is calculated by the following: multiplying the square root of the tire pressure by 10.3

EXAMPLE: A tire is carrying 25 pounds per square inch (PSI) of pressure. The square root of 25 is 5. Five times 10.3 equals 51.5. Therefore, 51 miles per hour is the danger speed for dynamic hydroplaning

- 2 Viscous Hydroplaning
  - a. Occurs on mirror smooth surfaces.
  - b. Badly worn tires.

- c. Speeds are much lower than those required for dynamic hydroplaning and with a film of water only 1/25th of an inch thick.
- d. Car weight has nothing to do with safety from skidding. That's because the heavier the vehicle, the bigger the tire footprint. Car weight per square inch of pavement remains essentially the same.

### 3 HYDROPLANING PREVENTION

- a. Stay below the estimated hydroplaning speed.
- b. Keep tires properly inflated.
- c. Don't drive on badly worn tires. Any tire with a tread depth of 3/32nds of an inch or less should be changed and discarded.
- d. Drive in the tire "wipes" of the vehicle in front of you.
- e. Drive on grooved roads.

### **SUMMARY**

Your best friends are four (4) free rolling wheels. In heavy rain, slow down. They have enormous side force to help straighten your car. Don't lock them up with the brakes and don't accelerate.

Determine your hydroplaning speed of your car's tires and equip your car with tires whose tread have been ribbed circumferentially, rather than patterned, and which have been "siped" (tiny transverse cuts in the rib). Remember, once a tire hydroplanes, even when the car is traveling in a straight line, all control can be lost. A crosswind of no more than ten (10) miles per hour can send a hydroplaning car into an unrecoverable spin.

### INTRODUCTION

During the operations of a motor vehicle, the driver seldom analyzes vehicle dynamics. The driver makes a series of sub-conscious adjustments in steering and speed selection to allow for continued vehicle control. This process becomes routine and the driver anticipates an uneventful drive. When there is a need for a dramatic steering or speed adjustment a driver reacts by drawing on impulse, training, and habits. The percentages for successful completion of the maneuver are very low, as the driver often reacts too slowly or overreacts and has a collision.

A driver who understands how the laws of physics act on a vehicle recognizes that they cannot be violated without paying a penalty. The driver must also understand during emergency vehicle operation the increased speeds and distractions present are compounded by the changes in vehicle dynamics. Stopping distances are also affected by the speed increase.

### CONTENT

Basic vehicle dynamics and factors, which influence the operation of an emergency vehicle include:

- 1 Centrifugal Force - As a vehicle travels around a corner, there is an increase in the centrifugal force, which impels an object outward from a center of rotation. The greater the speed, the greater the force. An example is when driving around a corner, a vehicle fails to maintain the intended path of travel. This is oftentimes characterized by the rear of the vehicle rotating around the axis of the vehicle.
- 2 Centripetal Force - The opposite of centrifugal force. It is pushing toward the center and is characterized by a vehicle's ability to maintain its intended path of travel while cornering. Driving the vehicle in excess of the appropriate speed diminishes the effectiveness of centripetal force and gives way to centrifugal force.
- 3 Inertia - The tendency of an object to resist acceleration. The tendency of an object at rest to remain at rest and an object in motion to remain in motion in a straight line unless disturbed by an external force. Resistance to motion, action, or change.
- 4 Momentum - The size and speed of a vehicle will determine the amount of time and distance required stopping it. The greater the mass or speed, the more time and distance necessary to affect a stop.  $P = WVZ$
- 5 Velocity - The rate of change of position relative to time; speed of motion in a particular direction. (Vector)
- 6 Gravity - A constant pull of the earth, pulling all objects towards its center
- 7 Friction - The force between two bodies that resist motion or tendency to motion. Sliding friction rolling friction and stopped friction. Examples are a vehicle with locked wheels sliding, a moving vehicle and a vehicle at rest.
- 8 Kinetic Energy - The energy associated with motion; the energy possessed by an object in motion. Kinetic energy =  $\frac{1}{2}$  mass x velocity squared. A force that is exerted by one solid surface on another when the two surfaces are sliding past each other.



- 9 Newton's First Law of Motion – An object continues in its state of rest or of uniform motion in a straight line unless acted by another force.
- 10 Newton's Second Law of Motion - A change of motion is proportional to force applied and takes place in the direction of the line of action of the force.
- 11 Newton's Third Law of Motion – To every action there is always an equal and opposite reaction.

## **DYNAMICS OF STEERING**

- 1 Counter-steering - A method of countering the forces created in a skid (dry or wet) by steering in the direction of the skid, or the intended path of travel.
- 2 Under-steer - The handling characteristic of a vehicle that tends to increase the desired cornering radius as a vehicle progresses through a turn. A tendency of the vehicle to continue in a straight line and resist turning from a direct course of travel.
- 3 Over-steering - The handling characteristic of a vehicle that tends to reduce the desired cornering radius as a vehicle progresses through a turn, requiring the driver to rotate the steering wheel away from the direction of the turn.

## **DYNAMICS OF BRAKING**

### 1 Braking

#### a. Front Wheel Lock-up

- (1) Caused by improper brake adjustments or slick spot on the road.
- (2) Caused by reduced braking ability and loss of steering.
- (3) Rear wheels act as a rudder and maintain straight-ahead slide.

#### b. All Wheel Lock-up.

- (1) Caused by a panic situation in which brakes are applied abruptly and hard enough to lock all four wheels.
- (2) The vehicle will probably skid in a straight line as long as variables such as road surface, tires tread, and air pressure are fairly even.

#### c. Rear Wheel Lock-up

- (1) Caused by improperly adjusted brakes which cause rear wheels to lock while front wheels continue to rotate.
- (2) Vehicle will rotate around center mass in the horizontal plane.

#### d. Brake Fade - Most common during a drive when frequent use of the brakes does not allow for proper cooling.

#### e. Weight Transfer

- (1) Occurs when the vehicle changes velocity or direction.

- (2) As a vehicle accelerates, the front tires lift, causing weight in rear to increase. This weight shift to the rear causes loss of traction for front-wheel drive vehicles, but an increase in traction for rear-wheel drive vehicles.
- (3) When braking, the vehicle weight is transferred to front wheels which have high braking efficiency.
- (4) Change of direction transfers weight from one side of the vehicle to the other, which is more noticeable in vehicles with a higher center of gravity.

f. Environmental Factors

- (1) Road Surfaces - Wet, dry, surface debris, pavement type, and temperature.
- (2) Road Designs - Flat, uphill, curve, crowned, banked.
- (3) Visibility relative to perception time - Weather conditions, day or night, blind spots, other traffic.
- (4) Wind

g. Vehicle Condition

- (1) Braking system - Poorly maintained, low brake fluid.
- (2) Suspension system and steering components - Bad shock absorbers, tie rods.
- (3) Tires - Improper tire tread, improper tire pressure, alignment, ice studs, balance.
- (4) Vehicle weight and distribution of extra weight - Uneven distribution, greater mass.

h. Braking Systems

- (1) Conventional - Drum disc.
- (2) Four wheel disc.
- (3) Anti-lock braking system (ABS)

## ANTILOCK BRAKING SYSTEMS (ABS)

What is ABS? An antilock braking system is the part of a vehicle's braking system that automatically controls braking pressure to prevent the controlled wheel or wheels from locking during braking.

Why is antilock braking system beneficial? Motorists, when confronted with emergency situations, are likely to press too hard on the brake pedal, causing their vehicle's wheels to lock, which in turn causes skidding and loss of control. ABS, by preventing wheel lockup, allows drivers to maintain control of their vehicles even in "panic stop" situations. Maintaining control can be a key factor in collision avoidance. Most antilock systems also enable the vehicle to stop in a shorter distance, particularly on wet or slippery road surfaces.

How does ABS work? On a vehicle equipped with antilock braking system, wheel speed sensors detect wheel lock and send signals to the brake pressure modulator to reduce brake pressure, which allows the wheels to turn, The ABS then reapplies braking pressure to maintain maximum braking. This pressure regulation, in effect, pumps the brakes in the same manner a driver would, only much faster. During ABS operation, drivers would expect to feel the brake pedal pulsating. This pulsating occurs as a result of the brake fluid pressure changes in the brake system when the ABS is activated. This is not an unusual situation and the driver should continue applying the pedal pressure as required.

Current antilock systems can release and reapply the brakes as many as fifteen (15) times per second. By allowing the wheels to continue rolling, the driver is able to maintain control and stop the vehicle on slippery surfaces in a shorter distance than would be possible otherwise.

What are the major components of ABS?

- 1 The typical antilock system includes the following major components:
  - a. Wheel speed sensors – measures wheel speed and then transmits this information to the electronic control unit (ECU).
  - b. Electronic control unit (ECU) - contains computer functions, sensor signal processing circuits, output signals to the various ABS valves and components, and failure detection logic.
  - c. Brake pedal pressure modulator - reduces, holds, and restores pressure to one or more brakes, independent of the brake pedal applied by the driver.
- 2 Antilock systems control either the two rear wheels or all four wheels of the vehicle. In general, the four-wheel systems provide better stability and control during braking compared with the two-wheel systems because the steered wheels do not lock up.

**In the event of a malfunction in the antilock system, a warning lamp on the instrument panel alerts the driver that the ABS is in need of repair.**

## **LAW ENFORCEMENT TRAINING AND ABS**

Just as skills and knowledge are required by police officers concerning emergency driving, the same holds true for vehicles featuring ABS. Four elements have been identified that assist law enforcement departments familiarize and train personnel with ABS.

- 1 ABS videotape produced from the vehicle manufacturer.
- 2 Driver's manual accompanying ABS equipped vehicles.
- 3 ABS warning lamp symbol and functioning.
- 4 Hands-on braking and handling familiarization prior to actual in-service emergency driving.
- 5 The four elements above may help officers recognize the improved efficiency of antilock brake system; however, it is important to emphasize specific features which characterize ABS. Items such as the pulsating effort of the brake pedal during activation of ABS is important information for officers. The activation of the ABS warning lamp symbol is also important for law enforcement officers because it means that the vehicle no longer has ABS braking capability.

However, traditional power brakes will be activated until the vehicle can be returned for service. Hands-on familiarization of the ABS braking and handling system completes the last element of training. By completing the above elements of ABS familiarization and training, officers will receive information which will assist them as they meet the challenges of emergency driving.

### **SUMMARY**

Knowledge of both basic vehicle dynamics and common factors such as braking will assist the operator in understanding how to effectively control an emergency vehicle.

## Stopping Distances

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### INTRODUCTION

Students must be able to identify acceptable vehicle control methods before they demonstrate them. This objective will identify acceptable methods for the following vehicle control considerations:

- 1 Acceleration and deceleration
- 2 Braking
- 3 Vehicle positioning and steering

### CONTENT

#### ACCELERATION AND DECELERATION

- 1 Acceleration is necessary to reach desired speeds. Therefore, the function of acceleration is separate from the decisions and attitudes that influence speed selection covered in the objectives.
- 2 The driver will have to make conscious adjustments in acceleration and deceleration habits based on the following criteria:
  - a. Engine power, low gears or high gears, and engine responsiveness.
  - b. Traction conditions and design, dry or wet, materials under tires, and over-acceleration.
  - c. Roadway characteristics and, design, uphill or downhill, straight or curve
- 3 Considering the above-mentioned criteria, acceptable strategies and methods for acceleration or deceleration are listed below:
  - a. Acceleration and deceleration should be smooth, rather than rough, sudden, or aggressive: The smoothest application of acceleration is always most desirable, even when maximum acceleration forces are necessary.
  - b. Acceleration or deceleration should be in direct relationship to the vehicle's intended path of travel. Acceleration can be greatest when the vehicle is positioned in the direction desired but less when not positioned as desired. This is most noticeable when exiting a turning maneuver. Deceleration can occur at any time, including times when the vehicle is not positioned in the desired direction of travel.

#### BRAKING

- 1 The amount of braking necessary is usually determined by the available stopping distance. Early deceleration reduces kinetic energy levels, allowing for smoother stopping. In contrast, rapid foot movement from acceleration to brake usually leads to dramatic, rough braking and increased chances for loss of vehicle control.
- 2 When the driver must begin braking, the available stopping distance will directly influence the decision as to which braking method is most appropriate. Regardless of the method selected some skill is necessary.

- a. Apply pressure on the brake pedal with the upper half of the right foot, preferably with the heel contacting the floor. Try to pivot on the heel for greater sensitivity on the pedal. This involves less leg muscles and reduces unwanted “pumping” or “lock-up” of the brakes.
  - b. Avoid left foot braking. The left foot muscle must be available, if the brakes fail, to use the parking brake. Left foot braking also encourages riding the brakes. This causes brake fade and improper communication to following vehicles. Use the left foot as an “anchor” to support the lower body.
  - c. Avoid staring at the front of the hood of the vehicle while braking. Check the conditions to the rear to avoid being hit from behind. Check the conditions to the side in an effort to create an escape path-of-travel. Search ahead to see if the conditions, which forced your braking actions, have changed. Be mindful of the fact that the speed of the emergency vehicle determines the amount of distance that you need to search ahead. The greater the speed the greater the distance to be searched.
- 3 The braking method selected will likely be influenced by one of the following conditions:
- a. Controlled braking - the driver has control of the stopping distance
  - b. Sudden stops - the driver is forced to quickly stop in the shortest possible distance.
  - c. Emergency conditions - the driver combines the strategies above in an effort to respond to an emergency situation as quickly, efficiently, and safely as possible.
- 4 When an officer enters one of these three conditions, the steps below will ensure safe braking.
- a. Controlled braking
    - (1) "Early and Smooth" - steady constant pressure early, with a smooth release of pressure as the vehicle slows to a complete stop
    - (2) "Stab and Jab" or "Pumping" - apply brakes, release, apply again as necessary (applicable on wet or snowy surfaces with conventional braking systems)
  - b. Sudden Stops
    - (1) "Threshold Braking" - maximum pressure short of lock-up, releasing gradually to avoid lock-up while maintaining maximum pressure throughout (conventional braking system)
    - (2) "Antilock Braking System" - allows controlled stopping under most conditions

An antilock brake system (ABS) is the part of the vehicle's braking system that automatically controls pressure to prevent the controlled wheel or wheels from locking during braking. Motorists, when confronted with emergency situations, are likely to press too hard on the brake pedal, causing their vehicle's wheels to lock, which in turn causes skidding and loss of control. ABS, by preventing wheel lockup, allows drivers to maintain control of their vehicles even in "panic stop" situations. Maintaining control can be a key factor in collision avoidance. Most antilock systems also enable the vehicle to stop in a shorter-distance, particularly on wet or slippery road surfaces.

During ABS operation, drivers should expect to feel the brake pulsating. This pulsating occurs as a result of the brake fluid pressure changes in the brake system when the ABS is activated. This is not an unusual situation and the driver should continue applying pedal pressure as required.

Current antilock systems can release and reapply the brakes as many as fifteen (15) times per second. By allowing the wheels to continue rolling, the driver is always able to maintain control and stop the vehicle on slippery surfaces in a shorter distance than would be possible otherwise.

Antilock systems control either the two rear wheels or all four wheels of the vehicle. In general, the four-wheel systems provide better stability and control during braking compared with the two-wheel systems because the steered wheels do not lock up.

**In the event of a malfunction in the antilock system, braking without the ABS-function, is maintained on the vehicle and a warning lamp on the instrument panel alerts the driver that the ABS is in need of repair.**

Automotive service technicians who work with ABS equipped vehicles also require additional training. Technicians must receive manufacturer product service training on Antilock Brake Systems. This ensures technicians are qualified to inspect and repair vehicles equipped with ABS.

Items such as the pulsating effect of the brake pedal during activation of ABS is important information for officers. The knowledge of the ABS warning lamp symbol and functioning is also important for police officers. This explains that should the ABS warning lamp symbol "light up" on the instrument panel during driving, the vehicle no longer has ABS brake capability. However, traditional power brakes will be activated until the vehicle can be returned for service. Hands-on familiarization of the ABS braking and handling system completes the last element of training.

Officers should be taught that when the pedal is pushed on a car equipped with the Antilock brakes, there is a pulsing sensation. The antilock brakes are doing their own "pumping." An officer should not pump the pedal, otherwise, he or she will defeat the purpose of ABS or lessen the effectiveness of the brakes

#### VEHICLE POSITIONING AND STEERING

- 1 Equally important for vehicle control is the steering function and how it relates to vehicle positioning. Most drivers develop a "feeling" for where the vehicle is positioned. When they have difficulty developing this ability they will increase collision potential to the front, rear, and sides of their vehicle.
- 2 Steering is a combination of analyzing the vehicle's position and deciding where the driver wants to redirect it. Steering strategies are necessary for lateral positioning and changes in direction. Steering combines hand positioning with hand movement.

- 3 Acceptable hand positioning methods and advantages are:
  - a. "9-3" is the acceptable hand position with light finger pressure, heavier pressure with the thumb. Excellent for quick steering needs, body balance, and quick access to dashboard control items.
  - b. "9 -3" is recommended for urban driving situations where speeds are usually less than 45 mph and steering inputs are more frequent.
  - c. One hand at the "12 o'clock" position is primarily used when backing in addition to turning the body and looking in the direction that the vehicle is moving.
- 4 Acceptable hand movements for steering methods and their advantages are:
  - a. "Shuffle Steering"-avoid crossing the hands by sliding the wheel in small amounts and is best utilized in gradual turns.
  - b. "Evasive Steering - with hands at "9-3," turn the wheel ½ rotation, then a full rotation in the opposite direction, and finally back to the original position.
- 5 Regardless of which steering method is used, the driver should be aware of and concentrate on searching the desired path-of-travel. The driver will tend to steer the vehicle where he or she is looking; therefore, you should be looking (searching) at the desired path-of-travel.

## **SUMMARY**

Vehicle control methods, when misused or improperly employed, will certainly increase the likelihood of a collision. When the driver develops a foundation of acceptable control methods, acceptable perceptual, and decision-making skills, the likelihood of a collision is greatly reduced.



## High Collision Driving Maneuvers

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### INTRODUCTION

It is important for the student to identify situations, which result in a high incidence of collision involvement while the officer is performing routine driving tasks. Collision prevention requires a conscious identification of specific driving behaviors and a motivated student who recognizes acceptable behaviors and develops them into low-risk habits.

By organizing a driving maneuver into specific behaviors, the student can follow a step-by-step sequence to success. Performances are more easily evaluated when feedback is "okay" or "not okay." Successful results are more consistent and corrections are more easily made.

### CONTENT

- 1 Driving movements frequently contributing to law enforcement collisions are:
  - a. Backing
  - b. Parking maneuvers
  - c. Road positioning
  - d. Turnabouts and turns
  - e. Lane changes
  - f. Driving too fast for conditions:
    - (1) While approaching intersections
    - (2) While approaching hills
    - (3) While approaching curves
    - (4) Passing vehicles
    - (5) Following vehicles

### BACKING

- 2 Over fifty (50) percent of all non-emergency law enforcement related collisions occur while the vehicle is in reverse.
- 3 Maneuvering in reverse driving situations necessitates a slightly different application of road position. The primary consideration is the swing of the vehicle's front end during turning motions. During constant, increasing, and decreasing radius turns, the part of the reverse driving line most affected will be the point of entry.
- 4 Limits on maneuvering presents the driver with other considerations. Driving limits may be imposed by roadway width, space between obstacles, or both.

## PARKING MANEUVERS

The following methods are suggested to aid the driver when completing reverse maneuvering:

- 1 Straight line backing
  - a. Driver's body should be turned.
  - b. Driver is looking out the rear window over his/her right shoulder.
  - c. Driver's right arm is over the front passenger seat.
  - d. Left hand is kept at the twelve (12) o'clock position.
  - e. Have a clear view to the rear.
  - f. Accelerate lightly.
  - g. There should be minimum hand movement on the steering wheel as the front tires will react immediately to steering input.
- 2 Backing and Turning
  - a. Properly position hand(s) on the steering wheel.
  - b. Driver's body is turned to look to the rear in the direction the vehicle will travel.
  - c. Frequent checks of the front corners are made to check the swing of the car before turning.
  - d. Turn steering wheel with a firm control of the hands, hands always on the wheel.
  - e. Maintain speed control; in close quarters creep the vehicle.
  - f. If backing is necessary, do the backing when first arriving at a destination rather than when leaving. In non-emergency situations, always back into a parking space.
- 3 Parking
  - a. Perpendicular or stall parking
  - b. Backing into a perpendicular parking space is recommended. If you back into a parking space, you can get into and out of a tighter area than if you pulled in forward. When a police vehicle is backed into a space, the officer is able to quickly and safely move the vehicle out if an emergency situation develops after the car is parked.
  - c. Angle Parking

Angle parking used when there are 30-45 degree angle parking spaces. This type of parking is designed for head-in parking.
  - d. Parallel Parking

Parallel parking is used for backing between two vehicles that are parked next to a curb.

## ROAD POSITIONING

- 1 Road positioning means the position of the vehicle on the road to best facilitate the negotiation of a turn or curve at a safe rate of speed and the use of the available roadway to its fullest advantage with the least amount of steering. Road positioning could also be referred to as the "driving line" through a turn.
- 2 Typical turn classifications are:
  - a. Increasing Radius turn is one where an initial sharp turning angle gradually straightens away from the apex arc. Vehicle speed will be slow at the entry point and can be increased at the apex and upon exiting, relative to the configuration of the roadway.
  - b. Decreasing radius curve is one in which the turn angle becomes sharper in relation to the distance driven. In this situation, the driving speed will necessarily be decreased in proportion to the severity of the turn angle. Negotiate the turn by taking the line of least resistance to the vehicle's travel.
  - c. Constant radius turn is the most efficient driving line utilized to negotiate a turn—a driving line with a constant radius. This turn would become a full circle if permitted to continue a full 360 degrees. The actual driving distance of the turn would be approximately  $\frac{1}{4}$  of the theoretical circle.
  - d. Multiple turn situation is where vehicle control problems are likely to occur. The correct roadway position through multiple turns is a path that will reduce the amount of directional change from one turn to another. This will lessen side-to-side weight transfer, to give the tires improved traction and allow for a greater potential for control. In order to drive correct roadway position, the driver will have to equalize necessary turning motions from one turn to another while maintaining a consistent speed. The reason for equalizing turning motions and speed is that the two ingredients combined to create centrifugal force.
- 3 Three essential or critical points of reference are relevant to a radius turning movement.
  - a. Entry-point is the entry position, placing the vehicle to the extreme outside of the available roadway. This is also the point of steering input to perform the turning maneuver.
  - b. Apex-point is the apex, the most inner part of the available roadway, and is referred to as the geometric apex. It is directly centered within the driving arc.
  - c. Exit-point is the exit position, placing the vehicle again to the extreme outside of the roadway. If steering input is correctly performed from entry and maintained to the apex, the vehicle will seek this exit point on its own.

## 4 TURNABOUTS AND TURNS

Some agencies have guidelines on when to turn (or not to turn) on a public roadway. In lieu of any definite guidance, some suggestions are:

- 1 "U" turn and broken "U" turns

- a. Slow vehicle
  - b. Pull to extreme right of lane or shoulder
  - c. Check traffic
  - d. Signal intent to turn
  - e. Do not accelerate until after the turn is completed
  - f. If the turn cannot be completed in one motion, back only so far as to allow for completion of the turnabout
- 2 Right-side Roadway Turn or Use of Driveway
- a. Requires a two-lane roadway
  - b. Use same method of backing into a perpendicular parking space
  - c. Check roadway for traffic before and during maneuver.
  - d. Avoid driving head-into a driveway, as this reduces maneuverability when exiting the driveway.
- 3 Making Left and Right Turns

By using an acceptable method for turning, the driver is able to practice the necessary steps for best habit development. When the driver is aware of the necessary steps, the potential increases for avoiding errors that can cause a collision. An acceptable method is:

- a. Get speed under control.
- b. Signal intentions.
- c. Check mirrors and blind spots
- d. Get proper side position before making the turn.
- e. Scan intersection to the left, front, and before beginning to turn be sure the new path-of-travel is clear.
- f. Look into the direction of the turn before beginning to turn to be sure the new path-of-travel is clear.
- g. Maintain the proper tracking control.
- h. Keep braking forces applied (on turn initiated from a moving position) until halfway into the turn.
- i. Shuffle steering technique will give positive steering control.
- j. Accelerate after the turn.

## LANE CHANGES

Why make the lane change? What is there to gain by the change? These questions are seldom considered by those drivers having lane-changing collisions. If the lane change is necessary, then consider the following method:

- 1 Check other lanes for problems and a clear path.
- 2 Check mirrors to find an opening in the adjacent lane.
- 3 Signal intentions by having the signal lever in the on position for at least three seconds before change lanes.
- 4 Turn head - check into the blind spot, by making a quick glance over the shoulder in the direction the car is to travel.
- 5 Tracking control requires a slight turn of the wheel for a smooth, gradual, accurate movement.
- 6 Speed control may require a slight increase in speed.
- 7 Time vehicle arrival into the adjacent lane to avoid interfering with other traffic.

## DRIVING TOO FAST FOR CONDITIONS

- 1 Collision data for officers indicate that collisions result from driving too fast for conditions when:
  - a. Approaching intersections
  - b. Approaching hills
  - c. Approaching curves
  - d. Passing vehicles
  - e. Following vehicles
  - f. Passing slower traffic
- 2 Approaching intersections
  - a. Observe the intersection early.
  - b. Check the mirror for an update of rear traffic
  - c. Select the best lane and positioning for negotiating the intersection
  - d. Scan left, front, right of intersection location for potential or actual conflicts, especially restrictions to the lane.
  - e. Get the best speed control by either covering the brake or applying the brake in case any conflicts are present in your line-of-sight.

### 3 Approaching hills

- a. Determine the hill grade by observing cars disappearing.
- b. Check area to the right for possible escape path from oncoming traffic.
- c. Check mirrors for closeness of fast approaching vehicles.
- d. Keep following distance.
- e. Avoid extreme movements to either side of the lane when visibility is restricted.
- f. Reduce speed to gain more time to see over the hillcrest.
- g. Try to determine immediately, while driving over the hillcrest, if the path of travel is “okay” or “not okay”
- h. Search ahead and see what the next problem might be.

### 4 Approaching Curves

- a. For purpose of speed control in a turning maneuver, consideration must be given to throttle and brake application in relation to the vehicle's position within the driving lane.
- b. This is accomplished by dividing the driving lane into zones of activity regarding brake and throttle usage.
- c. Speed adjustment consists of the approach roadway up to the entry area or zone. The vehicle's speed will be brought to entry speed within this area. This can be accomplished by speed increase, speed reduction (straight line or threshold braking)
- d. Entry consists of the turning arc (driving lane) between the entry point and the apex. Depending on the desired technique, vehicle speed is maintained by constant throttle or adjusted by brake release.
- e. Exit area consists of the roadway from the apex to the exit point. Options exercised in this area are speed maintenance or speed increase, speed decrease, or vehicle stop. Use of the appropriate option will be determined by the situations confronting the driver.
- f. The following rules apply to rounding curves:
  - (1) Determine sharpness of curve ahead.
  - (2) Check mirrors for conditions to the rear
  - (3) Keep the following distance
  - (4) Check area to right for possible escape path from oncoming traffic.
  - (5) Going in to a left curve, keep to the right edge of the lane if the left traffic flow is okay. This will give best line of vision into the curve and best drive line into the curve.

- (6) Going into a right curve, keep to the left edge of the lane if the left traffic flow is okay. If oncoming traffic exists, center the vehicle in the lane.
- (7) Establish an effective speed control before going into the curve.
- (8) Look into the curve, trying to see to the end of the curve, and continually evaluate the conditions of the path of travel.
- (9) Acceleration can be increased after the vehicle is beyond the halfway point in the curve and if the new path of travel is okay.

## 5 Approaching and passing slower vehicles.

- a. Look ahead of the vehicles to be passed.
- b. Observe the traffic conditions to determine the best passing location.
- c. Make mirror checks, head checks, and signal intentions.
- d. Check location to the side.
- e. If crossing lanes into oncoming traffic, put headlights on to increase visibility and separation.
- f. Accelerate smoothly and quickly.
- g. Pass to the left of the vehicle and keep as far away as possible for best visibility and separation.
- h. Keep searching for changes in the traffic conditions, knowing what the escape options are.
- i. When the headlights of the passed vehicle are seen in the rear view mirror use turn signal and return to original lane:

## 6 Following Vehicles

- a. There are three major reasons why an acceptable following distance should be emphasized for patrol vehicles.
  - (1) The patrol vehicle may be traveling faster than other vehicles, which means the closure rate of the patrol vehicle to the front vehicle will be rapid.
  - (2) The motoring public, after seeing a law enforcement vehicle approaching from the rear, will often make quick and unexpected braking actions, which could increase the closure rate.
  - (3) An officer is often performing surveillance of the areas surrounding conditions, which creates distraction away from the front of the vehicle.

- b. Some law enforcement courses recommend two-second following distance and other recommend a four -second following distance. We recommend a three-to-four second following distance. The more space the driver is able to routinely keep, the less the number of surprises there will be. With fewer surprises there will be maximum control and minimum stress. An acceptable following distance can be measured by the use of seconds.
- c. How to estimate following distance by using seconds:
- d. Estimate how many seconds you are away from the vehicle you are following. Then find a fixed marker, such as a traffic sign or telephone pole, that the front vehicle is about to pass. As soon as its rear bumper is even with the maker, begin counting by 1001, 1002, 1003, 1004, and so on until the front of your vehicle is even with the same marker.
- e. Repeat this process until you can estimate the distance covered in four (4) seconds. Do this for different speeds.

## SUMMARY

There are many situations which have high frequency of collision involvement for an officer. This objective presented a sequencing of driving tasks that are divided into measurable steps. If followed, these steps can help the student acquire specific behaviors and develop good driving habits. With these actions, the student can perform safely and consistently in a high-risk situation.



## Methods of Skid Avoidance

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### INTRODUCTION

The driver who avoids skids is a truly skillful, precise, and professional driver. The mental skills used in skid avoidance are more important than skills needed to get out of a skid.

Drivers should be aware that a vehicle in a skid is a vehicle out of control. Some of the factors influencing skid avoidance are:

- 1 Perception
- 2 Steering
- 3 Braking
- 4 Speed control
- 5 Roadway positioning

### CONTENT

#### 1 PERCEPTION

- a. Searching far enough ahead of the vehicle and maintaining adequate space around the vehicle will enable the driver to identify changes in the roadway and environment early enough to allow for minor adjustments in the position of the vehicle. Maintaining less than the desired amount of space, a driver is more likely to become surprised. This surprise often necessitates a much more drastic movement with the vehicle and may result in a skid.
- b. Some perceptual and space management methods for skid avoidance are:
  - (1) Searching at least 12 seconds ahead
  - (2) Maintaining adequate following distance of 3-5 seconds from the vehicle.
- c. Practicing the acceptable search and space management methods will reduce the chances of becoming involved in a skid situation.

#### 2 STEERING

- a. By maintaining proper hand positioning and using acceptable steering methods, a driver can minimize the vehicle's weight transfer. Sudden weight transfer can result in a loss of control that may cause the vehicle to go into a skid.
- b. Steering methods for skid avoidance:
  - (1) Hand position - by keeping both hands on the steering wheel, a driver is ready for initial steering input.
  - (2) The "9-3" steering method - this position will assist the driver of the vehicle in reducing the sudden weight transfer change that may cause a skid.
  - (3) Smooth steering inputs - Abrupt steering changes may cause sudden weight transfer situations that may result in a skid.

### 3 BRAKING

- a. Using acceptable braking methods, a driver is able to avoid wheel lock-up that can cause the vehicle to go into a skid.
- b. Early braking will greatly reduce the chances of wheel lock-up.
- c. Early braking is dependent on recommended searching and braking habits.

### 4 SPEED CONTROL

- a. By practicing speed control habits during non-emergency driving, a driver is able to develop a better sense of risk assessment for emergency response driving. To be sensitive to loss of traction, a driver must be aware of subtle changes in speed and situations that may cause a driver to want to exceed reasonable and prudent speeds.
- b. Speed control methods that will increase a driver's ability to avoid skid situations are listed below.
  - (1) Develop acceptable acceleration and deceleration habits
  - (2) Develop acceptable space management methods
  - (3) Increase awareness to speed and speed changes. The difference skidding and not skidding situations may only be 2-3 mph.
  - (4) Develop sensitivity to different traction surfaces.

### 5 ROADWAY POSITIONING

- a. The Lane Selected by the driver (and the position chosen within the lane) will significantly affect a driver's ability to avoid a skid.
- b. The more a vehicle has to move laterally, the greater the chances that it will become involved in a skid. By searching at least 12 seconds ahead of the vehicle, a driver can identify potential problems early, decide the appropriate path-of-travel, and begin to execute movement away from the potential problem. If the problem materializes, the driver has already moved the vehicle into a strategic position that will decrease the amount of steering input and severity of the vehicle's steering response.
- c. Roadway positioning methods for skid avoidance include:
  - (1) Lane selection - review space management systems
  - (2) Lane position within the lane - the vehicle favors whatever portion of the lane it is in -center, left, or right.

### SUMMARY

All drivers have the potential of becoming involved in a skid. Officers spend more time on the road than the average driver and have an even greater chance of becoming involved in a skid. By identifying the factors that can cause skids and practicing the methods necessary to prevent and control skids, the officer significantly reduces skid potential and increases vehicle control.

## Skid Control & Types of Skids

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### INTRODUCTION

When a vehicle's tires lose traction - with the roadway surface, the vehicle is in a skid. Regardless of the geographic location, officers throughout the country have the potential of becoming involved in skid situations.

Drivers erroneously believe that skids occur only in bad weather or while driving at high speeds. Emphasis should be placed on the fact that skids may occur during all types of driving: non-emergency, emergency, or pursuit. An officer on patrol may be distracted by a suspicious vehicle, and while looking at that vehicle, become surprised by the actions of another driver. This situation may force the officer to perform a drastic maneuver to avoid a collision, resulting in a skid.

There are many ways in which the driver, the environment and the vehicle can create a skid situation. It is important that officers be made aware of these factors and learn the skills needed to prevent or overcome a skid.

### CONTENT

There are a number of different types of skids. This objective will cover:

- 1 Braking skids
- 2 Cornering skids
- 3 Power skids
- 4 Front wheel skids
- 5 Rear wheel skids
- 6 All wheel skids

#### 1 BRAKING SKIDS

##### a. Conditions

- (1) One or more brakes lock up. The direction of travel will be dependent on the number and location of the wheels that lock up.
- (2) There is loss of steering if front brakes are locked
- (3) There is an increase in the braking distance when one or more wheels are locked,

##### b. Examples of contributing factors:

- (1) The driver brakes too late, or brakes too hard due to inadequate following distance, panic, or miscalculation.
- (2) The sun's glare blocks the driver's line of sight, resulting in a late brake.
- (3) The vehicle's brakes are improperly adjusted

- ##### c. Solutions: Release a minimum amount of brake pressure just until the wheels unlock. Steer in the direction the vehicle is to go.

## 2 CORNERING SKIDS

- a. Conditions
- b. While trying to negotiate a turn or a curve, the vehicle exceeds the limitations of adhesion.
- c. Examples of contributing factors:
  - (1) The driver over-steers, under-steers, or approaches the turn too fast
  - (2) The roadway is bumpy or is covered with loose debris
- d. Solution: Ease foot off the accelerator. Stay off the brake and steer in the direction the front of the vehicle is to go.

## 3 POWER SKIDS

- a. Conditions
  - (1) The driver over-steers, over-accelerates, and over-brakes.
  - (2) The roadway is covered with loose debris.
  - (3) The vehicle has too much weight behind the rear axle or poor shocks
- b. Solution: Stay off the accelerator and the brake. Steer in the direction the front of the vehicle is to go.

## SUMMARY

There are many ways an officer can become involved in a skid. The number of hours spent driving, the various weather conditions, and the distractions that the officer is faced with due to the nature of the job are just a few of these ways. By being made aware of these various skids and the methods for controlling them, an officer is more likely to be able to properly handle a skid situation.

## **Radio Communications**

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An officer needs to know how to use the radio without losing control of the vehicle or creating a situation that would distract the driver's concentration.

If possible, the desirable time to use the radio is:

- 1 On straight roads, when steering skills are not needed - this will prevent the microphone cord from becoming wrapped around the steering wheel assembly.
- 2 On flat roads, rather than hilly
- 3 When stopped
- 4 When the driver is able to search forward and to the sides for changing conditions, rather than during moments when visibility is temporally restricted by other vehicle or objects.
- 5 During the slower speeds of an emergency response or pursuit.

Some additional suggestions for increasing vehicle control include:

- 1 Avoid driving one-handed.
- 2 Find a consistent location to secure the microphone during non-emergency or emergency moments.
- 3 Keep the windows up to reduce sound distraction
- 4 If available, have a partner use the radio
- 5 Know the correct radio codes, language, street names, and locations.
- 6 Speak clearly and efficiently; avoid time-consuming conversations.

### **SUMMARY**

Proper utilization of the emergency vehicle's communication radio will minimize the possibility of a collision due to a lack of control on the steering wheel.

# ***EMERGENCY DRIVING***

## INDIANA LAW ENFORCEMENT ACADEMY LESSON PLAN

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Course Level:      Basic X i-Service X      Supervision      Management      Specialized

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Lesson No. Title: Non -Emergency Driving      Hrs. Required: 4 of 4

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Scope of Lesson Coverage: Develop accepted attitudes for safe driving and decision-making for collision avoidance, while learning to simultaneously integrate the tasks of driving and law enforcement.

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Specific Objectives: Students will learn the aspects associated with law enforcement driving and the effects that attitudes and emotions have upon law enforcement.

- 1    Specific Objectives: Students will learn the aspects associated with law enforcement driving and the effects that attitudes and emotions have upon law enforcement while responding in an emergency mode.
- 2    Given a lecture, students will identify the types and limitations of emergency warning devices on law enforcement vehicles.
- 3    Given a lecture, students will identify factors used in route selection for an emergency response.
- 4    Given a lecture, students will identify the changes in vehicle dynamics that occur during an emergency response.
- 5    Given a lecture, students will identify acceptable steering methods for use during an emergency response.
- 6    Given a lecture, students will identify acceptable methods of cornering during an emergency response.
- 7    Given a lecture, students will identify acceptable backing methods used driving an emergency response.
- 8    Given a lecture, students will identify acceptable collision avoidance methods during an emergency response.
- 9    Given a lecture, students will identify several types of power assist steering losses and acceptable methods of minimizing potential loss of vehicle control.

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Training Aids, equipment, etc., required:

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Material for issue: ILEA Driver Training Manual

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References: ILEA Driver Training Manual  
Law Enforcement Driver Training Reference Guide, 2000

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Prepared by: Nick Schiavarelli      Date: 06/17

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ILEA/180

### INTRODUCTION

When properly used, emergency-warning devices may enhance the officer's ability to maneuver in traffic and reduce the risk to self and others.

### CONTENT

#### 1 HEADLIGHTS

- a. During daylight hours, headlights should be used in conjunction with emergency overhead lights.
  - (1) Headlights are usually more discernable than traditional red or blue overhead lights in the daytime.
  - (2) Most drivers will see headlights before they hear the siren or see the overhead lights.
  - (3) Emergency flasher lights may be helpful in daylight hours.
- b. During hours of darkness, high beam lamps have a tendency to obliterate the emergency lights and blind oncoming drivers.

#### 2 LIGHTS AND SIREN

- a. Sirens are often required by statute, regardless of the time of day, when engaged in emergency driving; and some states now require by statute the utilization of overhead lights and siren in an emergency response.
- b. Emergency lights and sirens are not substitutes for exercising caution and using the driving skills that you have mastered.
- c. Various factors affect the siren's audibility and the light's visibility.
  - (1) Weather Conditions
    - (a) The siren may be heard sooner on an overcast or cloudy day.
    - (b) Siren audibility tends to dissipate into the atmosphere on clear days.
    - (c) Fog will allow sound to carry through its moisture with a minimum loss of decibels at close range. The greater the distance, however, the greater the sound blockage.
    - (d) Emergency lights are virtually ineffective in foggy weather.
    - (e) Inclement weather of any kind greatly reduces the value of lights and siren. The quality of the driving then becomes even more critical.



(2) Vehicular Traffic Conditions

- (a) Sirens become less discernible with the increase of traffic noise.
- (b) Large vehicles, such as heavy trucks and buses, will decrease the effectiveness of the siren.

(3) Location

- (a) The siren may be less discernible in a residential area. Large trees and hedges tend to absorb sounds.
- (b) Tall buildings tend to block out, deflect, or tunnel sound transmission. When this occurs, the value of the siren is diminished.
- (c) In flat, open areas the sound of a siren can be heard for a greater distance.

(4) Pedestrian Traffic Conditions

- (a) Emergency lights may not adequately warn pedestrians.
- (b) Sirens offer greater warning to pedestrian traffic.
- (c) Great care and caution must be taken in areas congested with foot traffic.
- (d) The use of warning devices in school zones is enhanced by a reduction in speed.
- (e) Speed control is the preferred response in areas where pedestrian traffic is the norm.

(5) Citizen Awareness

- (a) Drivers and pedestrians are not always attentive, so they may not see or hear an emergency warning device. They may be distracted by one or more of the following:
  - (i) Children misbehaving
  - (ii) Conversation with passenger
  - (iii) Radio on loudly
  - (iv) Air conditioning or heater fan noise
  - (v) Windows rolled up
  - (vi) Construction
  - (vii) Law enforcement activity in another area
  - (viii) Sightseeing problems

(b) The public may respond to the warning by panic stopping, panic steering, or sudden acceleration.

(6) Speed and Emergency Equipment Warning Devices

(a) As speed increases, the effectiveness of the siren decreases.

(i) Due to the increase of speed and the resultant increase in feet per second traveled by the emergency vehicle, other drivers and pedestrians may not have sufficient time to react to the sound of the siren.

(ii) As speed increases, a driver may not hear the siren until the officer is one or two car lengths behind the vehicle.

(b) As the officer's speed increases, the chances of having a collision increases and the time for processing information and decision-making decreases.

(c) The lights and siren also affect the officer's behavior.

(i) Tunnel vision develops at high speed and the officer tends to forget that the emergency warning devices are operating.

(ii) Speed reference is lost due to the elimination of the sounds of speed, such as wind and engine noise.

(iii) The use of emergency lights and siren may provide a false sense of security. Don't succumb to the "Invincibility Syndrome." These warning devices are there to benefit the public. The responsibility for safe driving rests with the officer.

## **SUMMARY**

Emergency warning devices are a means of communication. Communication is a process involving the sending of messages, reception of message, and confirmation of an understanding of the message. When the emergency message is sent early, prior to arrival of the law enforcement vehicle, the pedestrian's and driving public's reaction will be more reliable and consistent.

# Emergency Radio Communication

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## INTRODUCTION

The student will need to master one acceptable way of utilizing the radio in emergency situations. Individual agency policies and procedures may differ because of varying requirements. When the student returns to their individual agencies, they should learn and master those requirements and follow them.

## CONTENT

### VALUE AND IMPORTANCE OF RADIO SKILLS

Of the many skills that students are expected to master, few are more importance than the operation of the police radio. Accurate and precise use of the radio in emergency situations become more critical.

- 1 It is important to the officers and to fellow officers because it can:
  - a. Improve the office's effectiveness by reducing response time in emergency and pursuit situations.
  - b. Increase the likelihood of obtaining help when it is needed.
  - c. Make the difference between effective and ineffective response.
- 2 The radio is the officer's source of communication between the dispatcher and fellow officers. Use it effectively and efficiently in order to avoid disaster.

### RADIO TRANSMISSION ACCURACY

It is important that any information, which the officer transmits over the radio, be as accurate as possible. Inaccurate information may cause fellow officers to take inappropriate action and can result in a delay when requesting help or assistance. Regardless of how accurate and brief the message, when the dispatcher or other units cannot understand it, it is of no value.

### TONE OF VOICE

The tone of voice should be calm, natural, and relaxed.

### CONTROL OF EMOTION

The officer needs a good attitude when transmitting during emergency situations. The officer should always strive to be calm. A calm voice is easier to understand than an excited one. The more critical the situation the officer is reporting, the more important it is to transmit clearly. In stressful situations, the rate of speech frequently increases. Consequently, the officer must attempt to control emotions so everyone hears and understands the transmission.

### ENVIRONMENTAL FACTORS

There are a number of environmental conditions which may impact the quality of the officer's radio transmission.

Some common conditions are:

- 1 The siren
- 2 Heavy traffic
- 3 Loud engine noise from sudden acceleration

## TRANSMISSION CONTENT

The agency's policy will be the best source for determining exactly what information is to be transmitted during an emergency situation. There are a number of things, however, that may be consistently included:

1. Tell the dispatcher who you are.
2. Advise the dispatcher of your emergency situation
3. Indicate location and direction.

## THE TEAM APPROACH

The critical participants in radio communication are the dispatcher and the officer(s) involved in an emergency situation. Law enforcement vehicles operating with two officer assignments need to agree upon a division of labor during an emergency situation. It is advisable to have the non-driver maintains communication. An officer in a single assignment unit must exercise greater care and caution when doing both. Remember that the officer can expand the size of the team by providing quality information to fellow officers.

## SUMMARY

Radio communication is more critical in emergency situations. An officer must be prepared to use the radio efficiently and effectively. Ability to do so will enhance the officer's potential for responding to the emergency situation with quality police work.

## **Emergency Route Selection**

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### **INTRODUCTION**

An officer responding to an emergency will want to reach the desired destination as quickly as possible. The officer must do everything possible to ensure a prompt arrival. This means selecting the route that is the safest AND the one that will ensure the quickest arrival.

### **CONTENT**

#### **ROUTE SELECTION FACTORS**

- 1 Response management is most directly affected by traffic density: Avoid roads where heavy or uncooperative traffic patterns exist, especially commercially zoned areas. Avoid roads frequented by slow moving or large vehicles such as tractor-trailers or farm equipment.
- 2 Avoid locations of heavy pedestrian traffic, such as school zones, busy intersections, bus loading and unloading zones, and parked cars.
- 3 Avoid slow moving traffic conditions, such as construction zones, special entertainments events, bumper-to-bumper traffic, and rough pavement roads or roads that have potholes, multiple bumps, and non-paved surfaces.
- 4 Select roads having acceptable line-of-sight conditions. Avoid roads with hills and curves, poor visibility at intersections, or poor visibility due to parked vehicles.
- 5 One-way streets offer the advantage of avoiding oncoming traffic, but the disadvantage of approaching all vehicles from their rear -the area they tend to be least aware of while driving.
- 6 Traffic density, day of the week, road, weather, and visibility conditions are other factors to lie considered.
- 7 An officer responding to an emergency should try to select a route which will offer the following:
  - a. The least amount of steering and speed adjustment requirements.
  - b. Approaches to intersections offering acceptable line-of-sight and legal right-of-way.
  - c. The quickest, most direct route.
  - d. The route that will give the least interference to the emergency warning devices being seen and heard.
  - e. The routes that are the widest and have available escape paths to the sides.
  - f. The route which will assure safe arrival.

### **SUMMARY**

Route selection is often a low priority for a non-emergency response. However, proper route selection is critical during emergency response. When an officer "practices" route selection during non-emergency driving, the chance that the best route decision for an emergency response will be made increases. The emphasis should be on arriving at a destination safely, with speed as the last consideration.

# Vehicle Dynamics – High Speed

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## INTRODUCTION

As the officer responds to an emergency, the vehicle will usually travel at speeds greater than normal. With increased speed and the distraction from driving caused by the emergency condition, the officer should understand how the vehicle dynamics will change.

## CONTENT

The following concepts are consistent with increased speeds:

### 1 STEERING

- a. Counter-steering - Due to speed and weight transfer, the vehicle may experience a side skid while negotiating a correct turn. The skid will necessitate counter-steering, which is steering into the skid, i.e., the direction in which the vehicle was to go originally:
- b. Over-correct steering - In a secondary skid, there is a tendency to over correct steering input and allow the vehicle to get into a lesser skid in the opposite direction. This skid requires a conscious effort on the part of the driver to carefully control the steering of the vehicle;
- c. Steering in a skid - When the vehicle brakes lock up, there is a loss of control in the steering of the vehicle. Regardless of the steering, the vehicle will proceed in a straight line. This skid requires the operator to release the brakes and use threshold braking method.
- d. Under - steer front wheel skid - The handling characteristics of a vehicle that is under-steered tends to increase the desired cornering radius as the vehicle progresses through a turn. To correct this condition, the driver should slowly straighten the steering until directional control is regained. "If the tires squeal, straighten the wheel."
- e. Over - steer rear wheel skid - The handling characteristics of a vehicle that is over-steered tends to reduce the desired cornering radius as the vehicle progresses through a turn. To correct this condition, the driver should slowly straighten the steering and use weight to control the rear of the car. For every steering adjustment made, an equal adjustment needs to be made in opposite direction in order to maintain control

### 2 BRAKING

- a. Front Wheel Lock-up:
  - (1) Caused by improper brake adjustment or slick spot on the road.
  - (2) Causes reduces braking ability and loss of steering.
  - (3) Rear wheels act as a rudder and maintain straight ahead slide.
- b. All Wheels Locked
  - (1) Caused by a panic situation in which brakes are applied abruptly and hard enough to lock all four wheels

(2) The vehicle will probably skid in a straight line as long as variables such as road surface, tire tread, and air pressure are fairly even.

c. Rear Wheel Lock-up

Is caused by improperly adjusted brakes which cause rear wheels to lock while front wheels continue to rotate.

d. Brake Fade

(1) Most common during a drive when frequent use of the brakes does not allow for proper cooling

(2) The brakes are unable to grab and stop the wheel movement

### 3 CORNERING

a. Centrifugal Force-As a vehicle travels around a corner at high speed, there is an increase in the centrifugal force which impels an object outward from a center of rotation.

(1) A turn or curve cannot be entered at a speed greater than the driver and vehicle can handle.

(2) Any braking done in a curve will take away from the steering capability.

(3) No increase in acceleration should occur until the vehicle begins to exit the curve.

b. Centripetal Force - Opposite of centrifugal force, which must act on a vehicle in order to cause it to move in a curved path.

Centripetal force and centrifugal force must be in balance when driving around a curve or turning a corner.

### 4 WEIGHT TRANSFER

a. It occurs when the vehicle changes velocity or direction.

b. As a vehicle accelerates, the front lifts, causing weight in rear to increase. This weight shift to the rear can cause loss of traction for front-drive vehicles, but increase traction for rear-wheel drive vehicles.

c. When braking the vehicle, weight is transferred to front wheels which have high braking efficiency.

d. Change in direction transfers weight from one side of the vehicle to the other, which is more noticeable in vehicles with high center of gravity.

## SUMMARY

When the student understands how vehicle dynamics change during the increased speeds of an emergency response, the chance for vehicle control increases significantly.

## **Types of Corners – Curves**

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### INTRODUCTION

During emergency response driving situations, increased speeds are to be expected. With increased speeds comes the need for increased skills to drive through turns and curves. The officer should be able to perform a precise step-by-step system for cornering during increased speeds.

### CONTENT

The officer should understand the types of corners that are common to highway design. Corners are divided into three (3) types:

- 1 Constant Radius -requires constant, consistent steering
- 2 Increasing Radius -requires sharp to gradual steering
- 3 Decreasing Radius -requires gradual, then sharper steering

### CORNERING METHODS

- a. Search 12 seconds ahead and evaluate the conditions of the corner being approached.
- b. Start lane position adjustments prior to reaching the corner. Position to the outside or wide position. You must stay within your lane.
- c. Depending on the approach speed, braking may not be necessary. Speed control can be acquired through deceleration, threshold braking or trail braking.
- d. Begin steering actions while driving towards the apex of the corner. Avoid aggressive steering movements. The apex will be located to the inside or tight portion of the corner.
- e. As the vehicle passes through the apex, the driver should steer the vehicle toward the desired exiting position within your lane.
- f. Acceleration methods and steering adjustments are added at this same moment.

### ADDITIONAL CONSIDERATIONS

- g. Have speed under control before entering the corner to avoid heavy braking.
- h. Select apex location carefully, in accordance to the desired outcome.
- i. Use of the travel lane must take into consideration the line of sight restrictions and the legal lane limitations, roadway design characteristics (such as surface conditions), crowned roadway, and traffic patterns.

### SUMMARY

Any driver can approach a corner at high speed. The true talent is in the successful completion of the cornering maneuver. Through the use of an acceptable cornering method, the officer increases vehicle control through the turning situation. The officer also is able to identify and correct errors in method while cornering before losing vehicle control.



## **Emergency Backing Technique**

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### **INTRODUCTION**

With good routine backing habits, an officer will be able to minimize the risks generated while backing during an emergency. The chances for a backing collision increase with emergency response because officers seldom practice backing at higher speeds and heightened emotions.

### **CONTENT**

Acceptable backing methods for use during emergency response include:

- 1 Avoid backing unless absolutely necessary.
- 2 Back in a straight line if possible.
  - a. Keep left hand on top of the steering wheel.
  - b. Twist body to look out rear window.
  - c. Check mirrors and front of vehicle periodically.
  - d. Avoid steering dramatically, as the front of the vehicle will be extremely sensitive to steering actions.
  - e. Keep speed constant.
  - f. Brake smoothly, as front wheel lock-up is likely if hard braking is applied.
- 3 If turning is necessary, the best strategy is to avoid trying to save time by hurrying a maneuver. Turn in reverse safely and carefully and absorb the time in an attempt to guarantee successful completion of the reverse maneuver.
- 4 Avoid backing long distances whenever possible. Turn the vehicle around and maneuver in a forward gear.

### **SUMMARY**

The student should understand that reverse maneuvering in an emergency response will be much more difficult due to heightened emotions and greater speed. By practicing the suggested backing methods mentioned and combining them with the methods mentioned in this manual, the student will develop a thorough foundation of knowledge on which to base backing decisions.

# Emergency Collision Avoidance

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## INTRODUCTION

While responding to an emergency, the urgency for response, increased speeds, and emotional involvement, tends to distract the officer from the perceptual demands of driving. Collision avoidance maneuvers become more critical and necessary as the driving and pedestrian public react or fail to react to emergency warning devices.

## CONTENT

There are various methods that can be used for collision avoidance.

- 1 Quick, sudden braking.
- 2 Evasive steering or sudden lane change
  - a. Usually performed when the driver's intended path-of-travel is suddenly blocked by an object, pedestrian, or vehicle.
  - b. The driver should position the hands at the 9-3 steering location
  - c. The driver should turn the steering wheel no more than ½ rotation in the necessary direction, and return the wheel twice as far in the opposite direction, and finally straighten the wheel. A third steering movement of a lesser amount may be necessary to keep the back end from swaying.
  - d. This maneuver requires available roadway to the sides, allowing for lateral vehicle positioning.
- 3 Clearing intersections
  - a. Allow for others users to adjust to the law enforcement vehicle's approach.
  - b. Adjust speed to allow other users to see and hear the emergency warning devices.
  - c. Slow or stop at all intersections.
  - d. Use quick, yet thorough, searching methods to clear the intersection to the left, front, and right streets.
  - e. Look for additional emergency response vehicles.
  - f. Change siren pattern to attract attention with a different sound.

Assuming a collision will happen, there are ways to reduce injury and damage to the vehicle and avoid having the collision take place in the driver's door panel of the vehicle. Try to strike the objects at an angle, thus deflecting some of the impact forces. The driver must maintain steering and braking control to avoid colliding with additional objects after the first collision.

## SUMMARY

The officer should attempt to drive in a manner that will not require the use of collision avoidance maneuvers. However, under emergency response conditions, the potential for collision avoidance maneuvers increases. By identifying these methods and identifying personal skills, the student can choose the most appropriate collision avoidance maneuver when necessary.

# PURSUIT DRIVING

## INDIANA LAW ENFORCEMENT ACADEMY LESSON PLAN

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Course Level:      Basic X In-Service X      Supervision      Management      Specialized

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Lesson      No.      Title: Pursuit      Driving Hrs. Required: 4 of 4

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Specific Objectives: Students will learn the aspects associated with pursuit law enforcement driving and the catastrophic outcome that could occur if unable to properly control the law enforcement vehicle.

1. Given a lecture students will identify the factors that impact on initiating a vehicle pursuit
2. Given a lecture students will identify factors involved when conducting a vehicle pursuit.
3. Given a lecture students will identify factors that would warrant the pursuing officer, or a supervisor, making the decision to terminate a vehicular pursuit.
4. Given a lecture students will identify factors that impact on the termination of a pursuit: suspect voluntarily or involuntarily stopping.
5. Given a lecture students will identify the factors to be considered when a law enforcement vehicle is involved in the termination of a vehicular pursuit using various intervention techniques.
6. In a practical driving situation students will demonstrate the ability to conduct a pursuit.
7. Given a lecture students will identify post-litigation preparation considerations.

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Training Aids, equipment, etc., required:

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Material for issue: ILEA Driver Training Manual

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References: ILEA Driver Training Manual  
Law Enforcement Driver Training Reference Guide, 2000

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Prepared by: Lt. Nick Schiavarelli      Date:    06/17

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ILEA/180

## Vehicle Pursuits

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### INTRODUCTION

There is a school of thought that seems to be gaining ground that would discourage all vehicular pursuits. This trend is the result of public outcry regarding the perceived danger that the public, the violator, and the officer are exposed to during pursuits. The threat of litigation against the individual officer and the agency depending upon the conduct and outcome of the pursuit are also being considered.

The question at issue should not be are pursuits dangerous; we know they are. The question that must be addressed is when does a demonstrated need to conduct vehicular pursuits under explicitly defined circumstances exist. It is incumbent upon agencies to provide their officers with a training program specifically designed to address those factors that affect the critical decision of whether or not to engage in a vehicular pursuit, and when to terminate a pursuit once begun.

### CONTENT

Consideration of the following factors will assist officer in determining where to initiate a pursuit.

### LEGAL AUTHORITY AND AGENCY POLICY

The guidelines set forth by state law and agency policy are not optional. Officers are bound by these restrictions whether they personally agree with them or not. Officers must be absolutely sure what the state law and agency policy allow and that they DO NOT exceed those limitations.

### ENVIRONMENTAL FACTORS

- 1 Weather conditions affect vehicle operation and must be considered in the pursuit decision.
- 2 Traffic conditions such as density, patterns and speed must be considered when pursuing. Not all pursuits will involve high speeds. The speed of the fleeing vehicle will most likely be controlled by these traffic conditions, which will continually change, requiring ongoing evaluation and consideration as to whether or not the pursuit should be continued.
- 3 Population conditions such as urban areas, school zones and industrial zones will affect the pursuit. This consideration will include the area that the pursuit is currently in, as well as the area that the pursuit may be entering.
- 4 Time of day/day of the week considerations vary continually. Daylight affords the best visibility; dawn/dusk light tends to distort depth perception; and darkness greatly diminishes visibility. Traffic volume in urban areas may increase on certain days of the week. School buses may be operating in rural and residential areas during morning and afternoon hours.
- 5 Roadway design and conditions affect the pursuit greatly. The pursuit will undoubtedly create less danger on a four-lane divided highway than on a crooked, narrow, two-lane rural highway or in an urban residential area. In addition to the design the condition of the roadway itself may create further danger. Officers should beware of any loose material on the road surface and use caution when pursuing on dirt gravel roads.
- 6 Visibility conditions may be affected by other environmental factors. Weather and time of day have the most obvious effect on visibility. The increase of speed will reduce the officer's peripheral field of vision. Dirty windshields and headlamps can also contribute to this reduced visibility. Officers should remember that every time they clean their windshield, they should also clean their headlamps.

## VEHICULAR FACTORS

- 1 Tires are the single most important component of the vehicle. Tires must be examined daily prior to the vehicle's tour of duty for tread wear, cuts, bruises, abrasions, and foreign objects that have penetrated the tire. The air pressure must be checked daily and corrected if necessary. If any defect is discovered during the tire examination, the tire must be replaced or repaired prior to beginning the tour of duty.
- 2 Brakes are of vital importance in the operation of the vehicle. Officers should remain attentive to the way the vehicle responds during each application of the brakes. Unusual noises, poor response or brake pulling in either direction should be checked and corrected immediately. If the officer should experience any problem with the vehicle's braking system during vehicle operation, the vehicle should be taken out of service until the problem is corrected. This is especially true during pursuits. Any vehicle experiencing braking problems, including brake fade, should be immediately terminated from participating in the pursuit.
- 3 Suspension systems on vehicles should be checked routinely by appropriate maintenance personnel. Officers should remain aware of the "handling" or "response" of the vehicle. If problems in the suspension develop, the vehicle should be taken out of service until the problem is corrected.
- 4 Emergency warning devices are just that, devices designed to warn other motorists of the approach of an emergency vehicle. They are a means of communication. As such, they require that the other motorist first hear or see them, mentally process what they are, and react to them. Officers must be aware of the legal requirements and their agency policy regarding emergency warning devices. The use of these devices does not guarantee the officer safety, authorize the officer to violate legal restrictions or agency policy, nor does it allow the officer to operate the vehicle without due regard for the safety of others. Both audio and visual warning devices should be used during a pursuit. Unmarked vehicles should terminate participation in the pursuit as soon as a marked vehicle can be utilized.
- 5 Mechanical failure can be greatly reduced by regular vehicle inspection and proper preventive maintenance. Officer should immediately correct any mechanical malfunction that is discovered during the vehicle's pre-operational inspection or occurs during any patrol operation. Any vehicle that experiences any mechanical failure during a pursuit should immediately terminate participation in the pursuit.

## HUMAN FACTORS

When considering the human factors involved in initiating a pursuit, we must consider the two individual participating, the officer and the violator, and their individual roles in the pursuit.

- 1 The Officer
  - a. Psychological factors that affect an officer's ability to conduct a safe and effective pursuit includes stress and attitude. The stress an officer may endure during a pursuit is considerable and may possibly affect his or her ability to make proper judgments and decisions. The officer's attitude and emotions are also affected by stress. Officers should avoid taking pursuits personally. Officers must control their emotions, remain calm, and not cause others to take unnecessary risks.

- b. Physiological factors such as fatigue or poor physical fitness, are often related to an officer's psychological state. Irregular hours, shift work, poor eating habits, secondary employment and alcohol or substance abuse tend to produce these effects. Officers have a duty to the public, their families, and themselves to remain in top physical condition. Officers who fail to do so should avoid situations as physically demanding as pursuits. This factor affects senses such as vision, hearing, smell, and touch, all of which provide the input-data needed for decision making during pursuits.
  - c. Vision supplies 90% of incoming data. At high speeds peripheral vision narrows and depth perception is less accurate. Night pursuits will incorporate these along with reduced field of vision and color recognition.
  - d. Hearing provides 5% of input from traffic, the pursuit vehicles tires, other emergency vehicles and radios.
  - e. Smell can help detect and differentiate between odors of gasoline, brake or engine overheating or electrical shorts.
  - f. Touch provides 5% input from the hands, feet, and buttocks as to the vehicle's dynamics.
  - g. During a pursuit, the body receives an "adrenaline kick", due to the heightened anxiety and emotion, which provides assistance to body functions and reactions. Officer should learn to expect this adrenaline boost and use it to their advantage rather than letting it lead to faulty decisions.
- 2 The violator

- a. Psychological factors that may affect the violator are often the same as for the officer-stress and attitude. However, their effect is much different. The stress the violator may endure is his/her attempt to elude arrest is often great and most certainly will affect their ability to make proper judgments and decisions. The violator's goal in the pursuit is to elude arrest. Attitude and emotions are most likely out of control, and they have no need to regain that control. To the violator, there is no need to remain calm, and much can be gained by taking unnecessary risk. With the violated the pursuit is personal.
- b. Physiological factors such as fatigue, poor physical fitness and impairment may often be associated with a violator's psychological state. Alcohol and drug consumption are often producing these effects. These factors affect the senses such as vision, hearing, smell, and touch, (all of which provide the input-data needed for decision making during the driving) and may contribute to poor decision-making.

## ETHICAL CONSIDERATIONS

The role of the officer during a pursuit must be totally understood. The public generally perceives the officer's role as a protector of lives and property, and rightly so. Officers must recognize this role, or duty, extends not only to the public, but to themselves, their fellow officers, and even to the violator. Therefore, it is imperative that officers maintain the highest ethical and professional standards during any involvement in a pursuit situation. An officer's involvement may entail the role of the primary pursuit vehicle, the secondary pursuit vehicle, or no more than the monitoring of radio communication concerning a pursuit being conducted by other officers.

The decision to engage in a pursuit will be easier to make than the decision to terminate a pursuit. Involved officers must remain professional, focused on the task at hand and the skills required to complete the task, and not allow themselves to become emotionally or personally involved. While it's true that flagrant violators cannot be allowed to use the highways freely for unlawful purposes, neither can law enforcement officer engage in pursuit with reckless disregard for the safety of the public.

#### **SUPERVISION CONSIDERATIONS**

All pursuits should be supervised. Supervision of the pursuit should consist of another individual, a ranking officer or not, who is not directly involved in the pursuit operation and is capable of making objective decisions. During the duration of the pursuit, multiple law enforcement agencies, officers, and vehicles may become involved. Officers must consider that need for assistance and the risk involved in obtaining it. Generally, no pursuit should involve more than two (2) or three (3) vehicles in direct pursuit. The primary pursuit vehicle is responsible for the actual pursuit task. The secondary pursuit vehicle is responsible for communications and back-up. Other officers and vehicles should monitor the progress of the pursuit, travel at legal speed, position themselves to assist if necessary, and maintain radio silence.

#### **SERIOUSNESS OF THE OFFENSE -SUSPICION CONSIDERATIONS**

Offenses and suspicions may be classified depending upon their immediate threat to the public. The level of continuing threat must be considered when deciding to initiate, continue, or terminate a pursuit. Officers should refer to the guidelines that are set forth by state law and agency policy. Officers are bound by these restrictions whether they personally agree with them or not. Officers must be absolutely sure of what their state law and agency policy allows, and NOT exceed those limitations.

#### **SUMMARY**

The decision to flee is made by the violator, but the decision of whether to pursue or continue pursuing is made by the officer. The factors presented here should assist the officer in forming the correct decision.



### **INTRODUCTION**

Once an officer decides to initiate a vehicular pursuit, professional pursuit driving tactics and strategies must be utilized. Lacking this knowledge will increase the officer's probability of being involved in a collision and diminish the chances of conducting a pursuit. Officer should become familiar with the factors involved in conducting a vehicular pursuit. A working knowledge of these factors will greatly enhance the officer's chance of conducting a pursuit successfully and safely.

### **CONTENT**

#### **CONDUCTING A PURSUIT - RECOMMENDED PURSUIT STRATEGIES**

- 1 Generally, no more than two or three law enforcement vehicles involved in direct pursuit. This will prevent caravanning which serves no useful purpose, is dangerous, and looks silly to the press and public
- 2 The pursuit should be conducted by officers who are not emotionally involved. Upon determining that an officer has displayed an inappropriate attitude or behavior, that officer should be removed or replaced if the pursuit is to be continued.
- 3 Unmarked vehicles, covert surveillance vehicles, vans, motorcycles, and law enforcement vehicles with civilian passengers should not be involved in the pursuit. If the pursuit is initiated by an unmarked vehicle, the unmarked vehicle should relinquish the pursuit to the first available marked vehicle.
- 4 Compensate for inability to see approaching traffic at an intersection
- 5 No intentional contact with the violator vehicle i.e., P.I.T. maneuvers, ramming, blocking, fixed or moving roadblocks should be initiated unless a forcible stop is authorized or required and the officer is trained in the maneuver.
- 6 No shooting at, or from, moving vehicles unless agency policy authorizes and the officer is in conformance with the State of Indiana's deadly force statutes.
- 7 Emergency warning devices should be in operation at all times. The officer needs to remember that emergency 4-way flashers in operation will prevent the cruiser from signaling directional changes.
- 8 Maintain good driving techniques, both hands on the steering wheel, proper use of restraint systems, and proper braking techniques.
- 9 The interior of the law enforcement vehicle must remain free of loose objects. In case of a collision, any loose objects inside the vehicle is a potential missile which can severely injure any occupants.

## COMMUNICATION TACTICS

Professional communications is one of the primary keys to the successful termination of a pursuit. Using communications effectively in the pursuit environment has two primary goals, either of which may involve the coordinated activities of other law enforcement agencies vehicles and officers: (1) to enhance the safe passage of the pursuit along the traffic-way; or (2) to enhance the likelihood of apprehension by eliminating possible avenues of escape for the fleeing driver.

- 1 Communication with the public will be maintained through the use of patrol vehicle's emergency warning devices. When properly used, emergency warning devices may enhance the officer's ability to maneuver in traffic and reduce the risk to self and others.
- 2 Officers should refer to state statutes and agency policy that regulate the operation of emergency equipment.
- 3 Officers should never approach and pass another vehicle on the right when emergency warning devices on the law enforcement vehicle are in operation.
  - a. Even during daylight, headlights should be used in conjunction with emergency overhead lights.
    - (1) Headlights are usually more discernible than required red and blue lights, both the overheads and dash mounts, in the daytime.
    - (2) Most drivers will see headlights before they hear the siren or see the red and blue lights.
    - (3) Although the emergency flasher lights may be helpful, their use will eliminate the availability of the electronic turn signals.
  - b. During hours of darkness, high beam light headlights have a tendency to obliterate the emergency lights and blind oncoming drivers.
  - c. Emergency warning devices such as the lights and sirens are not substitutes for caution, nor do they relieve the officer from the general duty of exercising due regard to the safety of others.
  - d. Various factors affect the siren's audibility and the light's visibility.
    - (1) Weather conditions
      - (a) The siren may be heard sooner on an overcast or cloudy day.
      - (b) Siren audibility tends to dissipate into the atmosphere on clear days.
      - (c) Fog will allow sound to carry through its moisture with a minimum loss of decibels at close range. The greater the distance, however, the greater the sound blockage.
      - (d) Emergency lights are virtually ineffective in foggy weather.
      - (e) Inclement weather of any kind greatly reduces the value of lights and siren. The quality of the driver then becomes even more critical.

- (2) Vehicular traffic conditions
  - (a) Sirens become less discernible with the increase of traffic noise
  - (b) Large vehicles, such as heavy trucks and buses, will decrease the effectiveness of the siren.
- (3) Location
  - (a) The siren may be less discernible in a residential area. Large trees and hedges absorb sound.
  - (b) Tall buildings tend to block out, deflect, or tunnel sound transmission. When this occurs, the value of the siren is diminished.
  - (c) In flat, open areas the sound of a siren can be heard for a greater distance.
- (4) Pedestrian traffic conditions
  - (a) Emergency lights may not adequately warn pedestrians.
  - (b) Sirens offer greater warning to pedestrian traffic.
  - (c) Great care and caution must be taken in areas congested with foot traffic.
  - (d) The use of warning devices in school zones is enhanced by a reduction in speed.
- e. Citizens are not always attentive, so they may not see or hear an emergency warning device.
  - (1) The driver may be distracted by one or more of the following:
    - (2) Child passenger misbehaving
    - (3) Conversation with passengers
    - (4) High radio volume (Personal audio devices with headphones)
    - (5) Air conditioner or heater fan noise
    - (6) Windows rolled up
    - (7) Construction
    - (8) Law enforcement or emergency vehicle activity in another area
    - (9) Sight-seeing

Remember, the public may respond to the officer's warning by panic stopping, panic steering or sudden acceleration.

- f. As speed increases, the effectiveness of the siren decreases:
- (1) Due to the increase of speed and the resultant increase in feet per
  - (2) Second traveled by the pursuing law enforcement vehicle, other drivers and pedestrian may not have sufficient time to react to the sound of the siren.
  - (3) As speed increases, a driver may not hear the siren until the officer is one or two car lengths behind the vehicle. Additionally, more aerodynamic vehicles make less "wind noise" at higher speeds than older model police vehicles.
  - (4) As the officer's speed increases, the chance of having a collision increases, and the time for processing information and decision making decreases.

## **Termination Point of Pursuit**

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### INTRODUCTION

Whether a pursuit is terminated by the officer's decision that the risks outweigh the gain or the suspect voluntarily or involuntarily stopping, certain factors are critical to ensuring a successful and safe conclusion. Of paramount concern always must be the safety of the public, suspect, and officer(s).

### CONTENT

The following areas should be considered when officers formulate split second plans for actions associated with pursuit terminations:

- Safety of public, suspects, and officer(s)
- Termination without apprehension
- Contact with telecommunications
- Acknowledgment of psychological state of both officer and suspect.
- Pursuit terminations -high-risk felony stop situations
- Documentation needs -reports

### SAFETY OF PUBLIC,' SUSPECTS, AND OFFICER(S)

Decisions and actions at the point of termination should always focus on safety and what will be in the best interest of all involved.

Extra precautions .should be taken that will ensure safety.

Officer survival procedure -this is a high-risk situation.

Adequate warning of the public regarding an emergency situation in progress

Should risks escalate with threat to public, the situation may warrant immediate abandonment actions.

### TERMINATING WITHOUT APPREHENSION

Lengthy pursuits pose an increasing threat to the general public. If the suspect will not stop, the pursuing officer may have to terminate the pursuit. This is a very difficult decision to make. Most officers believe that terminating before a suspect is in custody goes against everything they stand for. As soon as a test of reasonableness shows that the risk of a continued pursuit or arrest action outweighs the potential gain of an apprehension, the pursuing officer's course of action is clear: call off the effort.

### CONTACT WITH TELECOMMUNICATIONS

Critical to successful terminations and officer survival, is the need to stay in constant radio contact. Once the pursuit has reached a stopping point, give the location and exact time of termination.

1. Give an immediate, detailed description of the vehicle and licensing tag along with unique suspect and passenger information.

2. Request assistance and a supervisor (high-risk situation)
3. Make all transmissions precise so that the record will be accurate and complete
4. Maintain radio contact and update as time permits.

#### ACKNOWLEDGEMENT OF PSYCHOLOGICAL AND PHYSIOLOGICAL STATES OF BOTH PURSUING OFFICERS AND SUSPECTS

1. It is important to recognize and understand the human factor changes that have occurred and the need to control emotions and behaviors that are critical to an officer's safety and the suspect's well-being.
  - a. The pursuit has caused a mixture of emotions, such as excitement, fear, anger, anxiety, and worry. These emotions can be so intense they have a crippling effect. Observable effects include faster heart and respiratory rates, flushed face, higher blood pressure, and tense muscles.
  - b. Signs of aggression may be present. Anger will easily be aroused, particularly when the actions of other people do not conform to your sense of correction.
  - c. Peer pressure may be fueled by personal pride and the fear of rejection. Often, its influences will lead to actions from risks one clearly know he or she cannot handle.
2. Pursuing officers must always remember that the suspects have been involved in the same stressful incident.
  - a. Their actions and lack of reasons should be considered in the arresting officer's decision-making process concerning the appropriate and reasonable use of force to affect the custodial arrest.
  - b. Issues of safety and officer survival are paramount.

#### PURSUIT TERMINATIONS - HIGH - RISK FELONY STOP SITUATIONS

Every pursuit termination should be treated as a high-risk situation that has the potential to escalate at any moment.

1. All terminations are high-risk stops and extreme caution should be exercised.
  - a. Agency policy directives concerning felony stops should be reviewed.
  - b. Back-up assistance should be coordinated when possible. It's always better to wait out a situation rather than charge into the unknown.
2. Placement of emergency vehicles
  - a. Pursuit vehicles should be placed so as to provide a safe avenue for suspects to be brought back to the handcuffing officer who will have cover.
  - b. Bring all suspects back to your law enforcement vehicle so no officer is left in the open with lack of cover.

- c. When all suspects have been placed into custody, approach the suspect(s) with a deliberate, planned, and coordinated effort to clear the vehicle. Keep' all officers alert for the unexpected. Officers should have weapons drawn while maintaining a safe distance for cover.
- d. When possible, back-up officers or supervisors not actively involved in the actual pursuit should physically handle the suspects, to safeguard against the potential for mistreatment (or allegations of such) that often occur.

## DOCUMENTATION NEEDS

During the entire termination activity, it is critical that special attention is given to the detail and facts that surround the incident. Constant mental awareness of this need will aid in developing accurate and complete reports.

- 1 Always give as much detail as possible when communicating with the telecommunications center. This will be available on permanent record, and should assist post-pursuit reporting efforts.
- 2 Secure the names of all parties involved:
  - a. Witnesses
  - b. Other back-up officers or assisting agencies.
  - c. Citizens offering assistance
- 3 Account for all physical evidence along with scene and evidence preservation needs.

## SUMMARY

When pursuits reach a termination point, recognizing personal limitations and changes, constant communication, with clear and deliberate planning while maintaining a focus on safety will assist in creating defensible outcomes. The termination point, whether the suspect voluntarily or involuntarily stops, is an extremely dangerous situation and must be responded to as a high-risk encounter. Special attention to detail, in addition to continue communications with the telecommunications center, will contribute to the development of accurate and complete records.

## **Pursuit Roadblocks**

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### **INTRODUCTION**

A roadblock may be defined as deliberate obstruction utilized by law enforcement officers for the specific purpose of controlling or terminating a targeted vehicle's movement on a selected roadway. It is imperative that officers involved in a roadblock fully comprehend the legal ramifications and operational considerations unique to this law enforcement task.

### **CONTENT**

#### **LEGAL CONSIDERATIONS**

1. Statutory Authority
2. Case Law

#### **AGENCY POLICY CONSIDERATIONS**

Agencies should have a policy that clearly governs the establishment and control of roadblocks. Each agency should rely on State statutes, court cases, and legal counsel in the development of its policy.

Each officer should be thoroughly familiar with this policy. Officers and supervisors must comply fully with the established policy to ensure that they are within the legal authority to utilize the physical intervention techniques included within this objective, or any other physical intervention techniques they may choose to employ.

The policy should include the following considerations:

1. Human
  - (1) Violator/Violation
  - (2) Juvenile or adult (if known)
  - (3) Type of violations that warrant a roadblock
  - (4) Seriousness of the violation to determine if roadblock is justified.
- b. Officer
  - (1) Number/availability of officers who can assist
  - (2) Experience
  - (3) Training
  - (4) Attitude
- c. Supervisor
  - (1) Must be supervised



- (2) How much responsibility/authority
- (3) Multiple agency involvement
- d. Telecommunicate-Communications
  - (1) Primary assignments(s) of personnel
  - (2) Secondary assignment(s) of personnel
- 2. Environmental
  - a. Site selection
    - (1) Terrain, highway configurations (number of lanes, intersections, exit ramps, hills, curves, etc.)
    - (2) Approach to roadblock, visibility, surprise, safety of violator, public and officers; site that provides sufficient space, avenues of escape (prevent and allow/control)
    - (3) Schools, playgrounds, residential, commercial establishments, industrial, urban verses rural considerations, shopping centers, business/downtown area.
  - b. Day/Night
  - c. Weather
    - (1) Wet
    - (2) Snow
    - (3) Ice
    - (4) Wind
  - d. Traffic conditions
    - (1) Rush &our traffic
    - (2) Special events (ball games, fairs, concerts) in the area
    - (3) Pedestrians
  - e. Time lapse between the commission of the offense and its bearing on the justification for using a roadblock.
- 3. Vehicle
  - a. Violators: What type of vehicle is the violator operating?
    - (1) Car
    - (2) Motorcycle

(3) Semi-truck

(4) Other

(a) Officers

(i) What type of vehicle is the officer's operating?

## TYPES OF ROADBLOCKS

Roadblocks will generally consist of two types, stationary and rolling/moving. The use of either type of roadblock will be to contain or terminate the movement of a specific vehicle on the roadway. This lesson plan will consider both types of roadblocks, their intent and how they should be configured.

### STATIONARY

Stationary roadblocks generally consist of one or more types of physical device(s) used to control or terminate the movement of a specific vehicle(s). The following are several recognized types of stationary roadblocks that may be employed:

1. Electronic disabler
2. Spike strips -tire deflation devices
3. Barricades -used to limit the direction of travel of oncoming traffic, slow and /or stop traffic.
4. Vehicles -used as a blocking tool; suspect direction control device, warning device
5. Aircraft -used for searching, spotting and tracking the pursued vehicle.

### ROLLING/MOVING

Rolling roadblocks generally consist of three or more law enforcement vehicles attempting to control or terminate the movement of a specific vehicle. This maneuver occurs when law enforcement officers surround the suspect vehicle and gradually slow pursuit speed to effect a slow and safe forced stop. Law enforcement officers must use extreme caution as some are placed in danger zones. This effort should never be attempted if the suspect(s) is armed.

### SUMMARY

A roadblock may be defined as deliberate obstruction utilized by law enforcement officers for the specific purpose of controlling or terminating a targeted vehicle's movement on a selected roadway. It is imperative that officers involved in a roadblock fully comprehend the legal ramifications and operational considerations unique to this law enforcement task.

## **Pursuing Officers Management Tasks**

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### **INTRODUCTION**

The decision whether to continue or terminate the pursuit is influenced by many factors. The primary consideration is always the safety to the public.

The decision to initiate a pursuit situation will most often be made by the operator of the wanted vehicle. Officers must refrain, however, from tactics that they to invite or encourage violators to flee.

The decision to terminate a pursuit will always be harder to make than the decision to initiate a pursuit. This decision, whether made by the primary pursuit officer or a supervisor, must consider each of the factors discussed here. More often than not, live pursuit scenarios do not lend themselves to an analysis of whether a decision can be judged as correct or not; however, the processing of as much data as possible by the pursuing officer, supervisor or others prior to making the decision can help.

Officers must remain consistently aware of their perceptions of the pursuit situation. At no time should an officer allow his or her desire to capture the violator exceed the officer's ability to safely conduct the pursuit. Police pursuits are not legalized racing or showing-off of driving skills. Police pursuits at best involve several speeding vehicles upon a highway with unsuspecting motorists who could be easily injured or killed. Safety must take precedence over all else. Officers must recognize their limitations and the limitations of their vehicles, and those limits must never be exceeded.

The ability to continue making rational decisions during a pursuit situation is extremely important. This ability will be strongly affected by emotions, peer pressure, social image, competition, frustration, attitudes, stress, physiological factors, and prejudices. An officer must possess maturity, experience, training, and a clear mind to continually evaluate changing perceptions of the pursuit situation. Safety must always remain the first priority of any pursuit involvement.

The ability to perform the driving skills necessary to conduct a successful pursuit is tempered by maturity, experience, and training. Aggressive or assertive driving during a pursuit situation is usually exhibited by immature or inexperienced officers. The "police machismo" image tends to influence officers to push themselves too hard during a pursuit, sometimes beyond the point where the pursuit should have been terminated.

Having to make and implement a decision to discontinue an active pursuit is one of the most difficult decisions for a law enforcement officer. This decision can damage an immature officer's self-perception. However, it is a decision that officers must be prepared to make and, if necessary, implement, if the fundamental role of law enforcement in society is to be maintained. Failing to discontinue a pursuit when necessary ignores the responsibility to protect the lives and property of others.

Some people would maintain that the law enforcement officer is not one who is placing the lives and property of others in jeopardy during the pursuit; it is the fleeing violator who is doing so by his or her attempts to evade apprehension. Others would maintain that it is the actual pursuit by the law enforcement officer that is causing the unsafe driving behavior of the fleeing violator, thus placing the lives and property of other in jeopardy. Is it the cause of the unsafe behavior that is placing the lives and property of others in danger that is important, or the fact that the lives and property of others are in danger that is significant?

The law enforcement officer must be concerned with why lives and property are in jeopardy, but the primary concern of the officer must be that his or her continuance of the pursuit may increase the hazard to the public. If the lives and property of others are in unnecessary jeopardy, and discontinuing the pursuit is the most effective means for reducing that threat, then the pursuit has to be discontinued. A failure to do so in these conditions negates the most fundamental law enforcement responsibility.

## CONTENT

Some factors to consider in determining whether or not to discontinue a pursuit or not are:

- 1 Do the hazards of continuing the pursuit outweigh the hazards of the violation?
- 2 Can an arrest be made at a later time because the operator of the fleeing vehicle has been identified?
- 3 Has the pursuing officer lost sight of the fleeing vehicle for a considerable length of time that would cause the pursuing officer to question the location of the vehicle?
- 4 Have conditions changed considerably since the pursuit began?
  - a. To the violator's vehicle
  - b. To the patrol vehicle
  - c. To the environment
  - d. To the officer

Once the decision to terminate a pursuit been made either by the pursuing officer or a supervisor, the following task should be performed:

1. The last know location and direction of travel for the violator's vehicle should be given to the dispatch center and broadcast to the other officers.
2. The pursuing patrol vehicle's emergency warning devices should be turned off.
3. The pursuing patrol vehicle should be parked, and the officer should exit the vehicle. This will allow the officer's psychological and physiological conditions to normalize. The pursuing officer should remain parked until these conditions have normalized.

## SUMMARY

The decision whether to continue or terminate the pursuit is influenced by many factors. The primary consideration is always the safety of the public. Officers must remain constantly aware of their perceptions of the pursuit situation. At no time should an officer allow his or her desire to capture the violator to exceed the ability to safely conduct the pursuit.

## Tire Deflation Device

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### INTRODUCTION

There are a number of tire deflation devices available for law enforcement agencies to use to safely, efficiently, and effectively terminate a pursuit. These tire deflation devices assist law enforcement agencies in stopping and preventing vehicle pursuits. In the course of this lesson, the officer will be instructed on methods of deployment, vehicle placement, and vehicles not to spike in a pursuit.

#### 1. EMERGENCY DRIVING OPTIONS

- a. Lights and siren
- b. Tire deflation devices
- c. Vehicle contact maneuvers
  - (1) Stationary roadblocks
  - (2) Rolling/moving roadblocks
  - (3) P.I.T. maneuver
- d. Deadly force
  - (1) Firearm
  - (2) Ramming or forcing vehicle off roadway with violent contact

#### 2. STOP STICKS AND STINGER DEVICES

- (a) Criteria for deployment:
  - b. Suspect has committed an offense to justify the use
  - c. Officer is providing proper notice to stop (lights and siren)
  - d. Suspect is ignoring the efforts to warning devices

#### 3. OFFICER CONSIDERATIONS

Officer should have received training in deployment and vehicle placement. Effective locations for deployment of spikes

- a. All law enforcement officers must have reasonably good sight distance to observe violator vehicle.
- b. Choose a location (if available) with natural barriers - roadway overpass, guardrails, shrubbery, trees, bridge abutments, and darkness.
- c. Special activities may create situations where use of tire deflation devices are inappropriate - construction zones, special events, and/or other activities in the area.

#### 4. VEHICLES NOT TO SPIKE

- a. Any vehicle transporting hazardous materials
- b. Any passenger bus with innocent, civilian passengers
- c. Any school bus that is transporting students or civilian passengers
- d. Any vehicle that may pose an unusual threat or hazard
- e. Any two (2) wheeled vehicle (unless deadly force is justified)

#### 5. COORDINATION OF DEPLOYMENT

- a. Notify pursuing units in advance (should have already obtained speed, number of vehicles involved and possibility of suspects having weapons)
- b. Predetermined location for deployment of devices
- c. All pursuing units should be notified when spikes are in place; especially communicate with primary unit so units can slow for spike retrieval after spikes are struck.
- d. Spike deployment should be in accordance with the agency's departmental S.O.P. and proper use by manufacturer recommendations.

#### 6. SUCCESSFUL DEPLOYMENT

- (a) Training + pre-planning + good communication + strategy = Safe and effective termination

#### 7. VEHICLE PLACEMENT

- (a) One Unit:
  - b. Place vehicle at a 45 degree angle across the lane of traffic that needs to be notified and stopped. This would not be the lane that the pursuit vehicles are traveling in. Law enforcement officers need to be prepared to stop, move, or re-route traffic not involved in pursuit.
  - c. Emergency lights **MUST** be illuminated due to the fact you are impeding traffic
  - d. Place tire deflation devices in path/roadway of the violator vehicle.
  - e. Remove the tire deflation devices from roadway as soon as possible after violator has struck the unit.
  - f. Notify all units involved in the pursuit that the tire deflation devices were successful or not successful and the roadway is clear for travel.

## 8. VEHICLE PLACEMENT

### (a) Two Units:

- b. Place both vehicles at a 45 degree angle (one on each side of the roadway). Ideally, each law enforcement vehicle should be facing opposite directions. This will allow for tactical purposes if the violator vehicle attempts to elude or evade the tire deflation devices.
- c. Emergency lighting illuminating
- d. Be prepared to move traffic or stop traffic not involved in the pursuit.
- e. Place tire deflation device in the path of the violator.
- f. Remove tire deflation devices from roadway as soon as possible after being struck.
- g. Notify all law enforcement units if the tire deflation devices were successful or not successful.
- h. Notify all the pursuing units that the roadway is clear for travel after removing device.

## 9. DEPLOYMENT

- a. Place tire deflation device on opposite side of the roadway – string unit lying across the roadway.
- b. Pull tire deflation device into violator's path. The hollow spikes will penetrate the tire and allow tire to deflate within thirty (30) seconds.
- c. After violator vehicle strikes the device, remove unit as quick as possible by pulling string attached to the unit towards you (off the roadway).
- d. Notify pursuing units if device was successful or not
- e. Notify pursuing units when roadway is clear of debris from tire deflation device

## 10. WARNINGS

- a. Do not handle the tire deflation unit unnecessarily. The hollow spikes are extremely sharp.
- b. Do not hold rope in hand or wrap rope around hand or wrist.
- c. If spikes are dropped or spilled, pick up immediately so an unsuspecting motorist doesn't run over.
- d. Debris and other articles on the roadway will "fly-up" off the roadway when device is run over.

# Emergency Driving Options

## During Vehicle Pursuits

LEVEL OF RESPONSE-VEHICLE	LEVEL OF RESPONSE-OFFICER
Ramming	Deadly or Lethal Force
Firearms	
High Speed P.I.T.  (Over MPH designated in policy, moderate to heavy traffic, road hazards)	
Roadblocks (stationary - blind, limited visibility, or no avenue of escape)	
P.I.T. Maneuver (MPH designated by policy)	Less Lethal
Stationary Roadblocks - Channel (visibility to allow for safe stopping distance)	
Rolling Roadblocks (speed designated by policy)	
Tire Deflation Devices	
Lights and/or Lights/Siren	Verbal
Marked Cruiser	Uniform Presence



## Pursuit Stress

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### 1 Introduction

- a. Pursuit Stress & Rage definition: An aggravated condition that occurs to a police officer during the stress of a pursuit or while engaged in emergency driving that may assist in the officer making improper or dangerous decisions.
- b. The goal of this course is to identify factors associated with Pursuit Stress and Rage during emergency situations and identify ways to control these factors
- c. As a result of attending this block of instruction the student will:
  - (1) Identify the definition of Pursuit Stress and Rage
  - (2) Identify the physiological explanation of Pursuit Stress and Rage
  - (3) Identify and list symptoms that indicate stress may exist
  - (4) Identify by reciting situations that cause stress during a pursuit
  - (5) Identify in writing ways in which stress can be relieved
  - (6) Identify in writing how departments are handling Stress and Pursuit Rage

### 2 Pursuit Stress and Rage

- a. The Dangers involved with Stress and Pursuit Rage
  - (1) Run to suspect or vehicle without thought of officer safety (Tactics/Cross-Fire)
  - (2) Unnecessary use of force
  - (3) Un-professional attitude
  - (4) Driving with Lack of Due-Regard

### 3 Adrenaline

- a. Body fluid which assists the body to accomplish tasks by rushing blood to the heart and muscles
  - (1) The body's reaction
    - (a) Fight
    - (b) Flight
  - (2) Rush-comparison to fighter pilot in combat
- b. Stress: The body's response to any situation that makes a demand on it.
- c. Stressors: Events, situations or surroundings that make a demand on the body.

- 4 Operational Stressors and symptoms:
  - a. Anticipatory Responses: Stresses that occur from the mere anticipation of what might happen
    - (1) Headaches
    - (2) Nausea
    - (3) Nervousness
    - (4) Anxiety
  - b. Alarm Reaction - Fight or Flight/Immediate reaction to stimulus
    - (1) Drying of mouth
    - (2) Sweating of palms
    - (3) Pounding heart
    - (4) Breathing increase
  - c. Task Related Stress - Stress that comes with handling the given task at hand
    - (1) Profuse sweating
    - (2) Heart rate and blood pressure increase tensing of muscles
    - (3) Headache and back pain
    - (4) Difficulty in concentrating
    - (5) Forgetting radio traffic
    - (6) Memory overload
  - d. Work Related Stress - Stress from within the job
    - (1) Impatience/Uneasiness
    - (2) Difficulty sleeping
    - (3) Difficulty in making easy decisions
    - (4) Aggressive confrontations
    - (5) Indigestion, nausea headaches, sweating, trembling
  - e. "Post-Error Dwell Reaction" - becoming more pre-occupied with mistakes made rather than the current situation

- 5 Attitudes and Driving Behaviors
  - a. Types of Driving Attitudes
    - (1) New driver
    - (2) The driver that over-estimates his/her ability
    - (3) Drivers that think they own the road
    - (4) Apprehensive drivers (afraid)
  - b. Stress Induced Negative Attitudes
    - (1) Impatience
    - (2) Intolerance
    - (3) Aggression
    - (4) Justifying risk
  - c. Fatigue Generated Emotions
    - (1) Anger
    - (2) Frustration
    - (3) Personalization
    - (4) Impatience
  - d. Effects of Attitudes
    - (1) Tunnel Vision
    - (2) Acquire an inaccurate picture
    - (3) Poor decision making skills
    - (4) Dangerous decision making skills
  - e. Ways to reduce effects of negative attitudes
    - (1) Maintain calm, professional approach
    - (2) Concentrate on situation at hand
    - (3) Avoid “Personalizing”
    - (4) Be aware of mood changes
- 6 Causes of and ways to deal with Pursuit Stress and Rage
  - a. Causes of Pursuit Stress and Rage
    - (1) Officer with bad attitude
    - (2) Officer being caught up in pursuit
    - (3) Officer taking pursuit personal
    - (4) Officer failing to apply training techniques

b. Ways to reduce or avoid Pursuit Stress and Rage

- (1) Apply ways to relieve stress and bad attitudes
- (2) Change pursuing officer
- (3) Officer initiating pursuit act as assist officer
- (4) Training, Training, Training

7 Summary

a. As a result of this block of instruction the student should have a working understanding of Stress and Pursuit Rage relating to emergency driving and pursuit situations by being able to identify and control factors associated with stress and pursuit rage.

- (1) Student should be able to identify the definition of Stress and Pursuit Rage
- (2) Student should be able to identify and list symptoms that indicate stress may exist
- (3) Student should be able to identify and recite situations that may cause stress during a pursuit
- (4) Student should be able to identify in writing how departments are handling issues of Stress and Pursuit rage
- (5) Student should be able to identify in writing ways that stress can be relieved
- (6) Student should be able to identify the physiological explanation of Stress and Pursuit rage.

8 Questions:

## APPENDIX A: EMERGENCY VEHICLE GLOSSARY

The purpose of this appendix is to ensure uniformity with nationally-accepted definitions of words and terms associated with the development of training in general and emergency vehicle driving training in particular. Terms associated with instruction on motor vehicle law, collision investigation, and vehicle stops are not included in this glossary.

**ACCELERATION:** the rate of change of velocity. It can be an increase or decrease. It is expressed as feet per second

**ACCIDENT:** term no longer in use by traffic management professionals. See "crash"

**ACUITY:** the capacity of either eye to recognize small space intervals and the discrimination of form

**ADHESION POINT:** a point in a curvature where the maximum amount of stress is on the vehicle's tires

**ANTILOCK BRAKING SYSTEM (ABS):** an anti-brake system is the part of a vehicle's braking system that automatically controls braking pressure to prevent the controlled wheel or wheels from locking during braking

**APEX:** (1) the highest point of something; (2) the point at which two sides of an angle meet or cross

**APEX OF A CURVE:** the point of a turn where the vehicle first begins to exit, the highest point of a curve

**BALANCED HAND POSITION:** a wide grip on the steering wheel. We will utilize a 9 o'clock and 3 o'clock position.

**BANKED PAVEMENT:** one side of the roadway is elevated, banked, or higher than the opposite side; normally occurs during a curve. Also referred to as "super-elevation." An engineering design technique to increase the traction (friction) of the vehicle to the road during cornering. If on a left-hand curve, it is known as positive banking

**BRAKE FADE:** the loss of braking efficiency, normally due to heat build-up resulting from excessive use and hard braking

**BRAKING DISTANCE:** the distance through which brakes are applied to slow a vehicle; the shortest distance in which a particular vehicle can be stopped by braking from a specified speed on a particular surface; the distance from application of brakes to collision or stop

**BRAKE LOCK-UP:** the application of brakes to the point that the wheels can no longer rotate while braking

**BRAKING SKID:** see skid, braking

**BRAKING, THRESHOLD:** the brakes are pressed firmly to a point just before lock-up and held at that point, and the wheels never lose their rolling friction

**CENTRIFUGAL FORCE:** see force, centrifugal

**CENTRIPETAL FORCE:** see force, centripetal

**COEFFICIENT OF FRICTION:** see friction, coefficient

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**COHESION:** the mutual attraction by which the elements of an object are held together, the sticking power between two surfaces

**CONDITION, VARYING OR ONGOING:** those factors which have an influence on choices of speed, lane position, or communication needs. Some examples are. legal limitations, lane width, lane selection, traffic flow, traffic density, traffic controls, and needs of the driver, roadway conditions, roadway design, visibility, environmental conditions, time of day, and weather conditions

**CORNERING SKID:** see skid, cornering

**COUNTERSTEER:** turning the front wheels to counter the effects of a previous turning movement or of a skid, to put the vehicle on its intended course of travel

**CRASH/COLLISION:** that occurrence in a sequence of events which usually produces unintended injury, death, or property damage (previously known as an "accident") Includes collisions between vehicles, collisions of vehicles with fixed objects, and rollovers.

**DECELERATION:** the rate of change of velocity when slowing down

**DRAG FACTOR:** a number which has been assigned to scientifically describe the slipperiness of a surface; the higher the drag factor, the greater the resistance; synonymous with friction coefficient

**EMERGENCY:** This definition must match the individual state's *legal definition of an emergency that justifies the use of lights and siren*. In the State of Indiana, an emergency is, "*When there is high probability of serious bodily injury or death,*" or "*When there is high probability of significant or substantial property damage.*"

**EMERGENCY SIGNAL DEVICES:** a siren, flashing or revolving lights that meet the requirements of a state statute(s); synonymous with **emergency warning device**.

**KINETIC ENERGY:** energy associated with motion; the energy possessed by an object in motion. Kinetic energy =  $\frac{1}{2}mv^2$ , mass x velocity squared. The energy possessed by an object in motion. A force exerted by one solid surface on another when the two surfaces are sliding past each other. Distinguish from **momentum**.

**ENERGY, POTENTIAL:** the energy an object possesses by virtue of its position. (A vehicle parked on a hill; the energy stored in a spring as it is stretched or compressed)

**EVASIVE ACTION:** any action taken by a driver to avoid a hazardous situation; steering, braking, or accelerating; to avoid a collision or other crash; sometimes referred to as a tactic

**EVO:** an acronym from the operation of an emergency vehicle whether in non-emergency, emergency, or pursuit mode

**EVO, RISK MANAGEMENT:** the identification of high liability exposures and the implementation of steps or methods to minimize the identified exposures

**EVOC:** an acronym for Emergency Vehicle Operations Course; an emergency vehicle operation course involving the control of an emergency vehicle using emergency equipment

**FEET PER SECOND:** an alternative to mph as a means of matter, measured by multiplying mph by 1.47

**FORCE:** that which changes the state of rest or motion of matter; measured by the rate of change of momentum, mass times acceleration

**FORCE, CENTRIFUGAL:** the force of an object in motion which tends to keep in continuing in the same direction rather than following a curved path. Under-steering is an example

**FORCE, CENTRIPETAL:** the force of an object in a curved motion that is directed toward the center axis or rotation. The force required to keep a moving mass in a circular path. A force which acts or impels an object toward a center of rotation. Over-steering is an example

**FORCE, GRAVITATIONAL:** a constant force; gravity creates weight

**FORCE, INERTIA:** the tendency of an object to resist acceleration; the tendency of an object at rest to remain at rest or an object in motion to stay in motion in a straight line unless disturbed by an external force

**FORCE, MOMENTUM:** the product of an object's mass times velocity. An amount of motion; it is the property of a moving body which determines the length of time required to bring it to rest; distinguish from kinetic energy

**FRICTION:** (1) the rubbing of one object or surface against another (2) resistance to any force trying to produce motion; constantly present and always working opposite the direction in which an object is moving

**FRICTION, COEFFICIENT:** the measurement of cohesion between two surfaces; synonymous with drag factor

**FRICTION, ROLLING:** a force exerted by one solid surface on another when the two surfaces are sliding past each other. A prerequisite to steering, e.g., the front wheels must be rolling in order to steer the vehicle

**FRICTION, STATIC:** a force exerted by one solid surface on another when they are at rest; the holding force between two surfaces at rest

**FRONT END SWING:** the movement of the front end in the opposite direction of the steering input when backing up

**HANDLING:** a vehicle's ability to quickly and accurately respond to a driver's command with no or minimal negative reaction, and the ability to compensate for sudden irregularities in road or wind conditions; distinguish from ride

**HYDROPLANING:** to skim along on the surface of water. The condition occurs when a tire rides upon water rather than the-roadway

**IMPACT FORCE:** the force measured when one object collides with another. It includes the speed of the objects, the weight of the objects, and the distance traveled between impact and the final resting place

**IMPENDING SKID:** see **skid, impending**

**INERTIA:** see **force, inertia**

**INTENTIONAL TORT:** see **tort, intentional**

**KINETIC ENERGY:** see **energy, kinetic**

**LATERAL WEIGHT TRANSFER:** see **weight transfer, lateral**

**LONGITUDINAL WEIGHT TRANSFER:** see **weight transfer, longitudinal**

**LIABILITY, DIRECT CIVIL:** the liability that is imposed upon a person for causing injury to another through a negligent or willful misconduct

**LIABILITY, VICARIOUS CIVIL:** the liability which is imposed upon one who is without personal fault or complicity, because of the relationship that person bears towards the person who actually performed the wrongful act or omission

**MARKED VEHICLE:** see **vehicle, marked**

**MENTAL CONDITIONING:** the preparation of the driver to deal with the psychological, physiological, and environmental conditions that may be encountered while operating a motor vehicle

**MODERATE SPEED:** see **speed, moderate**

**MOMENTUM:** see **force, momentum**

**MECHANICS:** a branch of the science of physics which deals with what happens when forces act on material objects

**NEGLIGENCE:** it is the failure of a law enforcement officer to conform his or her conduct to the standard which a reasonable law enforcement officer would have conformed to under the same or similar circumstances. In some states, an officer is held: to a standard of the "reasonable man."

**NEWTON' S FIRST LAW OF MOTION:** an object continues in its state of rest or of uniform motion in a straight line unless acted upon by another force

**NEWTON'S SECOND LAW OF MOTION:** a change of motion is proportional to force applied and takes place in the direction of the line of action of the force

**NEWTON' S THIRD LAW OF MOTION:** to every action there is always an equal and opposite reaction

**OVER-STEER:** the characteristic of a vehicle to tighten its turning radius as the rear end slips towards the outside of the curve

**PATROL DRIVING:** see **driving, non-emergency**

**POLICE PACKAGE:** a manufacturer's modification of a standard passenger vehicle to meet the demand's placed upon a police patrol vehicle. It usually involves modification of the raking, suspension, and electrical system

**PERCEPTION:** (1) awareness of objects and other data through the medium of the senses (2) having insight or intuition, as an abstract quality

**POTENTIAL ENERGY:** see **energy, potential** **POWER SKID:** see **skid, power**

**PRECISION OPERATION:** see **operational, precision**



**PURSUIT:** an event that is initiated when law enforcement officer, operating an authorized emergency vehicle, gives notice to stop [either through the use of visual or audible emergency signals or a combination of emergency devices] to a motorist who the officer is attempting to apprehend and that the motorist fails to comply with the signal by either maintaining his/her speed, increasing speed, or taking other evasive action to elude the officer's continued attempts to stop the motorist. A pursuit is terminated when the motorist stops, or when the attempt to apprehend is discontinued by the officer at the direction of competent authority

**REACTION TIME:** see **time, reaction**

**REAR-END CHEAT:** while driving during a turn, the rear tires will track along a path different than that of the front tires. They may track inside, outside, or along the same line, depending on the speed, tires, and load distribution

**RESPONDEAT SUPERIOR:** Latin for "Let the master answer." The legal theory that the employer is liable for the wrongful acts of the employee where the employee is acting within the scope of employment. This theory is applicable only in state courts. It is not applicable in federal courts

**RIDE:** the result of a vehicle's absorption of the irregularities of the road. This is accomplished through the design of tires and suspension system (springs, shock absorbers); distinguish from handling

**ROLLING FRICTION:** see **friction, rolling**

**SEMI-MARKED VEHICLE:** see **vehicle, semi-marked**

**SIREN:** a device used to generate and transmit the easily recognized siren sound whose frequency varies with time, used as a warning signal by police vehicles, fire vehicles, and ambulances

**SKID:** the loss of traction to one or more wheels

**SKID, BRAKING:** the loss of traction when one or more wheels are locked by excessive braking pressure

**SKID, CORNERING:** the loss of traction in negotiating a curve or a turn at a speed faster than can be sustained by the tire-road cornering limits

**SKID, IMPENDING:** a preliminary skid caused by maximum pedal pressure short of locking the brakes

**SKID PAN OR - PAD:** an area designed to practice skid control

**SKID, POWER:** the loss of traction when excessive power is applied, causing the drive wheels to spin and no longer provide cornering traction

**SPACE CUSHION:** the open area surrounding a vehicle while it is in motion; an "escape route" to the front, rear, or sides

**SPACE MANAGEMENT:** the selection of the best speed control, path of travel, or communication technique to maximize control of the space surrounding the vehicle

**SPEED, HIGH:** a speed that, given the posted or prima facie speed, would constitute reckless driving

**SPEED, MODERATE:** 50% to 75% of the maximum speed which may be safely operated; considering the nature, condition, and type of roadway, volume and direction of the flow of traffic, presence of intersections, visibility, and weather conditions

**STATIC FRICTION:** see **friction, static**

**STRATEGY:** an overall plan to increase the probability of success and to minimize the probability of failure - Distinguish from **tactic**

**SUPER ELEVATION:** *see* **banked pavement**

**SUPERVISOR:** an individual having responsibility for the control or training others

**TACTIC:** the actions of an individual or small group for achieving a limited goal or objective  
Distinguish from **strategy**

**THRESHOLD BRAKING:** see **braking, threshold**

**TIME, REACTION:** the total length of time it takes for the brain to receive the information from the senses (eyes, ears, nose), make a decision, transmit the decision to the appropriate muscles, and for the muscles to respond

**TIRE FOOTPRINT:** the contact area of a tire tread with the roadway

**TORT:** a private or civil wrong against a person or property for which a court may award money

**TORT, INTENTIONAL:** a wrongful act committed by a person who knows that the law requires that the act not be committed

**TUNNEL VISION:** see **vision, tunnel** UNMARKED VEHICLE: see **vehicle, unmarked**

**UNDER-STEER:** the tendency of a vehicle to continue in a straight line and resist turning from a direct course of travel. Motor vehicles with more weight on the front wheels than on rear or with too little pressure in front tires are likely to under-steer at high-speeds

**VEHICLE CONTROL:** developing an understanding of the principles and developing the proficiency pertaining to the successful operation of vehicles under all driving conditions

**VEHICLE DYNAMICS:** any force, action, or law of physics that affects the path of a vehicle in motion

**VEHICLE, MARKED:** a police patrol vehicle equipped with a permanent emergency roof light, siren, and police agency vehicle identification decals. It may or may not be painted with the standard color(s)

**VEHICLE OPERATION, DEFENSIVE:** operating a vehicle in such a manner as to be able to avoid involvement in a preventable crash, no matter what the road and weather conditions; synonymous with driving, precision

**VEHICLE OPERATION, EMERGENCY:** a response to a situation that is life threatening or that involves an extreme property loss; justifies the legal use of emergency warning devices

**VEHICLE OPERATION, NON-EMERGENCY:** all operations of a vehicle in other than an emergency or pursuit mode.

**VEHICLE OPERATION, PRECISION:** the operation of a vehicle in such a manner as to avoid involvement in a collision, no matter what the road and weather conditions or the actions of other drivers;  
- synonymous with driving, defensive

**VEHICLE OPERATION, PURSUIT:** the act or instance of chasing or pursuing a fleeing vehicle in an attempt to overtake and apprehend the driver

**VEHICLE, SEMI-MARKED:** a police patrol vehicle equipped with a siren, and with permanent emergency lights in the grill area or mounted in the front or rear window area

**VEHICLE, UNMARKED:** a standard vehicle with no indicators that it is a law enforcement vehicle. It may or may not be equipped with portable or concealed emergency lights and siren

**VELOCITY:** the time rate of motion in a fixed direction; the rate of change of position relative to time, speed of motion in a particular direction

**VISION, PERIPHERAL:** a wide arc of vision that allows a person to see objects to the right and left of center

**VISION, TUNNEL:** a narrow arc of vision; the focus of attention on a particular object or area to the exclusion of adjacent areas of activity

**VISUAL HORIZON:** the point at which a driver's eyes are focused on the roadway

**WHEEL BASE:** the distance from the center of the front wheels to the center of the rear wheels

**WEIGHT TRANSFER:** the transfer of weight to the front, rear, or either side caused by acceleration, deceleration, or turning

**WEIGHT TRANSFER, LATERAL:** the transfer of weight to the opposite side the vehicle, due to a turn

**WEIGHT TRANSFER, LONGITUDINAL:** transfer of weight to the rear axle due to acceleration, or to the front axle due to deceleration