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Police Pursuit and the Use of Force

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Chapter I

Introduction

As we have seen, studies of police vehicle pursuits have increased during the past two decades see generally, Lucadamo, 1994, Auten, 1994, Alpert and Fridell, 1992, Falcone, Wells, & Charles, 1992 While researchers and practitioners alike are beginning to accumulate good quality and very important data, the literature is limited to in depth studies of single agency information or studies from multiple agencies with restricted data.

The history of research on pursuit follows the trend found in research on the use of firearms (Alpert and Fridell, 1992). Geller and Scott report the state of research on police use of firearms, but could be explaining what we know and do not know about pursuit driving (1992:13). More is known now about the nature and frequency of shootings in which police are involved, although we have nothing resembling a comprehensive, continuous national picture of these violent police citizen encounters. Even police insight into the nature, extent, causes and prevention of police shootings tends to draw on anecdotal rather than systematic information, and insight is highly localized . This state of affairs poses a dilemma for public policy makers, who do not have the luxury of waiting for systematic data or tactical advances before making concrete decisions about how the police are supposed to conduct themselves. The atmosphere surrounding the deadly force debate is charged with emotion, fear entrenched assumptions, class, and race based suspicions and virtually intractable value conflicts. Geller and Scott inform us of two of the competing values that raise concerns among members of law enforcement and members of the communities they serve. On the one hand, if too many restrictions are

placed on police use of deadly force, the public will be endangered threatened endangered by permitting dangerous persons to escape immediate apprehension and such restrictions discourage effective police work. On the other hand, insufficient controls are placed on the police use of deadly force, there will be needless killings in the community.

Over the years, the effort to reform the police has influenced the promulgation of restrictive policies. For instance, in 1985, the United States Supreme Court prohibited police officers from shooting non-dangerous fleeing property offenders (*Tennessee v Garner*, 1985). The social movement aimed at reforming police use of deadly force was a direct result of the perception in minority communities that police had one trigger finger for Blacks and another for whites. Over the years, the staggering increase in complaints against the police use of firearms has triggered government investigations and the formation of grass-roots community groups serving in a watchdog capacity. The consequences of these interests have been a moving force in the reform of deadly force policies, training and applications.

As Gerald Caiden (1977:3) pointed out in the 1970s in *Police Revitalization*, reform movements do not appear by magic. Dissatisfaction with the status causes optimism about the efficacy of remedial action. The dissatisfaction must carry people over their threshold of tolerance and inertia to the point where they demand action and support promising prescriptions. In many communities, similar attention is now being directed toward police pursuit driving.

Police Pursuits and Reform

The public and private response to pursuit driving is in its beginning stages but a growing number of public agencies, media representatives and private citizens are calling

for investigations and reform. There have been many government investigations on the issue of pursuit driving. The United States Congress has had hearings on pursuit and several local grand juries have investigated the problems associated with pursuit.

The consequence of this type of inquiry has been reform in policies, training and supervision of pursuit driving. In the 1980s, the first grass-roots organization to reform pursuit driving was created by the father of a victim of pursuit, Gerald LaCrosse. Named after his daughter, Desere, his foundation strongly influenced the original organization and direction of many victims and their families. Mr. LaCrosse has dedicated his life to the education of law enforcement officials and the public in pursuit-related activities. In the 1990s, the movement has grown considerably and the Organization STOPP (Stop the Tragedies of Police Pursuit) has taken the lead role in the organization and development of reform in pursuit driving. This group has developed a national network of victims and others who are seeking reform in pursuit driving as a police tactic. In fact, Senator Byron Dorgan has introduced legislation (the Pursuit Awareness Act of 1995) to Congress. Senator Dorgan, who lost his mother in a police pursuit, has been a voice in the need to reform and manage police pursuit driving.

As a result of this publicity and the knowledge of local tragedies, some members of the police community, the media and citizen groups have criticized the negative results of pursuit driving as unnecessary and dangerous. The result of this criticism has been a reevaluation of pursuit policies and practices by many law enforcement agencies. Most of these police agencies responded to their evaluations with more restrictive policies and procedures.

Perhaps the most significant reform by a police agency during this period of the 1980s was spearheaded by the International Association of Chiefs of Police (IACP) which, in its 1990 model policy, restricted pursuits to those actions for which an officer would make a custodial arrest (1990). This statement exemplified the concerns expressed by many police officials. The Concepts and Issues Paper discussing the model policy warns the reader (1990: 3) the Model Policy is relatively restrictive in prohibiting pursuit where the offense in question would not warrant an arrest. Most traffic violations, therefore, would not meet these pursuit requirements. It is recognized that many law enforcement officers and administrators may find this prohibition difficult to accept and implement, particularly where they have accepted a more permissive pursuit policy. Nevertheless, in this critical area of pursuit driving, law enforcement administrators must be prepared to make difficult decisions based on the cost and benefits of these types of pursuit to the public they serve.

There is no indication exactly what prompted the IACP to recommend a relatively restrictive policy but most research and professional literature has concluded that pursuits create a far greater risk than benefit to law enforcement and to the public (for an opposing view, see Hannigan, 1992). In other words, when controlling for certain criminal actions, the risk created by vehicular pursuits is greater than the need to enforce the law (Crew et al, 1994). While this means that some offenders will escape immediate apprehension, it also means that innocent lives will be saved. There has been an increase in research on the risks and benefits of pursuit driving since the beginning days of empirical research started by the California Highway Patrol in 1983. The interpretation of those data provides a convincing argument that pursuit driving is an extremely

dangerous police activity and officers must not be allowed unbridled discretion.

However, many police officials still believe that the injuries and deaths caused by pursuits are worth the value of pursuing law violators (Hannigan, 1992). Because the issue of pursuit driving involves the heart of what many police view as their major concern, to apprehend law violators, some police defend pursuit driving emotionally it brings out their emotions. Similarly, as pursuit driving involves what many view as the central police mission, to save lives, it brings out opposing emotional responses from citizens and many law enforcement officials. In other words, pursuit driving is a highly emotional topic. Just as police use of firearms required study and reform, so do the tactics of pursuit. This study reports information collected over a two year period. It begins with a review of the legal, behavioral and attitudinal literature on pursuit and then turns to the original data collected for the study, and their analysis. The data include a national survey of law enforcement agencies, detailed case studies of several police agencies, opinion data from police recruits, officers and supervisors, members of the public and offenders who have attempted to elude the police. Following the data, policy implications will be discussed.

CHAPTER II

Civil Liability and Risk Management for Emergency Vehicle Operations

Legal Underpinnings of Emergency Vehicle Operational Liability

In our media conscious society, law enforcement and public safety organizations face increased scrutiny of their pursuit operations on a daily basis. Much of what has been termed "media sensationalism" has come about due to a variety of factors including victim outrage and high dollar civil judgments. To understand the need for reform in law enforcement pursuit training and the concept of law enforcement risk management requires that we adopt a new focus on the impact which emergency vehicle operations may have on the public which we have sworn to protect. Law enforcement risk management, in a fundamental sense, is about both the protection of the public and the reduction of agency and officer civil liability. Once the fundamentals of liability exposure for both agency and officer are understood, we can begin to build a protective structure, which is the risk management process.

Law enforcement pursuit operations should be viewed as a high profile component of every municipality's efforts at risk management. Indeed, the conventional wisdom is that, nationally, claims settlements and damage awards attributable to law enforcement activities account for approximately forty percent (40%) of all payouts for governmental entities. While this figure is not an exact one, to be sure, it highlights the increasing national concern over law enforcement exposure. For example, in a 1992 survey commissioned by the National Institute

of Municipal Law Officers (NIMLO), sixty percent (60%) of the NIMLO members surveyed identified police operations as the one municipal function which is most negatively affected by litigation costs. Members further identified litigation as the fastest growing "uncontrollable" expense affecting government budget priorities and processes¹. To understand the breadth of this exposure, the role which police pursuits may play in its creation and the mechanisms which may be available to assist in controlling it, requires that, as before mentioned, we understand the fundamentals of police civil liability exposure.

From a daily operational standpoint, both automobiles and firearms are deadly weapons. Accordingly, there has arisen a national consensus, reflected in recent court decisions, that increased scrutiny must be paid to the permissible parameters of firearms usage and emergency vehicle operations. Especially in the area of police pursuit there has been an increased outcry from the law enforcement and public safety community for more definitive operational guidance, as a matter of "front end" risk management. Again, the foundation for such guidance must rest on a comprehensive understanding of the legal principles which underlie agency and officer liability where injuries or property damage result from the conduct of the vehicular pursuit.

The purpose of this chapter is to provide insight into the various legal theories which may come into play when an individual elects to bring suit for injuries which were brought about by an emergency vehicle response, especially in a pursuit mode. An understanding of

¹MacManus, "Litigation: A Real Budget Buster for Many U.S. Municipalities"; *Government Finance Review*, February 1994.

the basis of such lawsuits can be immensely beneficial in the designing of a mechanism to assist in reduction of agency financial exposure.

Whether an injury came about from alleged officer negligence in a non-emergency response mode, from injuries sustained through an officer's intentional act in pursuit mode or an agency's failure to provide adequate or meaningful policy or training, officers must be made aware of the potential for liability based upon their acts, whether in a federal or state court setting. Likewise, from a public trust and risk management standpoint, law enforcement and public safety executives and risk managers must come to understand that both victim outrage and high dollar civil judgments are not vestiges of our society for which there is no controllable cause. The management of risk exposure, and thus litigation and its associated expense can only be based upon a comprehensive understanding of the legal principles underlying emergency vehicle operations.

THE BASES OF LIABILITY FOR EMERGENCY VEHICLE OPERATIONS

As a general proposition, lawsuits involving emergency vehicle operations will be brought in either state court or federal court. Actions brought in a state court, commonly called "tort"²actions, are generally brought in a court of general civil trial jurisdiction such as a District, Circuit or County Court. While the names of the courts may differ, they are invariably courts which have the authority to hear and decide actions brought by private parties

² A tort is generically defined as an injury to the person or property of another for which the injured party may recover damages or other relief from a court of law.

(as opposed to those actions brought by the State, such as criminal actions). Actions brought in the state courts under state tort law will not, of necessity, involve violations of federal constitutional rights. Actions brought under Title 42, section 1983 of the U.S. Code (hereinafter "§ 1983"), whether in state court or federal court, will require a showing of violation of a federally protected constitutional or statutory right. Whether a cause of action is based on state tort or on § 1983, the allegations of the plaintiff must establish responsibility on the part of the emergency vehicle operator or the employing agency, or both. Responsibility of the operator is typically based on an allegation of some variety of negligence, or some greater degree of culpability such as a so-called "intentional tort". The responsibility of the employing agency, to the contrary, may be based upon a showing of failure to provide meaningful policy or adequate training, although, under state law in many states, merely employing an officer who commits an act of negligence can constitute a basis for agency liability under a theory called *respondeat superior*. This theory of recovery is not available under § 1983. As will be developed later, § 1983 is not an appropriate cause of action for an injured party where a federal law enforcement officer is alleged to have caused the injury because §1983 is limited in application to those persons who are acting under apparent "authority of state law".

State Tort Actions

Actions brought against an officer or the employing agency under state law are generally, as noted above, based on allegations of negligence. The legal formula for negligence can be summarized as follows:

1. A duty or obligation, recognized by the law, requiring the person to conform to a certain standard of conduct, for the protection of others against unreasonable risks.
2. A failure on the person's part to conform to the standard required: a breach of the duty...
3. A reasonably close causal connection between the conduct and the resulting injury. This is what is commonly known as "legal cause," or "proximate cause," and which includes the notion of cause in fact.
4. Actual loss or damage resulting to the interests of another.

From a practical standpoint, negligence in an emergency vehicle scenario generally results from one of the three following omissions:

1. Violation of an applicable state statutory provision which created a duty to act or not act.

³ Prosser and Keeton on the Law of Torts, (5th Ed.; 1984)

2. Violation of pertinent department policy which created a duty to act or not act.
3. Violation of a duty to use "due care" generally.

The term "duty", as used here, means that there was some obligation recognized by the law to behave in a particular fashion towards the person who was injured. The law recognizes generally that if there was no duty to the injured on the part of law enforcement then there can be no responsibility for payment of monetary compensation , known as "damages", or any other type of relief to the injured party. As will be discussed later, the law also recognizes certain "constitutional duties" which are not created by statute or policy. Particularly egregious violations of an owed duty may result in liability under §1983 for either the officer or agency concerned.

Whether a lawsuit is ever filed against an officer or agency, however, may be determined by the presence of tort claims legislation in the state concerned. While it is beyond the scope of this chapter to discuss claims against federal officers and agencies under the Federal Tort Claims Act, similar limitations on suit are present where a federal government agency or actor is alleged to have been negligent. The effect of tort claims legislation is generally to limit the amounts which may be recovered for injury or to limit the available defendants in the event of a lawsuit.

The underlying purpose of state tort claims legislation is to limit litigation by encouraging settlement of claims in advance of the necessity of filing suit. Where the filing of

a lawsuit occurs nonetheless, tort claims legislation may limit significantly the number of available defendants and, as well, the amounts recoverable. A common attribute of many state Tort Claims Acts, and the Federal Tort Claims Act as well, is that intentional or criminal action or inaction is excluded as a basis for recovery under the act itself. In situations involving such behavior, the injured party may only recover by filing suit and typically will name the offending officer as an individual defendant. At the time the suit is filed the injured party becomes known as the "Plaintiff" or "Complainant".

A Brief Overview of a Typical State Court Lawsuit

In the typical state tort action, the Plaintiff alleges some variety of negligence on the part of the officer, or officers, involved in the emergency vehicle operation which has "proximately" caused the Plaintiff's injury. This allegation is set forth in a legal document known as a Complaint or Petition or some other similar expression. The party being sued, the "Defendant", is then afforded the opportunity to answer the Complaint or Petition within a certain number of days or be declared "in default". Being in default merely means that the court, in many states, may award the Plaintiff the relief requested in the Complaint or Petition without further hearing on the matter. The Defendant has, of course, the opportunity to provide a response to the Plaintiff. This is done in a document known as the Answer. In the Answer, the Defendant may also raise Counterclaims against the Plaintiff or Crossclaims

⁴ *The term "proximate cause" is an important concept in American tort law. It merely means that there is a close causal connection between the actions of the alleged "wrongdoer", legally known as the "tortfeasor", and*

against other persons who are felt to be responsible for injuries which occurred. Where the Defendant files a Counterclaim, the Plaintiff is allowed to file an additional document known generally as a Reply to address the Defendant's assertion of fault on the Plaintiff's part. All the documents mentioned above are collectively known as "pleadings".

Once the pleadings have been filed and served on opposing parties, each side to the lawsuit will engage in a process known generally as "Discovery", as permitted by the applicable state Rules of Civil Procedure. The Rules of Civil Procedure are typically contained in a volume of the state code of laws and generally govern what items of information are required to be disclosed to the opposing party, when they are to be disclosed and the remedy for failing to disclose. Many states have fashioned their discovery rules and their Rules of Civil Procedure after their federal counterpart. Discovery is a critical part of the lawsuit and many cases are settled or dismissed based upon what has been discovered by the opposing party.

If the parties get beyond the Discovery process without settlement or dismissal, each party then typically files a variety of Motions. Motions are requests directed to the court asking it to order relief without submitting the matter to trial either before the court or by a jury. Motions may be addressed to some procedural aspect of the case, such as a Motion to Extend Discovery, or to some substantive aspect, such as a Motion to Dismiss or a Motion for

the injury suffered by the Plaintiff.

Summary Judgment. In all events, the motion stage of the proceeding is critical for sorting "the wheat from the chaff" and allowing the court to deal only with the matters which should require its attention at trial.

After motions have been completed and ruled upon, the final stage of the proceeding is the trial. In the typical state tort case, the burden is upon the Plaintiff to show by a "preponderance of the evidence" that the Defendant has caused the injury for which the Plaintiff is seeking recovery. Typically the Plaintiff will choose between a trial by a jury or a trial by the bench (i.e. by the judge without a jury). The process of deciding whether to choose trial by jury over trial by the bench is a complicated one which is far too extensive for discussion in these materials. Where trial is by jury, however, the jury will decide the facts in the case and the judge will decide all legal issues. When the trial is by the bench, the judge decides, obviously, all issues factual and legal.

In the typical negligence action, as in most lawsuits, the issue of "damages" becomes central. The term refers to the amount of money which the court will award to the Plaintiff, or to the Defendant as a matter of Counterclaim, to compensate for an injury. Monetary damages are generally said to be either "compensatory" or "punitive" in nature. There are some

⁵ *This is the general civil standard of evidence which must be satisfied by the Plaintiff in order to be awarded relief by the court. Generally the term means that the Plaintiff must show that it is "more likely than not" that the Defendant is responsible for the injuries.*

⁶ *Some states use the terms "nominal" or "actual" to describe compensatory damages. In either event, the concepts are the same. Punitive damages, as the name implies, are assessed to punish a wrongdoer and typically have no logical relationship to compensatory damages. Thus, it is not unusual to have compensatory damages of,*

limitations on when punitive damages are appropriate, however and against whom. As a broad generalization, punitive damages are not appropriate where the Plaintiff's injury was caused merely by the "simple" negligence of a law enforcement officer or against a municipality.

Compensatory damages are awarded to "make the person whole"; in other words, to compensate the injured party for the injury suffered at the hands of the wrongdoer.

Compensatory damages may cover such matters as medical costs, lost wages, prescription costs, pain and suffering and loss of the company and association of the injured party by a family member. In the typical jury trial, the jury will determine the appropriate amount of compensatory damages, whereas the issue of punitive damages is sometimes, depending upon jurisdiction, decided by the judge.

42 U.S.C. § 1983 ACTIONS

From the standpoint of a state or local law enforcement officer or municipalities, section 1983 actions can be especially devastating from both a financial and public confidence standpoint. There has been much written about § 1983 and law enforcement activities and, yet,

say, \$ 10,000 and punitive damages of \$ 100,000 or more!

⁷ *The rules concerning award of punitive damages are varied from state to state. For example, some states may allow award of such damages where the behavior of an officer can be shown to be "grossly negligent", whereas in others punitive damages may not be appropriate unless "recklessness" can be shown. In suits brought under 42 USC § 1983, punitive damages cannot be awarded against a municipal defendant. This same applies in some state court proceedings as well.*

⁸ *This latter type damage, loss of association, is commonly known as "loss of consortium".*

⁹ For purposes of § 1983 discussion, the term "municipality" includes all units of local government at lower than the state level. The most common of these are, obviously, cities and counties.

for the most part, law enforcement officers and administrators remain somewhat unclear regarding the application of the section and how it may come to impact them.

The language of Title 42, United States Code, section 1983; frequently called the "Federal Civil Rights Act" is amazingly brief. The section states, in pertinent part:

"Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress...."

Thus, § 1983 creates no rights in and of itself but merely provides a remedy for violations of rights secured by either the United States Constitution or the "laws" of the United States. It has only two operative requirements:

- 1) That a violation of a federal constitutional or statutory protection occur; and
- 2) That the person committing the violation be a person acting "under color of " state law

Where municipal law enforcement officers are involved, actions undertaken in the course and scope of duty will virtually always satisfy the second requirement, as the authority

¹⁰ Typically, law enforcement officers and administrators think of § 1983 in terms of federal court proceedings. The § 1983 action, however, can be brought as an action in state court as well. The substantive aspects of state and federal court § 1983 actions are identical. Some procedural differences may exist in terms of motions, discovery and various other aspects of the lawsuit which are controlled by state rules of civil procedure. For our purposes, however, we will discuss § 1983 as a federal court proceeding.

to arrest and exercise the myriad of other law enforcement functions derives from state constitutional or statutory empowerment. Interestingly, § 1983 does not apply to injuries inflicted by persons acting under the apparent authority of *federal* law, absent some state law connection. The history of the statute will show that § 1983 was enacted by the U.S. Congress in 1871 as a means of ensuring that newly emancipated slaves were not deprived of their constitutional protections by the secessionist states themselves. In fact, the law was originally referred to as the "Ku Klux Klan Act", although it has seldom been used against their activities.

The Application of § 1983 to Law Enforcement Activities

A fundamental question which must be addressed is how, or why, section 1983 applies to law enforcement activities. From the time of its enactment in 1871 it was relatively unused until the U.S. Supreme Court decided *Monroe v. Pape* (365 U.S. 167) in 1961. *Monroe's* holding, that the term "persons acting under color of state law" was applicable to municipal police officers although not directly applicable to municipal corporations themselves, started a trickle of lawsuits against law enforcement officers which did not come to full stage until 1978 in *Monell v. Department of Social Services* (436 U.S. 658). In *Monell* the Supreme Court overruled *Monroe* to the extent that it had held municipalities not to be "persons" within the meaning of §1983. After *Monell*, litigation floodgates literally opened for suits against municipalities whose "policies, customs or practices" could be said to be framed as the

"moving force" behind constitutional or federal statutory violations against their citizens. The swelling stream of §1983 litigation against municipalities has finally reached torrent levels after the U.S. Supreme Court's 1989 decision in *City of Canton v. Harris* (489 U.S. 378). No single case has become so critical to the management of municipal law enforcement risks, particularly those associated with emergency vehicle operations, especially pursuit. The aftermath of *City of Canton* and its impact on section 1983 litigation against municipalities, in particular, has become a frightening history.

Types of Liability Under § 1983

Just as it is important to understand why section 1983 applies to law enforcement operations, it is equally important to understand the types of liability which may attach in section 1983 actions.

As a broad proposition, liability under § 1983 falls into three categories:

- 1) Individual , or personal, liability of the law enforcement officer
- 2) Vicarious, or Indirect, liability of a supervisor; and
- 3) Municipal liability

¹¹ The term "vicarious liability" has spawned a significant amount of disagreement among legal practitioners as to its specific meaning. Some practitioners use the term to refer to a common law theory of imputed negligence otherwise known as *respondeat superior*. This theory of imputed negligence requires no showing of fault on the part of an employing agency but rather assigns (i.e. "imputes") the negligence of the employee to the employing agency for liability purposes. This theory of recovery is not available under § 1983 but is available in many state court proceedings. We adopt the meaning of "vicarious" shared by the other school of thought which denotes vicarious liability as a type of indirect liability for the acts of a subordinate where a superior, usually a supervisor, has through some gross negligence of his or her own, or through participation in the subordinate's activities, allowed injury to occur. We specifically do not refer to *respondeat superior*.

Individual Liability

Individual officers frequently express concern over the exposure of their personal assets in the event of a lawsuit where their personal activities are alleged to have caused a Plaintiff's injuries. For the most part, the Plaintiff alleges that some variety of negligence or intentional wrongdoing of the officer has caused compensable injuries.

In state court, an applicable Torts Claims Acts may provide some insulation to the officer where simple negligence is alleged. Typically, even where there is a finding of gross negligence on the officer's part; if the actions complained of are within the course and scope of the officer's duty, the resulting judgment will virtually always be paid by the employer or its insurance carrier. The reasons for the decision of the employer or carrier to pay the judgment are too wide and varied for discussion in this chapter but typically center around principles of public service and policy.

In § 1983 actions, however, the basis of individual officer liability is somewhat more complicated than in a state tort action and requires a basic understanding of how the § 1983 cause of action relates to emergency vehicle operations. After the discussion of § 1983 claims

¹² Beyond the individual officer's concerns with state or federal civil liability are issues which may arise with respect to allegations of criminal wrongdoing. While beyond the scope of these materials, the individual officer may face criminal liability under federal criminal civil rights statutes such as 18 U.S.C. § 241 or § 242 or criminal proceedings in state court under state criminal statute or, in some states, under state common law. The discussion in these materials relating to litigation file preparation has general application to an officer in such a situation. Agency assistance, however, may not be readily available to an officer pending criminal prosecution and the services of competent private legal counsel should be enlisted.

in emergency vehicle operations, we will discuss the bases for vicarious and municipal liability.

Section 1983 Constitutional Claims in Emergency Vehicle Operations

Although the expression "emergency vehicle operations" may encompass non-emergency, emergency response and pursuit activities, § 1983 lawsuits have generally focused on emergency response and pursuit activities. Traditionally, non-emergency vehicle operations have been the focus of state negligence claims. To understand how the § 1983 action is set out in an emergency vehicle operations case, one must recall the two operative requirements for § 1983 set out earlier in this section:

- 1) That a violation of a federal constitutional or statutory protection occur; and
- 2) That the person committing the violation be a person acting "under color of " state law

For the moment , discussion of the first requirement is critical, with a concentration on violations of constitutional protection.

Constitutional Violations in Emergency Vehicle Operations

A federal constitutional violation cannot occur unless the injured party has constitutional protection. While this statement may seem overly simple, it is a critical concept in understanding how liability attaches, or does not attach, to law enforcement emergency

vehicle activities. Federal constitutional protections are laid out in the Bill of Rights to the Constitution, which consists of its first ten amendments, and the Fourteenth Amendment which makes the first ten amendments applicable to the states. Therefore, if a Plaintiff alleges that a violation of constitutional rights occurred, the protection must be found either in the Bill, of Rights, the Fourteenth Amendment or in the courts' interpretations of those rights. The mere fact that injury occurs to the Plaintiff and that there was law enforcement involvement in the set of circumstances out of which the injury arose is insufficient to attach liability, by itself , to the law enforcement officer or agency. The reason for this result is that there must have been some duty on the part of law enforcement towards the Plaintiff; whether the duty was to act or refrain from acting. If there was no duty, which is frequently set out as a "special relationship" to the Plaintiff, there can be no liability. This concept will be further developed below in the discussion of Fourteenth Amendment "due process" claims. At the present time, the vast majority of emergency vehicle constitutional claims under § 1983 are brought under the Fourth Amendment or the Fourteenth Amendment to the U.S. Constitution. These claims differ significantly from each other and are based, in large part, on the identity of the Plaintiff as suspect or innocent third party. It is also important to note that, unlike state tort actions, § 1983 "due process" claims generally require a degree of "fault" greater than simple negligence to be present if the action is to go forward.

¹³ This is a somewhat significant oversimplification in as much as the U.S. Supreme Court has ruled only that substantive due process claims under § 1983 cannot be supported by an allegation of simple negligence (see *Davidson*

Fourth Amendment Claims

The Fourth Amendment to the United States Constitution prohibits, among other things, "unreasonable" searches and seizures,. From the standpoint of emergency vehicle claims, we need only concentrate on claims for unreasonable "seizures". This type claim is typically brought by a suspect who has fled from law enforcement and suffered injury as a result. Because Fourth Amendment claims require that a "seizure" occur and because of the definitionä of seizure given by the United States Supreme Court in such cases as *California v. Hodari D.* (111 S.Ct. 1547 ;1991), Fourth Amendment claims will typically arise only where a pursuit has occurred. For purposes of illustration, it may be helpful to take a look at how such a claim arises.

Although there have been few cases decided on a pursuit factual basis by the U.S. Supreme Court, there is a wealth of cases which have dealt with the issue of seizures, especially by deadly force. Perhaps the most important of these is the 1985 decision in *Garner v. Tennessee* (471 U.S. 1) which essentially sounded the death knell for the so-called "fleeing felon" rule. That rule had allowed a law enforcement officer to use deadly force, typically a firearm, to stop the flight of a fleeing suspect where the suspect, having committed a serious crime (i.e. felony), refused to stop on police demand. The Court, noting the development of the concept of "felony" from the English common law to its present day iteration, ruled that in

v. Cannon and Daniels v. Williams; 1986); footnote 8 of *City of Canton v. Harris* clearly sets forth the court's reluctance to address the operative degree of fault required to establish an underlying violation; although general consensus is that mere negligence will likely be held insufficient..

present day society, where the classification of "felony" is no longer reserved solely for capital crimes (asä it had been at Common Law), use of deadly force is an inappropriate means of stopping a non-dangerous fleeing suspect. In fact, at the time of the *Garner* decision many jurisdictions classified various non-dangerous offenses as felonies. As an example, in South Carolina, the crime of "Peeping Tom" was classified as a felony punishable by up to three (3) years imprisonment, but the crime of Assault and Battery of a High and Aggravated Nature was classified as a misdemeanor, punishable by up to ten years' imprisonment! The upshot of the ruling in *Garner* has been that law enforcement agencies are now required to operate under a "two prong" analysis before using deadly force against fleeing suspects. Specifically, an officer electing to use deadly force must now answer both of the following questions affirmatively before deadly force usage is authorized under *Garner*:

- 1) Does the fleeing suspect against whom deadly force usage is considered pose a "significant threat" to members of the public if immediate apprehension is delayed; and, if so
- 2) Is there any lesser means of stopping the flight of the suspect, besides deadly force, which is reasonably available ?

In 1989, the U.S. Supreme Court addressed the issue of the constitutional limitations of deadly force usage in a pursuit situation. The decision was called *Brower vs Inyo County* (489 U.S. 593). *Brower* has become important for its recognition that certain pursuit tactics may

result in a claim of constitutional violation through a seizure by deadly force. The facts of the case are that a suspect in a stolen car was being pursued at high speed by deputies of the Inyo County California Sheriff's Department. The chase terminated when the suspect collided with a roadblock, consisting of an 18-wheel tractor-trailer rig pulled across both lanes of a two-lane highway just beyond a blind curve. Additionally, a police cruiser had been parked on the shoulder of the roadway near the tractor-trailer with its high-beam headlights aimed at the suspect's eye level in an effort to blind the suspect and conceal the fact of the roadblock. The court held that a "seizure" by deadly force, for purposes of the Fourth Amendment, had occurred and sent the case back to the lower court to determine whether the seizure was unreasonable.

The *Brower* ruling, discussed above, relied heavily on the holding in *Garner* to point out that whether a suspect in a pursuit case could be seized by use of deadly force would depend upon the nature of the offense for which pursuit was initiated and the danger which the suspect posed to the public. The net impact of *Brower* is that a seizure by deadly force; such as by ramming, discharge of a weapon or other contact method, will not likely be permitted for minor nondangerous offenses, such as traffic violations, where the suspect's driving does not pose a "significant threat" to the public, to include the officer. This point becomes critical to discussions of pursuit tactics and policy development and training to the policy.

Fourteenth Amendment Claims

Although Fourth Amendment claims are typically raised only in pursuit claims by suspects, Fourteenth Amendment claims are generally brought by innocent third parties who are injuredä in either pursuits or in emergency response situations. This cause of action under § 1983 alleges usually that the Plaintiff has been deprived of "due process" protections under the due process clause of the Fourteenth Amendment. The pertinent language of the Fourteenth Amendment states:

"No State shall ...deprive any person of life, liberty, or property without due process of law..."

The term "due process" is a nebulous one in the law and may be spoken of in terms of "substantive due process" or "procedural due process". For our discussion purposes we will focus on the so-called "substantive" aspects, meaning that we will look at those situations where a person has been deprived of "life, liberty or property" itself as opposed to the right to have a hearing prior to deprivation by the government.

Situations where an innocent motorist is struck by a fleeing suspect or law enforcement vehicleä in pursuit or a law enforcement vehicle in emergency response mode are perhaps the most tragic situations imaginable for law enforcement professionals. The idea that an innocent person is made to suffer runs contrary to the law enforcement mission to protect and serve. Understanding that, we must further understand that injury to third parties will be balanced by a court against the duty owed to those persons by law enforcement. It is this duty concept which underlies Fourteenth Amendment claims. As we noted earlier, if there is no duty on the

part of law enforcement to act or refrain from acting with respect a particular individual then any injury which may result to the individual from law enforcement activity or inactivity legally will not result in liability. This proposition frequently causes concern on the part of law enforcement officers who, for example, feel that they have a *duty* to pursue. To understand the duty concept, it may be helpful to use a practical illustration before undertaking further analysis.

As a hypothetical situation, suppose that a law enforcement officer observes a man swimming in a rain swollen river toward shore. In the course of swimming the man becomes fatigued and begins to drown. The law enforcement officer has a coil of rope in the trunk of his cruiser but elects not to retrieve it and instead gets into his car and drives away. Should liability be imposed upon the officer for the failure to attempt rescue? Morally, we would likely all agree that the officer owed a "duty" to the drowning man. Legally, however, the duty question must be framed quite differently. Absent a special relationship between the officer and the drowning man, there is no legal duty, in the majority of jurisdictions, to render rescue. This result comes about because of the widely accepted rule, often called the "public duty" rule, that a law enforcement officer's duty of protection is to the public generally and not to a specific individual, absent a so-called "special relationship". This morality-legality dichotomy causes many officers great problems when they feel the need to act from a moral, or social responsibility, basis but subsequently find themselves being subsequently sued for the decision to act. A classic example of this situation occurs when an officer is confronted with

an apparently drunken driver weaving down the road at a low rate of speed. The initial inclination of some officers is that there is an immediate need and duty to pursue the driver, at all costs, even where the driver pulls away at an increased rate of speed after being signalled to stop. But is there? It is critical to distinguish between the duty to pursue and a duty to take other possible steps to protect the public, just as it is important to distinguish moral from legal duty.

Analysis of liability under the Fourteenth Amendment due process clause focuses on this issue of duty. While the focus of the Fourteenth Amendment is on "constitutionally created duty"; we would do well to also understand that there are also "nonconstitutional" duties which may impact an officer's performance. Nonconstitutional duties are created generally in one of two ways: by state statute or local ordinance, or by agency policy. Neither state statute nor agency policy, however, can create a constitutional duty. The fashion in which a policy or statute created duty is violated, however, may give rise to a constitutional claim if the behavior itself violated some constitutional protection envisioned by the Fourteenth Amendment's due process clause.

Statutory duties

Each state has a provision in its code of laws which specifies conditions under which a vehicle may be operated as an authorized emergency vehicle. The importance of such statutory provisions is that they lay out in general terms how an emergency vehicle may be exempt from

state traffic laws when responding to an emergency or when in pursuit of an offender and, as such, may create certain duties. The most common duties created under state statute are the duties to utilize emergency warning devices and the duty to exercise "due care" in emergency response or pursuit operations. Most state statutes are based upon the language of the Model Vehicle Code which allows the operator of an emergency vehicle to exceed the posted speed limit and generally disobey traffic directives if the operator exercises "due care" and utilizes lights and/or siren. Obviously, each law enforcement agency which wishes to exceed speed limits, or otherwise disobey traffic directives, must comply with the statutory provisions. Beyond the bare guidance of the state statute, however, each agency must provide guidance to its officers in the form of policies and procedures. It is important to remember that state statutes will not likely provide guidance on such critical matters as when a pursuit or emergency response can be initiated. These issues must be addressed in the agency policy.

Policy created duties

An agency's pursuit policy is a directive for action to its officers. The joint purpose of the policy, and the procedure to implement it, is to identify for officers acceptable, as well as unacceptable, behavior in the course of pursuit operations. In other words, the policies and procedures create certain duties for officers engaged in emergency vehicle operations to undertake or not undertake certain actions. It is fairly safe to say that the majority of jurisdictions do not tell their officers in their policies that they *must* pursue all violators but rather leave the decision to continue or discontinue a pursuit to officer discretion, subject to

agency policy guidance. Until 1989, many agencies across the United States took the approach that minimal written guidance to officers and the advisement to "exercise good judgment" were the preferable means for controlling the risks of pursuits. That year, however, the U.S. Supreme Court delivered its opinion in *City of Canton vs. Harris* (109 S. Ct. 1197; 1989) (discussed above) and effectively served notice that a philosophy of "no policy is the best policy" could pose extreme liability problems for municipalities and their law enforcement agencies where the actions of their officers violated citizen constitutional protections.

Constitutional duties

Above and beyond the guidance provided by state statutes and agency policy and procedure, are the limitations and duties imposed by the United States Constitution, as interpreted by the courts. In 1989, the U.S. Supreme Court in *DeShaney v. Winnebago County Department of Social Services* (109 S. Ct. 998; 1989) effectively served notice that unless a special relationship exists between the government and an injured party; in other words that a governmental duty to the injured party exists; liability cannot attach, irrespective of the perceived moral obligation of the government or the outrageousness of its behavior.

To revisit, at this point, the question of whether there is a duty to pursue; an affirmative answer can only be forthcoming if there is either a state statutory mandate to pursue (there is none); or the agency pursuit policy mandates that officers pursue all violators (this is ill-advised and generally unlikely); or there is a constitutional duty to act to pursue all violators (*DeShaney* clearly indicates not). Is there, however, a duty to take some step to

prevent the previously mentioned drunken driving suspect from injuring the public; or should law enforcement officers turn in their cruisers and badges and allow all suspects to escape? Hardly.

Inherent in the law enforcement oath to uphold the laws and to protect and serve is a duty to take steps to protect the public. Balanced against this apparent open ended obligation, however, is a balancing test which courts will undertake where injury occurs. The balancing is basically this: Was the need to immediately apprehend the suspect so great that the risk posed to the public and the resultant injury justified by law enforcement action? Inherent in this analysis is the question of the reasonableness of the law enforcement officer's actions. In § 1983 suits, the standard for judging the reasonableness of individual officer behavior in Fourteenth Amendment "due process" claims has varied from federal circuit to federal circuit. For example, one federal court might rule that an officer's "recklessly indifferent" behavior in a pursuit could result in "due process" liability; whereas the same behavior in another federal court would likely be insufficient to trigger the threshold requirement of behavior which "shocks the judicial conscience". In summary, the balance of officer behavior against the need to immediately apprehend which will be deemed acceptable to avoid individual liability varies significantly from federal circuit to federal circuit.

Revisiting Individual Officer Liability

Individual officer liability, subject to the above discussion of Fourth and Fourteenth Amendment violations, typically comes about where the officer's behavior exceeds the course

and scope of duty or constitutes intentional violation of agency policy. As a general proposition, law enforcement officers are protected under a concept known as "qualified immunity", sometimes erroneously called "good faith immunity" for their actions in the course and scope of their duty. This concept, in its most current judicial version, allows officers to avoid individual liability where their actions do not violate "clearly established law". What may be considered as "clearly established", however, is not clearly established under current U.S. Supreme Court guidance,ä but it is generally a safe statement to say that an officer whose actions in compliance with policy result in injury to a third party or suspect will not likely be held personally liable unless the policy was known by the officer involved to violate well established law.

It is also important to remember, however, that the officer's actions in the course of an emergency response or pursuit will be critical initial indications of the potential liability which may later come about. For example, if the officer's conduct in the course of a pursuit is such that it violates agency policy, there remains the question of whether the violation of policy is merely "negligent" (i.e. unintentional, but lacking in the exercise of "due care") or "intentional" or "shocking to the conscience" (i.e. intending the resultant outcome of the behavior; or foreseeably certain to result in the injury). The answer to this question can significantly shape the character of the suit which is filed. If the officer's conduct is violative of policy solely through the failure to exercise due care, the resultant plaintiff's claim will likely be one brought under the state's tort claims act; or ultimately filed as a state court

negligence action. If, however, the violation of the policy is intentional (e.g. the officer knew that ramming of a suspect vehicle for less than dangerous felony offenses was prohibited but consciously made the decision to do so anyway), or the officer's behavior in violating the agency policy created duty rose to the level of a constitutional due process violation, as discussed above, then the plaintiff's claim will likely focus on § 1983 as a remedy. This result comes about based on our earlier discussion regarding the general non-availability of § 1983 for simple negligence claims.

Vicarious Liability

Once the basics of § 1983 liability are comprehended, vicarious or indirect liability can be understood by the simple concept that a supervisor, or other superior officer cannot, with impunity, allow a subordinate, to whom a duty of supervision is owed, to commit constitutional violations against a citizen or take part in the unconstitutional behavior either through direct participation or ratification. A classic, if not overused, example of this concept is the liability which attached to the inaction of the on-scene supervisor during the beating of Rodney King in Los Angeles in the early 90s. Vicarious liability under § 1983 will require, at a minimum, that gross negligence or greater culpability be attendant to the supervisory action or inaction. Where state law tort claims come about, the concept of *respondeat superior* may attach liability to the employer itself, where permitted under state law. Recall, however, that *respondeat superior* (which is liability based upon the mere employment of the officer) is not a permissible basis of recovery under § 1983.

Municipal Liability

From the standpoint of so-called "deep pockets" liability, municipalities, and we might add their insurers, are greatly at risk. As developed earlier, a municipal entity is not liable for the acts of its officers, under § 1983, merely because it employs them. The officers' infliction of constitutional injury must have been in furtherance of the "policy", "custom" or "practice" of the municipality before the treasury of the municipality is exposed. As alluded to earlier, "policy" may be deemed to exist by a court in a number of ways. Certainly, written policies and directives may be indicative of the municipality's "causation" of a Plaintiff's injury through its officers, but often the injury suffered cannot be directly attributed to anything in writing although it is well known that "it's always been done that way." In such situations, development of a history of constitutional violation by the offending agency's officers can suffice to establish the custom or practice by the Plaintiff. For purposes of municipal liability, however, mere establishment of a policy, custom or practice is not enough to impose liability. The policy, custom or practice must have been such as to have proximately caused a deprivation of the Plaintiff's constitutional rights (or federal statutory protection). In our previous discussion of § 1983 liability for pursuit and emergency response activities, we identified the Fourth and Fourteenth Amendments as significant sources of constitutional protection for Plaintiffs and as significant limitations on an agency's emergency vehicle operations. At this point, some discussion is necessary regarding how violations of constitutional protections can impose liability on a municipality. Specifically, we must discuss

the impact which *City of Canton v. Harris* has had on law enforcement emergency vehicle policy, operation and training. At the conclusion of this chapter we will discuss *Canton* and its impact on risk management for law enforcement emergency vehicle operations.

City of Canton v. Harris

In 1989 the U.S. Supreme Court effectively served notice that municipalities and their representative law enforcement agencies must be accountable for the critical law enforcement functions of their officers. The *Canton* case, on its facts, is not related to emergency vehicle operations; but the court's holding and the language of the now famous "footnote 10" are fundamentally important to protecting the public and officers alike. The *Canton* case was a § 1983 action commenced by a woman who suffered "severe emotional distress" after being arrested by officers of the Canton, Ohio Police Department. The substance of her claim related to an alleged failure to provide her medical attention when she was booked into a detention cell at police headquarters. In essence, Ms. Harris, complaint was that she was deprived of her due process right to medical attention by the city of Canton because there was inadequate training of intake officers to recognize when an arrestee was in need of medical care. In fact, Ms. Harris was taken to the emergency room of the city hospital upon her bonding out and was admitted to the hospital for treatment and, after release, was treated on an outpatient basis for a significant time period. The court, in analyzing her claim, noted that certain law enforcement activities require meaningful officer training if members of the public are to be protected against constitutional injury. Of critical importance to our discussion of

emergency vehicle operations is the court's language in footnote 10 of the opinion. In describing law enforcement activities which require significant training, the court stated:

"For example, city policy makers know to a moral certainty that their police officers will be required to arrest fleeing felons. The city has armed its officers with firearms, in part to allow them to accomplish this task. Thus, the need to train officers in the constitutional limitations on the use of deadly force, see *Tennessee v. Garner*, 471 U.S. 1 (1985), can be said to be "so obvious," that failure to do so could properly be characterized as "deliberate indifference" to constitutional rights. It could also be that the police, in exercising their discretion, so often violate constitutional rights that the need for further training must have been plainly obvious to the city policy makers, who, nevertheless, are "deliberately indifferent" to the need."

The sum and substance of the holding in *Canton* is that municipal policymakers must be cognizant that certain activities of their law enforcement officers run the great possibility of causing injury to citizens if officers are not trained in the performance of the activities. While footnote 10 discusses the use of deadly force under *Garner*, responsible inquiry by law enforcement administrators must be into those law enforcement activities which expose the public, and officers themselves, to extreme risk of injury if not properly carried out. From a statistical standpoint, we would all likely agree that a law enforcement officer is much more likely to engage a suspect in pursuit, as an example, than to discharge a weapon (other than for

training or animal humane purposes) during a career. Yet the predominant focus of law enforcement policy and training has been on firearms usage. Likewise, law enforcement administrators have traditionally focused on firearms as the virtually exclusive means of inflicting deadly force. Yet, recently, cases like *Brower* (discussed above) have caused us to reevaluate our pursuit operations as potential deadly force applications.

The bottom line for municipal law enforcement is that if a failure to provide policy and training to officers in "critical functions", such as emergency response and pursuit, can be classified as "deliberate indifference" to the constitutional rights of members of the public and constitutional injury occurs; then municipal liability will likely attach.

Liability for State Officers

A fundamental question unanswered in the foregoing discussion is the liability exposure faced by officers who are employed by state law enforcement agencies. This area is of critical importance because of the general proposition that neither a state nor its officers, who are acting in "official capacity", can be sued in federal court, or for that matter in a state court upon a federally based cause of action such as 42 U.S.C. § 1983 (See, e.g., *Will v. Michigan Department of State Police*; (491 U.S. 58; 1989). This prohibition, however, is not an ironclad protection against any lawsuit for state officers; to include sheriffs and their deputies who may be classified as "state actors" under the laws of their respective states. It is important to recall that a state claim based upon negligence, or some variation thereof, can have application against virtually any state or local officer.

From the standpoint of § 1983 exposure, however, liability can attach against a "state actor" only in that officer's individual, capacity. Distinguishing what constitutes an official capacity act from that which constitutes an individual capacity act can, however, prove tricky. Also, it should be noted that, as a practical matter, a Plaintiff will likely allege in the Complaint that the acts of the officer which resulted in injury occurred in the officer's individual capacity. Because of the extensive effort which must be expended in the course of pretrial discovery to identify whether the acts were actually personal or official capacity, an insurer will likely intervene to defend the officer. While such an approach by Plaintiff's counsel may appear to be unfair in some clearcut instances, the reality is that it frequently is utilized to tap into the pocket of the employing governmental entity. Therefore, as a practical measure, state officers may take little solace in the protections purportedly afforded them and, as an operational concern, should tailor their conduct accordingly.

RISK MANAGEMENT AND LIABILITY REDUCTION

Risk Management: Definition and Benefit

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 commonsense 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 one might add cost effective, protective measures which will prevent the hazards from becoming *actual*, or at least catastrophic, occurrences.

To understand the benefit of effective risk management requires that we understand that unprepared for hazards have financial, operational and emotional impact both on law enforcement agencies and the governmental entities they serve. Equally, financial and emotional hardship may be borne by the members of the public officers have sworn to protect and serve. In some agencies there is a smug, and one might add erroneous, perception that, once an incident has occurred, law enforcement operational exposures are an insurance company's problem. Such a shortsighted approach ignores the fact that insurance premiums are borne by the agency either directly, or indirectly through its representative governmental entity's budget allocation. Perhaps the best justification for effective law enforcement risk management measures is the budget savings which can be reallocated, away from law enforcement liability or automobile insurance premiums, to critical law enforcement needs such as increased personnel, new equipment or funding for training.

"Front End" Risk Management

Ideally, risk management for law enforcement agencies should be what is called a "front end" proposition; that is that it should put into place well in advance of the occurrence

of the contingencies which invite hazards so that adequate steps can be taken to provide protection. Unfortunately, we do not live in an ideal world and, as we will see below, risk management must sometimes take an "after the fact" approach; which many of us might colloquially refer to as "damage control". In this portion of this text we will address both "front end" and "after the fact" risk management. In order to understand the application of these concepts, a short look at the principles of risk management is necessary.

Basic Principles of Risk Management

Risk Management is an ongoing process which consists of four basic steps:

- 1) Identifying the hazards or potential hazards which face an organization.

-These hazards and potential hazards are commonly referred to as "exposures". Exposures can vary widely from such concerns as an inadequate training budget to outdated equipment.

- 2) Determining the means of reducing (i.e. eliminating or curtailing) the identified exposures.

-These means must be realistically within the capability of the organization. Examples of exposure reduction might include such possibilities as increasing the amount of training provided in certain "critical function" areas (such as EVO), reviewing the organization's progressive discipline policy or revising the organization's pursuit policy in light of recent court decisions.

3) Implementing appropriate measures for reduction of exposure.

-This is the logical followthrough to step 2) and may include the use of such risk management processes as policy development, training, post-incident reporting requirements and enhanced public relations efforts.

4) Monitoring the effectiveness of the selected exposure reduction measures and implementing changes as appropriate.

-This step requires a recognition that the risk management process is not a one time undertaking but a constantly evolving program which should be continually updated.

Identifying Exposure

In many respects this part of the risk management process is the most difficult. Any number of considerations may explain an agency head's reluctance to address the possibility that the operations or policies of the agency may be deficient or otherwise open to attack. Even where the agency head is willing to entertain the possibility, however, the logistical or financial aspects of an identification process may appear overwhelming. A number of options present themselves as means of identifying agency exposures. In the ideal setting, each law enforcement agency would undertake an objective and intensive self-study of its organization, staffing, operations, policies and procedures, insurance (to include workers' compensation) losses and litigation profile in order to accurately depict its state of exposure. Unfortunately, few agencies have the resources, financial or human, to undertake such a gargantuan effort.

Some agencies, in the course of seeking agency professional accreditation, may successfully accomplish many of these tasks and gain significant insight into actual and potential exposures. Again, the cost of participation in a nationally recognized accreditation program may be more than a small agency, or its municipality, can bear. Still other agencies discover some of their actual exposure in a most unfortunate fashion: they are sued.

Somewhere between being sued and undertaking the ultimate self study, there is an approach to exposure identification which will serve the needs of the "average" law enforcement agency. We will refer to this approach as the "critical functions" assessment.

The Critical Functions Assessment

Most law enforcement agency heads have a fairly accurate concept of where their agencies are likely to come under legal attack. While risk management, in a pure sense, does not deal exclusively with legal exposure, the everpresent potential for police civil liability places it towards the top of most agencies' list of exposures. From a national perspective, a handful of functions appear to present the greatest operational exposure for law enforcement agencies. The purpose of the critical functions assessment is to identify those functions performed by the agency which because of their great potential for serious injury, if improperly performed by the agency's officers, warrant review. A critical function may be one which does not occur frequently but has great potential for injury such as an officer's use of deadly force in attempting to stop a dangerous fleeing suspect or it may be one which does

occur with relative frequency and which has high potential for serious injury, such as an officer's vehicular pursuit of a stolen vehicle.

Law enforcement use of force, use of deadly force and emergency vehicle operations are perhaps three of the most significant operational exposures faced by agencies, as noted above, because of their potential for serious or fatal injury, potential financial impact based on settlement or judgment and foreseeability of occurrence. In evaluating liability exposure, an agency should review with its Risk Manager, City or County Manager or other person responsible for tracking claims and lawsuits, the current and historical litigation status of the agency, to include settlement decisions. Such a review should help focus on current and past problem areas which may warrant increased attention. It is important to remember that the fact of a lawsuit does not, in and of itself, represent that the agency is deficient with respect to its treatment of an operational area. It does, however, serve to send up a "red flag" for an area which should be carefully examined individually and in conjunction with similar cases in an attempt to discern whether a trend is developing.

Determining the Means of Exposure Reduction

The means of reducing identified exposure for law enforcement activities are as wide and varied as the creative minds of law enforcement officers. It should be constantly kept in mind that risk management is not solely a proposal for Risk Managers. To the extent that a law enforcement officer is concerned about the welfare of fellow officers and serving the public, risk management is a matter for every member of the agency.

Exposure reduction can run the gamut from enhanced training programs to individual counselling of a subordinate to implementation of a progressive discipline scheme for violations of policy. Exposure reduction measures, however, should not be directed only to actual incidents which have already resulted in exposure, for this approach would amount to nothing more than "damage control". Instead, exposure identification must, of necessity, involve honest and intelligent projection of potentially problematic areas; based upon feedback from line officers and supervisors and observed trends. Exposure identification will be driven somewhat by the idiosyncratic nature of the law enforcement function under review and the legal and policy directives which address the area.

Implementing and Monitoring Exposure Reduction Mechanisms

Obviously reduction of exposure cannot come about unless implementation and monitoring of exposure control occurs. This process of implementation is what is commonly called risk control, or risk management. Technically, however, risk management refers to the entire process of identification of exposure through followup by monitoring. As we will see below, regardless of the name we assign the process, unless there is followup to assure ourselves that our selected mechanisms are, in fact, working the process of risk management will become nothing more than a senseless exercise. The monitoring process is in reality a feedback mechanism and a system of verification. The same measure, taken in the initial step of the risk management process: identification of exposure; becomes once again critical for the

monitoring phase of the process. Thus, in a very real sense the risk management process is an ongoing and continuous, if not a circular, process which warrants constant updating.

Application of the Risk Management Process to Emergency Vehicle Operations

Identifying Emergency Vehicle Operational Exposures

Determining exposure for an agency's emergency vehicle operations (EVO) is a process involving agency review of historical loss data (both from a liability and workers' compensation standpoint), review of litigation (both pending and completed), and polling of line officers regarding problematic issues arising in the course of vehicular law enforcement. Agencies should not rely solely upon examination of those EVO occurrences which result in property damage or personal injury. Exposure for EVO can come about through a "policy, custom or practice" of unconstitutional behaviors as has been previously discussed. Thus, although only a portion of EVO incidents may have actually resulted in personal injury, it is entirely possible that a pattern of unconstitutional, or merely negligent, behaviors could be in place. While severe injury might arise from only one incident in the ongoing pattern of behavior, the exposure of a municipality could very well be based upon the pattern; whereas an isolated incident would not likely have implicated the municipality!

Perhaps one of the best mechanisms available for identifying EVO exposure, and accordingly identifying means of reduction, is the "pursuit after action report". While many agencies require such reports when personal injury has occurred or where there is the perceived likelihood of a lawsuit; the better practice is to require them after each and every

pursuit. In this fashion, an agency will be able to both freshly document the specifics of each pursuit, thereby building a file to assist in its defense in the event of litigation, and be able to counter allegations of a pattern, custom or practice which seek to attach liability to the municipality. Another benefit of such an approach is that it affords officers the opportunity to learn from the specifics of their behavior and to revise training as may be necessary to remedy problem areas which may surface when the reports are reviewed.

Identifying Means of Exposure Reduction for Emergency Vehicle Operations

Identifying a means of reducing EVO exposure requires that we inquire into the variables which may have significant effect on the exposure. Where EVO is concerned, there are three major variables which determine the manner in which EVO occurs: environment, vehicle and driver. Collectively, these three could be called an "interactive triangle"; as changes in one will likely affect the other two. Experienced EVO trainers recognize, however, that control may be exercised over the behavior of only one corner of the triangle in the course of a pursuit: the driver. While law enforcement officers "control" their vehicles in the course of a pursuit, the reality is that the vehicle operates under strict principles of physical dynamics which the officer cannot alter. More plainly put, wishing that a police cruiser would stop in a hundred less feet in order to avoid a collision does not change the physical behavior of the cruiser. Likewise, wishing that a sudden rainstorm would stop or that a stretch had not buckled has little effect on meteorological or physical reality. Only the behavior of the driver

can be controlled or altered in the course of the pursuit. Therefore, our focus must be on the driver if we wish to effectively reduce exposure.

The available means of reducing EVO exposure are many. Most of us will readily cite training and policy as two principle means of addressing exposure. In a broad sense, these measures are the most critical and effective means available to a law enforcement agency to "get hold of" its exposure. In a specific sense, however, training and policy must be agency and officer appropriate before they can have any utility for the risk management process. As an example, the term "police driver training" connotes to many officers time spent on the track at high speed or otherwise, getting a "feel for" a police vehicle. If an evaluation of an agency's pursuit after action reports, however, shows a trend in which the majority of property damage and personal injury occurrences relate to controlled intersection collisions, the more appropriate training might be related to officer decisionmaking as opposed to technical skill development. While statistically unsupported, it seems a fair statement that the majority of law enforcement officers are relatively proficient technical drivers but could probably benefit from training related to pursuit decisionmaking. Likewise, from a policy standpoint, many agencies are of the apparent opinion that an advisement to their officers to "use good judgment" and to "comply with state law" in the course of a pursuit is sufficient to control exposure.

As means of exposure reduction, training and policy are perhaps the most critical measures available to an agency. Every agency, however, must tailor both policy and training to reflect its actual operational profile and to meet the demonstrated needs of its officers.

From a risk management perspective there are no "shortcuts" to effective policy and training. Especially from a pursuit policy development standpoint, there is a dire need to "cover all bases" to insure that agency guidance to officers addresses each critical component of pursuit operations. Checklists, such as the one enclosed in the appendix to this chapter can serve as helpful tools in the drafting of pursuit policy. Failure to accurately identify exposure problems, utilization of untested, or unread, "off the shelf" policies and unquestioned implementation of generic training materials are ingredients for financial disaster. Additionally, there is a critical need to obtain officer input and "buy in" to the agency's pursuit policy, lest it be disregarded as "unrealistic".

Revisiting City of Canton v. Harris

After *City of Canton v. Harris*, Municipal Law Enforcement Agency Heads and Risk Managers were effectively put on notice of the grave potential for section 1983 liability for uncontrolled police activities. The "deliberate indifference" standard approved by the U.S. Supreme Court extended an invitation to revisit the inventory of "critical" functions performed by the municipal police agency and to identify standards for their performance and make provision for training before the advent of a lawsuit. In a very real sense, the message of *Canton* was that management of the risks associated with such critical functions as pursuit is the principal key to effectively achieving the critical balance between departmental enforcement objectives and protection of the community.

Conclusion

Effective front-end risk management, and thus liability reduction, can only come about where there is open and honest communication between those sharing in the risk. In the context of law enforcement operations, two principal partners in the risk are the governmental entity's Risk Manager, if in fact there is such a person, and the head of a law enforcement agency involved. Ongoing dialogue between these two key actors in the risk management process should not contain phrases such as "This is strictly a law enforcement matter" from the law enforcement side or "This is a matter of administrative concern only" from the Risk Manager or the administration side; or any variation on these themes. The outcome of such dialogue will certainly be an aftermath of fingerpointing and illwill when pursuit or emergency response claims inevitably come about. The proportional percentage of law enforcement claims to a municipality's overall loss history is generally exceptionally high. Common sense dictates that identification of the areas where claims are likely to occur will assist in managing them. Support may be required from the administration in funding additional equipment or training needs. Courage will also be required to "fix" observed deficiencies rather than hope that a suit will not come about. As such, the management of EVO risks, whether under section 1983 or conventional state tort action, must be an open dialogue complemented by free exchange of information. The bottom line is that risk management must be a proactive process by which law enforcement identifies the risks of its operations and then acts upon the identified risks to reduce liability exposure and increase public safety. Ignoring the red flags which signal deliberate indifference is a sure invitation to financial disaster.

Chapter II Appendix

A CHECKLIST OF COMPONENTS FOR A DEFENSIBLE PURSUIT POLICY

I. Mission Statement:

-The mission of the Police is to "Protect Lives". This section serves not only to remind officers of their ultimate responsibility, but as well "sets the tone" from a liability standpoint.

II. Rationale:

-What is the purpose in pursuing? Generally this section will recognize that the purpose is to apprehend suspects who will be brought to trial. The purpose is not to engage in a contest with the suspect. The section should focus on the need to immediately apprehend balanced against the danger to the public and availability of alternative means to pursuit.

III. Definitions:

-Officers must communicate with a common vocabulary. Perhaps most critical is the definition of "pursuit". All critical terms must be defined clearly.

IV. Initiation and Termination Factors:

-The purpose of policy is to define officer discretion. The most important aspect of discretion concerns when to allow pursuit and when to require termination.

This sec

V. Pursuit Tactics:

-Permissible tactics should be defined up front. Likewise, impermissible tactics should be identified. This section is highly critical because of the requirement to coordinate certain tactics, such as roadblocks, PIT and ramming, with department policy on use of force. Identification of permissible tactics is also important from the standpoint of identifying necessary training for officers who will engage in pursuits.

VI. Supervisory Responsibilities:

-An on-duty supervisor not actively involved in the pursuit must take control of pursuit operations. The supervisor must have ultimate field authority to order termination at any time, even though initial authority must belong to the officer. Likewise, the supervisor must bear ultimate field responsibility for decisions to use extraordinary measures such as roadblocks.

VII. Communications Responsibilities:

-Communications between pursuing units, dispatch and supervisor should be preestablished. This section must define initial and secondary pursuing unit

responsibility for communication and the roles to be played by central or regional dispatch and air support units where available. The section should coordinate with the agency's policy on radio communications.

VIII. Interjurisdictional Pursuits:

-Foremost must be the admonition that the agency's officers are required at all times to comply with their own policy regarding pursuit operations even where going into the territorial jurisdiction of another department or where dispatch changes hands.

Likewise, where providing assistance to another agency entering their jurisdiction, officers may only use tactics which are permitted by their own policy irrespective of what is requested by the other agency.

IX. Apprehension:

-This section should address who is to effect arrest of the suspect. The end of a pursuit should not resemble a convention of police vehicles. Affirmation of this section should be part of the controlling supervisor's responsibility. This section is especially important where crimes have occurred in multiple jurisdictions in the course of the pursuit.

X. Pursuit After-Action Report:

-This section is mandatory from a liability and risk management standpoint. Proactive supervisors and managers must know where deficiencies occur in order to better protect the public and their officers. After-action reports must be completed within a short period of time after the pursuit is terminated. The reports should be reviewed by a Pursuit Review Board composed of officers not involved in the pursuit and even, arguably, citizens. Recommendations of the Pursuit Review Board should be used to refine and improve policy and as a basis for administrative discipline where necessary.

XI. Discipline:

-This section should put officers on notice that violation of agency policy on pursuit activities will result in administrative discipline irrespective of whether property damage or personal injury has resulted. Adherence to this provision is mandatory if the agency wishes to protect against an attack premised upon allegations of "custom" or "practice" of unconstitutional acts under *City of Canton v Harris*.

XII. Training:

-This section must require that only officers who have successfully completed agency approved pursuit training be allowed to engage in pursuit. It should also require at least annual updates on the both state statutory and case law affecting police pursuit operations.

XIII. Statutory Reference:

-Either by reference within the language of the policy, or by direct reproduction of the statute itself, every policy must acquaint the agency officers with the controlling state emergency vehicle law. Where the statute is inserted remains the prerogative of the agency, but it is recommended that the beginning of the policy is the preferable location.

-Summarized from Beach, Morris and Smith, *Emergency Vehicle Operations: A Line Officer's Guide* ; Pecos Press, 1993. Used by permission of the Publisher.

Chapter III

Review of Literature on Pursuit Driving and Attitudes toward Pursuit

As we have seen, studies of police vehicle pursuits have increased during the past two decades (see generally, Lucadamo, 1994, Alpert and Fridell, 1992, Falcone, Wells, & Charles, 1992). The purpose of this chapter is to review and discuss the empirical studies which report information on the nature and extent of pursuit driving. Further, studies on attitudes held by law enforcement officers and members of the public toward pursuit will be presented.

Empirical Information

Unfortunately, pursuit data are not collected nationally. Although differences exist in the pursuit figures provided by police agencies, it is remarkable that the rates of accidents, injuries and deaths are so similar over time and location (Alpert and Fridell, 1992). Because agencies maintain different reporting procedures and levels of information, it is difficult to conduct comparative analyses, except at the most general level. For example, some agencies use voluntary termination of pursuit as a category of outcome. While some agencies lump all of these terminations into one category, others keep separate categories for terminations by officers and supervisors. Still, other agencies have a separate category for pursuits that are "voluntarily" terminated but include pursuits terminated after the suspect was lost or not observed for a time. This distinction is very important as some officers will terminate voluntarily only after losing a suspect. These two behavioral options by the police reveal different decision-making processes but the differences may be masked by the level of data collection or analysis.

Summaries of several of the available data sets are presented below to demonstrate the

similarities in the broad categories of pursuit. However, these data must be interpreted and compared with caution. For example, the California Highway Patrol study used mostly freeway data; the Miami study used data from a large county police department (formerly a sheriff's department); the Baltimore County data are from another large county agency; and the Minnesota and Illinois data represent data from large, small and medium sized agencies from urban, rural and suburban areas. Further, the data collection procedures and levels of data may not be similar. Regardless of the imperfections, the data are presented as representative of our knowledge of pursuit driving.

The California Highway Patrol

The most important study on pursuit driving in the early 1980s was conducted by the California Highway Patrol (CHP). The CHP study reports findings from an analysis of almost 700 pursuits. The data from this study demonstrated that:

1. 683 pursuits were conducted;
2. 198 pursuits (29%) resulted in accidents;
3. 99 pursuits (11%) resulted in injuries;
4. 7 pursuits (1%) resulted in deaths;
5. 27 pursuits (4%) were voluntarily terminated by the officer.
6. 429 pursuits (63%) were initiated for traffic offenses;
7. 184 pursuits (27%) were initiated for DUI;
8. 75 of the pursuits (11%) were initiated for serious criminal activity; and
9. 243 of the pursuits (36%) were voluntarily terminated by the offender.

Two of the most important findings reported by the California Highway Patrol are that: 1) 77 percent of the suspects were apprehended; and 2) 70 percent of the pursuits ended without an accident.

The Miami and Metro-Dade Studies

During the past decade, there has been considerable research conducted on pursuit in

Dade County, Florida (Alpert and Dunham, 1990). The major findings, most of which are consistent with the data reported in the other studies include (Alpert and Dunham, 1990):

1. 952 pursuits were conducted;
2. 364 pursuits (38%) resulted in accidents;
3. 160 pursuits (17%) resulted in injuries;
4. 7 pursuits (.07%) resulted in deaths;
5. 40 pursuits (4%) were voluntarily terminated by the officer;
6. 512 pursuits (54%) were initiated for traffic offenses;
7. 19 pursuits (2%) were initiated for reckless driving or impaired driving;
8. 312 pursuits (33%) were initiated for serious criminal activity;
9. 646 pursuits (68%) resulted in an arrest; and
10. 341 pursuits (36%) resulted in arrests which were for non-pursuit related offenses (mostly drug and weapons charges).

Baltimore County

The Baltimore County police have also encouraged analysis of their pursuit data. An officer, Tom Lucadamo (1994), conducted an extensive study of pursuit driving in his department which included pursuits over a six-year period:

1. 1,064 pursuits were reported;
2. 388 pursuits (36%) resulted in an accident (1 accident every 2.7 pursuits);
3. 586 pursuits (55%) were initiated for traffic offenses;
4. 60 pursuits (6%) were initiated for reckless driving or impaired driving; and
5. 266 pursuits (25%) were initiated for suspected criminal activity.

Lucadamo analyzed the pursuits from Baltimore County in search of factors which explained accidents. He reports that four factors; years of service (5-8), weather (clear), number of police vehicles (1), and entering another jurisdiction were able to accurately predict 92% of pursuits resulting in no accident and 65% of all pursuit outcomes (accident versus no accident). Although this study represents another step in our accumulation of knowledge concerning pursuit driving, the analysis overlooks important variables outside the model. That is, while officers

who have between five and eight years of service are the ones most likely to be involved in pursuits which result in no accident, there is no control for the years of experience of those patrol officers most likely to be on patrol and involved in pursuits. Similarly, while those pursuits entering another jurisdiction are most likely to result in no accident, it is not known whether those are the pursuits that are terminated voluntarily by officers or supervisors or which get away from police who are in unfamiliar areas.

Minnesota

In 1988, the Minnesota Board of Peace Officer Standards and Training (POST) promulgated pursuit policy guidelines for statewide adoption. Further, it required all law-enforcement agencies to collect and submit for analysis a minimum of eleven data elements concerning pursuits and their outcomes. All the police departments in Minnesota were reporting their pursuits by October, 1989. The Minnesota Highway Patrol maintains separate records and were involved in 123 pursuits in 1994, with 86 (70%) resulting in accidents and 30 (24%) resulting in injuries. The data provided by Minnesota POST (1995) reflect information reported during the calendar year 1994 for all other agencies.

1. 764 pursuits were conducted;
2. 307 pursuits (40%) resulted in accidents;
3. 205 pursuits (27%) resulted in injuries;
4. 1 pursuits (.001%) resulted in deaths;
5. 30 pursuits (04%) were voluntarily terminated by the officer.
6. 420 pursuits (55%) of the violators stopped;
7. 519 pursuits (68%) were initiated for traffic offenses;
8. 40 pursuits (5%) were initiated for DUI;
9. 126 pursuits (16%) were initiated for felony vehicle; and
10. 16 pursuits (.02%) were initiated for warrant service.

These data reveal the type of pursuits that were conducted in Minnesota and how they

were terminated. Since 1989, the number of pursuits and those initiated for traffic and DWI and those resulting in accidents and injuries represent interesting patterns. The data presented below. The 1995 information was available through June and was estimated for the full year. Since the first complete year of data collection (which may be under-reported), there is a decline in the overall number of pursuits. Percentages of those initiated for traffic (68% average) has fluctuated, but those initiated for DWI (6.4% average) has declined slightly. Property damage (41% average) remained relatively stable and percent of injuries (26% average) has fluctuated.

Minnesota Pursuits 1989 - 1995

Year	Number of Pursuits	Traffic	DWI	Property Damage	Injuries
1989	823	627 (76%)	46 (6%)	358 (43%)	194 (24%)
1990	1,029	762 (74%)	71 (7%)	390 (38%)	214 (21%)
1991	976	592 (61%)	88 (9%)	388 (40%)	216 (22%)
1992	828	567 (68%)	56 (7%)	369 (44%)	301 (36%)
1993	793	549 (69%)	35 (4%)	341 (43%)	197 (25%)
1994	764	519 (68%)	40 (5%)	307 (40%)	205 (27%)
1995	690	486 (70%)	40 (6%)	290 (42%)	206 (30%)

Most recently, Crew et al. (1995), analyzed the combined 1989 - 1993 State of Minnesota data. These authors computed some intriguing cost and benefit figures from the data.

They report that the probabilities and odds of apprehension, damage and injury vary according to the reason for which the pursuit was conducted. They note (1995:420):

The chases most likely to involve deaths and injuries are those initiated as a result of felonies and those that begun because of DWI's. The probability of an injury or death resulting from a chase begun because of a felony is .169 and from a pursuit precipitated by a DWI the probability is .144. The odds are greatest that a chase begun because of a felony will result in a death or injury.

These researchers use a successful apprehension versus escape to compute the relative cost/benefit. They warn us, "that there is not an absolute value that distinguishes a 'good' from a 'poor' trade off" (1995:421). The policy maker must interpret the risks presented and assume them if he or she is to permit or encourage officers to engage in pursuit. The Minnesota data reveal that DWI and pursuits for warrants (a known offender) are likely to produce a better cost/benefit ratio than pursuits for traffic offenders. But these types of pursuits are also the most likely to result in injuries and deaths. The policy maker must accept those risks when determining the value of pursuit as a police tactic.

One conclusion reached by Crew et al. (1995:420) is that "The chases most likely to involve deaths and injuries are those initiated as a result of felonies and those begun because of DWIs." As the authors acknowledge, the data permit a comparative analysis among the incidents for which pursuits were conducted but do not allow for a determination as to whether the pursuits are worth the risk. These data have many of the same analytical restrictions as the data presented by Lucadamo. As only four data elements were analyzed (beginning offense, injuries, damage and apprehension), there is insufficient information to determine the merit of a pursuit. For example, the outcome of the chases for suspected felonies and DWIs may be the result of a more intense effort as officers take more and greater risks and supervisors permit the greater risks, than

those taken or allowed in pursuits for other reasons. There are too many data elements missing from the analysis of the Minnesota data to conclude that one type of pursuit is worth the inherent risks.

Illinois

In the most complex analysis of pursuits published, James Auten (1994) reported the results of 700 pursuits from 129 agencies which took place in Illinois during 1991 and 1992.

(There are no data from the two largest agencies, the Chicago Police Department or the Illinois State Police). The descriptive statistics demonstrate the following:

1. 273 pursuits (39%) resulted in accidents (1 in 2.6 pursuits);
2. 77 pursuits (11%) resulted in injury (1 in 9.2 pursuits);
3. 12 pursuits (1.7%) resulted in death (1 in 58 pursuits);
4. 385 pursuits (55%) were initiated for a minor traffic offense;
5. 77 pursuits (11%) were initiated for a suspected stolen vehicle;
6. 70 pursuits (10%) were initiated for a suspected DUI/DWI;
7. 84 pursuits (12%) were initiated for a felony offense;
8. 68 pursuits (9.7%) were terminated by the pursuing officer or supervisor;
9. 518 (74%) of the pursuits resulted in arrests;
10. 145 (21%) of the pursuits resulted in a felony arrest (the three most prevalent categories include motor vehicle theft, criminal damage to property and aggravated fleeing and eluding and comprise 75% of the 145 pursuits).

Auten's study isolated chases for various offenses and provided the opportunity to assess the costs and benefits for specific types of pursuit. For example, the pursuits involving minor traffic violations resulted in accidents 22% of the time, suspected stolen vehicles resulted in an accident 68% of the time and pursuits initiated for a suspected DUI resulted in an accident 48% of the time, compared to the 39% overall average (Vol. II: 950). Auten concluded that pursuits for any reason are dangerous and must be managed and reduced. Concerning pursuits for traffic violations he concluded (Vol. II: 950):

For at least 46 people that ultimate penalty for running a stop sign, speeding, failure to yield, improper passing, etc., was an injury or death. That's ridiculous! If public safety is in fact the ultimate goal, then it seems rather obvious that pursuits initiated for this reason should be eliminated.

Using National Safety Council estimates for injury and fatal accidents, Auten estimated the total economic loss from the pursuits to be \$5,994,010 which averages \$22,118 per pursuit-related accident (1994 Vol. 1:16).¹ Further, he calculated that 31% of all accidents involved innocent bystanders and that the most common terminating event (39%) was an accident (1994: 867). One of the most important figures he reports is that thirteen felony arrests resulted from pursuits which were conducted because the suspect was suspected of committing a violent felony. In other words, pursuits resulting in arrests were conducted for 13 violent felony actions which were suspected by the police before the chase. These and the other 687 pursuits resulted in 12 deaths, 273 accidents and almost \$6,000,000 in economic loss. From his data Auten concludes:

... it must be acknowledged that police officers cannot be given the unrestricted authority to engage in pursuits. There is ample evidence to indicate that officers' decisions to initiate or continue a pursuit are often characterized by faulty decision making ... These are the situations that must be restricted if the protection of the public is the foundation of police operations (1994, Vol. II: 806).

The Case of the Drunk Driver

One consistent concern is that of the drunk driver. The data reveal that only a small percentage of pursuits are conducted for the original offense of drunk driving. In fact, the studies

¹ There were no estimates for legal costs or costs of agency time spent investigating the accident or possible policy violations included in this figure.

presented here demonstrate that **suspected** DWI pursuits vary from 2% to 27% (for the CHP freeway study). However, most of the studies show DWI pursuits make up 10% or less of the total pursuits. What must be considered is that an impaired driver may be having difficulty keeping his vehicle within the lane markers or at a consistently safe speed and is creating a risk to the public. Further, it must be considered that it is neither likely or probable that each event of driving under the influence will result in an accident. The problem of driving under the influence is the habitual nature of the event or the multiple events in which drivers are involved. While each event has its own (unknown) probability of resulting in an accident, these chances increase as multiple trips are taken (see generally, Jacobs, 1989).

When a driver is signalled to pull over but refuses and increases his speed and recklessness to escape apprehension, he dramatically increases his likelihood of his driving resulting in an accident. In fact, Auten reported that pursuits for DUI resulted in an accident 48% of the time, compared to the 39% overall average (1994, Vol. II: 950). His data re-affirm the saying that "the only thing worse than a drunk driver on the road is a drunk driver being chased by a police officer."

Reducing the Number of Pursuits

Two researchers have demonstrated that the number of pursuits can be reduced. Crew (1992) and Homant and Kennedy (1994) reported the effectiveness of restricting a pursuit policy. Crew, utilizing computer-aided dispatch system (CAD) data from the Houston, Texas police department, revealed a significant change in the number of pursuits (or reporting behavior) after a change to a more restrictive pursuit policy was made in September, 1987. "During the two periods, recorded pursuits dropped by 40 percent. This change reflects either a real reduction in

the number of incidents of hot pursuit or a change in officer or supervisor behavior regarding the reporting of this phenomenon" (Crew, 1992: 92).

Homant and Kennedy (1994), studied seven state agencies with different types of policies (judgmental, restrictive and discouragement). Their conclusion is similar to Crew's. "... in ... the state with the most restrictive policy, the number of pursuits was found to be less than half the number of pursuits per officer in ... the state with the most permissive policy." These findings mirror the conclusion of Geller and Scott from their excellent study on deadly force:

Adoption of restrictive policies usually has been followed by marked decreases in shootings by police, increases in the proportion of shootings that are responses to serious criminal activity, greater or unchanged officer safety and no adverse impact on crime levels or arrest aggressiveness (1992:267).

Similarly, the change of pursuit policies in Florida (based on a State Supreme Court case *Brown v City of Pinellas Park*, 1992) has decreased the number of chases in many cities. Many departments in Florida have restricted pursuits to situations involving known or suspected violent felonies. The data from the present study clearly show the influence of policy on the number of pursuits conducted by the Metro-Dade Police Department and the Omaha, Nebraska Police Department after policy changes were made. In the case of Metro-Dade, a more restrictive policy reduced the number of pursuits while in Omaha, a less-restrictive policy increased the number of pursuits. The details of these policy changes are documented in Chapter VII.

Politics and Pursuit: Examples of the Aggressive Pursuit Policy

As noted, Omaha modified its policy to permit pursuits for law violations which previously would have been against policy. As a result, the number of pursuits increased. The data from Omaha are discussed later. Two agencies which advocate aggressive pursuits must be

mentioned: The California Highway Patrol and Houston, Texas. First, the California Highway Patrol. While their data from 1982 reveal that 77% of their suspects are apprehended and 70% of the pursuits end without an accident, these figures could be presented as 23% of the suspects escaping apprehension and 30% of the pursuits resulting in an accident.

Based on these outcomes, the general opinion of the California Highway Patrol is that pursuits are worth the inherent risks. The CHP report concluded:

Attempted apprehension of motorists in violation of what appear to be minor traffic infractions is necessary for the preservation of order on the highways of California. If approximately 700 people will attempt to flee from the officers who participated in this six-month study, knowing full well that the officers would give chase, one can imagine what would happen if the police suddenly banned pursuits. Undoubtedly, innocent people may be injured or killed because an officer chooses to pursue a suspect, but this risk is necessary to avoid the even greater loss that would occur if law enforcement agencies were not allowed to aggressively pursue violators (1983: 21).

Further, the CHP concluded that "[A] very effective technique in apprehending pursued violators may be simply to follow the violator until he voluntarily stops or crashes" (1983:17).

Maurice Hannigan (1992), who remains the Commissioner of the California Highway Patrol has stated based on his review of the data through August, 1991, that "Law enforcement agencies should be as aggressive as possible in pursuing violators; nevertheless, their officers must use good judgment in the service and protection of the community" (1992: 48).

Chief Sam Nuchia of Houston, Texas has recently made a similar argument. In fact, Chief Nuchia dismantled a strong policy written by former Chief Lee Brown and substituted a policy which gave total discretion to officers in the field. The Houston Post reported on January 11, 1995 that 62 people were injured and 11 killed during pursuits in 1994. It will take some comparative research, but the changes in the number of pursuits reported by Crew (1992) which

reflected the move to Chief Brown's policy in the late 1980s, appear to have been reversed by Chief Nuchia's policy. An argument can be made that some of these injuries and deaths can be attributed as a direct result of that change in policy. Recall Auten's conclusion that officers' discretion must be controlled "if the protection of the public is the foundation of police operations" (Auten, 1994: 806).

In any case, Mayor Bob Lanier of Houston, who won his election in 1992 with a promise to beef up the police department, has been quoted as saying, "I'd rather have John Waynes than Sam Wimps." He went on to base his argument on the following: "If you say to a criminal ... 'if you go past 60 MPH, we're not going to bother you,' our judgment is you'll have a lot more crime, a lot more injuries, a lot more deaths than you have now... That added damage far outweighs, in our judgment, the risk of the chase." (Quoted from the Dallas Morning News 1-12-95). It is unclear on what Chief Nuchia and Mayor Lanier have formed their opinions, but this decision clearly has the impact of giving officers the green light to pursue anyone who fails to stop for a police blue light.

Certainly, there is a strong appeal to lower crime rates and reduce the number of those who flee from the police. However, the deterrent value of pursuit is limited as most suspects who flee from the police are trying to escape capture and are not involved in a rational decision-making process. Research has demonstrated that only a few offenders actively evaluate the likely actions of the police. In fact, a suspect is likely to increase his speed and take risks to avoid capture while the officer increases his speed and increases risks to apprehend the suspect. While there are a few technological methods, such as spike belts and nets, to stop a fleeing motorist, each has problems in application. Unfortunately, short of a deadly force application or

an accident, there are few ways to stop the fleeing motorist. If we accept the figures from CHP (a freeway study), Minnesota and the Illinois study, we would have a 77% (CHP), 78% Minnesota, or a 74% (Illinois) apprehension rate but the vast majority of those offenders apprehended would be for non-violent or minor offenses. In fact, in the Illinois study, less than 21% of the pursuits resulted in arrests for felonies (regardless of whether they were committed before during or after the chase) and 2% of the pursuits were for violent felonies known to the police and resulting in arrests.

The next section of this chapter reviews the research on the attitudes of police and the public toward pursuit.

Attitudes toward Police Pursuit Driving

Very little is known about the specific attitudes of law enforcement personnel or the public they serve concerning pursuit driving. This lack of information has prohibited an overall understanding of attitudes toward pursuit or the variables that affect that understanding. The limited research on pursuit policy development, pursuit outcome, evaluation of legal decisions and civil liability has identified four critical factors which are important to police in reaching a pursue/ don't pursue decision (Alpert and Fridell, 1992 and Alpert, 1993):

1. the known violation;
2. the area in which the chase occurred;
3. the traffic conditions; and
4. the weather conditions.

A fifth consideration should be the public's understanding and support of pursuit.

Interpreting the information on pursuit outcome and legal decisions is difficult and many police trainers have had to rely on their own perceptions and beliefs for information to present to their officers. As a result, police officers have received information about pursuit driving which has been based more on emotion than reason. It is the purpose of this chapter to review prior attitudinal research on pursuit driving and to present and analyze original data on the four critical variables from samples of police and the public. The law enforcement community has traditionally relied upon pursuit as a tactic to apprehend law violators. Recently, members of the public and the media have criticized this strategy as very dangerous. Therefore, we have selected representatives from several diverse groups to determine if differences exist in attitudes and support of pursuit driving among the members of these groups.

Previous Research on Attitudes toward Pursuit

It was not until the 1960s that police pursuit was considered a critical issue for either the police or the public. During that decade, two juxtaposed positions became the focus of the pursuit debate: 1) the benefit of pursuit or need to enforce laws and apprehend violators; and 2) the risk of pursuit or the importance of public safety. While these two concerns have been the cornerstone of the pursuit argument and the courts have balanced them in their opinions, precious little information has been collected on the views of officers or the public on these dimensions.

During the late 1960s, an effort was made to determine the public's response to pursuit driving. A small public opinion survey was conducted to measure the support for police pursuit driving. According to Fennessy et al. (1970:11), a random sample of the driving population of Fairfax County, Virginia, was questioned about pursuit driving and penalties for fleeing from the police. Each subject was given a short scenario in which a motorist did not stop when signaled by a police officer's emergency signals and began to flee. Sixty-four percent of the subjects agreed that the police should chase the suspect, 33% responded that they should not chase the suspect and 3% did not reply. In addition, members of the driving public were asked to indicate whether a fleeing motorist should be sent to prison, lose his license, receive a heavy fine or receive a light fine. Almost 11% responded that the fleeing motorist should be sent to prison and almost 63% reported that he should lose his license. Twenty-six percent wanted the law violator fined heavily and no one reported a light fine as an appropriate punishment. From the data reported in the survey, it certainly appears that the public in the late 1960s was less than unanimous in its support for pursuit driving, but regarded fleeing from a police officer as a serious law violation deserving relatively heavy sanctions.

Unfortunately, the scenarios provided in this early survey were limited to running from the police without a variation of offenses for which the suspect was being chased. Similarly, the research did not address various risk factors commonly associated with pursuit driving. However, the study was important as a first step in determining the level of the public's support for pursuit as a police tactic.

Recently, eight studies were located that analyzed attitudes toward pursuit. Each has its own methodological imperfection but nonetheless contributes to our knowledge of pursuit. The first, conducted in 1991 by the University of Utah for the Salt Lake City police department, measured the public's attitude toward chasing. In a state-wide survey of residents (805 subjects), 28% reported that police should routinely pursue suspects. Fifty-six percent said that police should pursue in cases involving forcible felonies only and 8% reported that police should not pursue suspects at all. Five percent reported other answers and 3% reported, "don't know" (Reese, 1991).

The second study was conducted by David Falcone, who has been a leader in the design, collection and analysis of officers' attitudes and beliefs about pursuit. His research included a sample of officers and agencies in Illinois (1994). The data from this research include opinions from almost all of the responding officers that pursuits are somewhat or absolutely essential for controlling crime and maintaining order (Falcone et al, 1992: 104-105). Further, Falcone and his colleagues report that there was a wide variation among the respondents for the offense categories which would justify pursuit. Their measures advanced from traffic offenses to DUI, misdemeanors, felonies, drug offenses and forcible felonies (Falcone et al., 1992: 73). The authors acknowledge that there appears to be an attitudinal split between law enforcement

officers in some areas. Some admit the risks of pursuit and avoid involvement in it while others consider that the benefits outweigh the risks and will readily pursue a suspect (Falcone et al., 1992: 73).

Although differences exist among the respondents in Falcone's research, several consistent themes are reported. As one would expect, the seriousness of the offense was positively and strongly correlated to the need to pursue. Most officers reported (in declining order) that reasons to terminate a pursuit include, traffic conditions, certain speed zones, dangerousness of offense and weather conditions. More than 84% reported that a pursuit should be permitted for a forcible felony (Falcone et al., 1992: 106). Most officers reported that they did not believe that the majority of citizens would run from them if their agency had a no-pursuit policy. Falcone reports (Falcone, 1994: 150-151):

Actually, officers thought that somewhere between five and 15% of the population would be so encouraged ... Most officers also mentioned that many of the would-be offenders would probably attempt to allude them despite the presence of a no-pursuit policy.

Insight into why officers continue pursuits is provided by the researchers (Charles and Falcone, 1992: 81):

Most officers interviewed agreed that it became difficult to call off a pursuit once they became involved in such an activity. Not only did they report that the chase often became a personal challenge requiring them to win over the violator, but they frequently admitted to a high state of excitement that often shaded their good judgment.

This view has been presented by others (Homant et al., 1993 and Comment, 1986:116) who concluded that:

All too often, an officer becomes so personally involved in the capture of a suspect that the safety of others is forgotten. The chase then becomes a matter of professional pride in driving skill: the officer concentrates only on winning.

While the officers reported general resentment on any limitation to pursue aggressively, they acknowledged that "discretionary pursuit behaviors are not institutionally rewarded, are not given clear support by the majority of their peers (and) are not part of their public safety mandate inherent in their departmental mission" (Falcone, 1994: 152). Perhaps the most important conclusion drawn from these data reflect on the response to restricting officers' discretionary pursuit actions. In his comparative analysis of police agencies, Falcone reports (1994:154):

The data suggest that civilian departments with discouraging pursuit policies experience no increase in attempts to elude and show that actual pursuits were lower than in departments with more permissive policies.

The third study, conducted by Britz and Payne (1994), was designed to determine if attitudes toward pursuit policies differed between line officers and administrators. The researchers surveyed police officers in a state agency. The officers reported serious deficiencies in the language of their pursuit policy as well as problems in their training (1994: 115, 131). Specifically, the results of this study indicated that 38% of the officers found the pursuit policy difficult to understand (and implement), 80% of the supervisors reported that they provided no training on pursuit to their patrol officers and 35% of the officers had been in pursuits and not reported them. As expected, there were significant differences among the ranks concerning "... perceptions of policy, supervisory support, the adequacy of training, liability issues and discretionary issues regarding police pursuit" (1994: 131).

In a fourth study, conducted recently by Stephanie Picolo (1994), a mall intercept method and a quota sample in Columbia, Maryland was utilized to investigate the publics' attitude toward pursuit driving. Her innovative study also examined whether exposure to information about risks related to pursuit influenced attitudes. She approached and received

permission to interview 200 males and 200 females who were twenty-one years of age or older (50% white and 50% black) and randomly assigned them to control and experimental groups. She provided members of the "control" group with only a standard definition of pursuit and provided members of the "experimental" group the same definition as well as a series of risk statistics from Alpert and Dunham's (1990) study of pursuit driving. Finally, each subject was given a 19-item survey concerning attitudes toward pursuit under adverse conditions. Picolo reported that there was generally, only moderate support for pursuit and quite low support for the most risky scenarios. Further, she concluded that (1994: 77):

... white men seem to be exceptionally different from white women, black men and black women in their attitudes toward the use of hot pursuits. Over and over again, white males are overwhelmingly more supportive of pursuits regardless of the seriousness of a criminal offense, the road and weather conditions, and the locations in which they occur.

White males were also the group most affected by introduction to the risk factors. While the other racial and gender comparisons revealed insignificant attitudinal differences based upon introduction to the risk factors, the white male "experimental" group was the only one that reported significantly less support for a continued pursuit and more support to terminate a chase. Picolo attributes these differences to the crime control orientation of white males and the relative importance of the knowledge about risks.

The fifth study, by Homant and Kennedy (1994a), involved a survey of registered voters in a suburb of approximately 80,000 people near Detroit. The researchers mailed out survey instruments to their sample and received a 40% return. The members of the public who responded, reported that police officers use good judgment in deciding whether to engage in a high speed pursuit (76%). Interestingly, 60% reported that the police should be allowed to

engage in a high speed pursuit only to prevent the escape of someone known to be a dangerous criminal. Although it is not clear, apparently that means that 36% of the respondents did not support a pursuit for even a dangerous felon. Fifteen percent of the respondents reported that they might be tempted to elude if they knew that the police would not chase them. The authors report that the 15% plus a 6% “unsure” response is low as registered voters may be more pro-social than non-registered voters.

The sixth study, also by Homant and Kennedy (1994b), was designed to examine pursuit tendencies among patrol officers from departments with different policies. Officers from seven state agencies completed the questionnaires and formed the sample for this study. One part of the study asked officers to respond to scenarios by indicating their willingness to pursue. The researchers report (1994b: 103): “As predicted, states with the most permissive policies had officers who were most inclined to pursue, while the more restrictive states had officers that were less inclined.”

The seventh study by Leslie Steele (1995) explored officers’ attitudes toward pursuit as a police tactic. More than 200 officers from Montgomery County (Maryland) were surveyed to determine their attitudes toward pursuit and to determine if knowledge of risks associated with pursuit affects these attitudes. The methods of this study incorporated the same concepts and measures used by Picolo (1994) in her study of citizens which was discussed above.

Two major findings are presented by Steele: 1) experienced officers are more likely to terminate a pursuit than officers with less experience; and 2) exposure to risk has little to do with the formulation of their attitudes. Steele concludes that “exposure to risk information has little to do with the formation or alteration of officers’ opinions in this sample. The results are mixed, at

best, and statistically insignificant over all four grouped variable categories. It may be that the police as a subculture develop a 'mindset' even in the face of risk. It would appear that a group such as the police, trained to use discretionary judgments under different circumstances, does just that" (1995: 64-65).

Most recently, Alpert and Madden (1994) report the results of a study which measured the attitudes of a sample of students majoring in criminal justice, police recruits and police supervisors. The groups of subjects were provided a set of pursuit scenarios. Each scenario contained four bits of information depicting the environment of a pursuit including the need to immediately apprehend the suspect (the known offense) and the risk factors (the area in which the chase occurred, the traffic and weather conditions). The results demonstrated that supervisors were most likely and the students were least likely to support a general decision to pursue. Police supervisors weigh the need to immediately apprehend a suspect as more important than the risks to the officers and the public. They believe that the enforcement of law takes a higher priority than public safety. Students rank the risk factors as more important than the need to immediately apprehend criminal suspects. They rank public safety higher than the apprehension of certain offenders. It was anticipated that police recruits would support pursuit driving to a greater degree than the students. However, their responses were in between the other two groups. Thus, the dilemma of pursuit as a police tactic is underscored. Police supervisors, who can terminate a pursuit, view the tactic differently from a group of young citizens who are studying criminal justice and a group of young citizens who are learning to become police officers.

Summary of Opinions

The information generated by this new group of studies provides insight into the attitudes held by officers and the public concerning pursuit driving. First, many officers resent having restrictions placed on their decisions to pursue. Second, many officers do not favor the restrictions placed on their behavior during pursuit. Third, many officers do not receive training in pursuit or do not recall their training. Fourth, many supervisors are not trained and do not instruct their officers in pursuit decision making. Fifth, some officers engage in pursuit but do not report the behavior. Sixth, many officers report that a pursuit becomes a personal challenge. Seventh, many officers realize that pursuit is a dangerous activity and that restrictive policies reduce the number of pursuits and their resulting negative outcomes. Eighth, many officers place public safety over apprehending offenders. Ninth, many officers report that only a fraction of the public would flee if the public were not allowed to pursue. Tenth, the public, officers, supervisors and recruits may view pursuit differently. Together, this information indicates that pursuit driving is a controversial tactic which is viewed differently by different samples. The tentative conclusions that can be drawn from the previous research on officers' attitudes and opinions toward pursuit are summarized by officers' resentment at having their discretion reduced or controlled, that they do not understand their policies, that they do not receive or remember their training and they get caught up in the heat of the chase. However, many of these same officers realize the need for restrictions and place public safety over the need to immediately apprehend certain suspects. Finally, it may be that the officers who resent the institutional control the most, engage in pursuit driving but do not always report it. The little we have learned about the public's attitudes toward pursuit indicates that citizens view pursuit with a

Chapter IV

An Overview of the Study

Police pursuit and excessive force are two of the most controversial topics in law enforcement today. The recent concern over police pursuit has raised many issues which have been traditionally discussed in debates over the use of force and use of deadly force by police. That includes the evaluation of the reasonableness of pursuing a suspect for a particular offense and the reasonable amount of risk permitted to affect an arrest. Specifically, the importance of enforcing the laws and the rights of individuals must be balanced in each application of police authority.

There exists a need to balance the seriousness of the offense and the amount of risk to which the public should be exposed. In both pursuit driving and use of force applications, police are responding to suspects who do not comply with lawful demands. Pursuit driving is the attempt to apprehend a suspect by using a motor vehicle and a show of authority to chase and convince the suspect to stop or to apply deadly force to make the suspect's vehicle stop. The use of force traditionally refers to the attempt to apprehend a suspect by applying physical coercion. In some situations, pursuit and the application of physical force are necessary and reasonable while in other cases they are unnecessary and unreasonable. Distinguishing the limits of both pursuit and use of force is a difficult task. When either is determined unreasonable, questions of improper police behavior, unnecessary risk to the public, excessive force and brutality are raised.

Unfortunately, it is not known how frequently pursuits occur, result in the use of force or excessive force. Because pursuit driving is an emotional event and almost always involves some

violation of law, when a suspect is confronted after a chase, the police response is predictable. The focus of attention must be on determining whether or not that common and predictable response is reasonable and what is best for the citizenry.

The major questions addressed by the present research include the nature and extent of pursuit driving as revealed by the data collected from a national survey of law enforcement agencies, the nature, extent and effectiveness of pursuit as reported by data from our sites, the attitudes and beliefs about pursuit-related concerns as expressed by members of the law enforcement community and the public, the frequency and consequences of force used to take the suspect into custody, and the effect of various administrative guidelines on pursuit.

Unfortunately, the number and type of pursuits that occur in the United States is unknown. The outcome of these uncounted pursuits is unknown and the costs and benefits of these pursuits is unknown. While some studies have been conducted, most are limited to a small number of outcome variables or a small number of departments. Furthermore, relatively little is known about the concerns of law enforcement personnel or the public they serve concerning pursuit driving and the subsequent use of force.

The present study includes data from multiple sources. The study includes data from a national sample of police agencies, members of the public, police personnel and suspects who have eluded the police. The most comprehensive data are from three law enforcement agencies of different size and geographic location. These study sites include The Metro-Dade Police Department in Miami, Florida; Aiken County Sheriff's department in Aiken, South Carolina; and the Omaha police department in Omaha, Nebraska (Mesa, Arizona was included in the officer surveys). In each of these departments, an in-depth analysis of pursuit incidents, including

cautious eye and provide only limited support. There is a great deal the public does not know about the benefits or costs of pursuit.

subsequent use of force and management plans is reported. Short descriptive statements of each agency and the research methodology are presented in the next chapter.

The data from each component of the study are presented in subsequent chapters. These chapters include brief introductory statements and the general findings. The overall conclusions and policy implications are reported in the final chapters.

Chapter V

Methodology

This study required information from multiple sources. First, a national sample of police agencies was questioned about pursuit policies and operations. The survey requested specific information about the agencies' pursuit management systems. Second, information on pursuits conducted by officers from each of our study sites needed to be collected. This information included the reason for the chase, the time it occurred, how long it lasted, its location, distance, speeds, etc. Additionally, it was critical to find the outcome of the chase and whether or not force was used after the chase and whether or not there were any injuries. Third, views and opinions of police recruits, officers and supervisors were collected. The views of the recruits, officers and supervisors were important to determine how they felt about pursuit driving benefits and risks. Fourth, opinions of members of the public were collected. These public opinion surveys were conducted to determine the views and opinions about pursuit driving. Finally, information from suspects who eluded the police was collected. These data were obtained from interviews with jail inmates. Each of these data collection is described in detail below.

The National Survey on Pursuit

The national survey on pursuits and use of police force was conducted between October 1994 and May 1995. The purpose of the survey was to collect pursuit and use-of-force information from police agencies throughout the country. Specifically, the instrument asked about:

- Mandated vehicle pursuit policies, both local and statewide;
- Pursuit data collection and incident analysis;
- Incidents resulting in accidents, injuries, assaults on officers, or reports of officer misconduct;
- Policies governing pursuit actions, options, alternatives, and terminations;
- Training provided to pursuing officers;
- Procedures, if any, for pursuit reviews and/or investigations; and
- Discipline and litigation resulting from pursuits.

Similar information on police uses of other forms of force was requested as well. In all, this eight-page instrument contained 50 items although many included multiple parts and/or requested open-ended answers. Our survey instructions requested that the chief executive designate the persons appropriate for the instrument's completion. After constructing the survey instrument (see Attachments) with participation from project staff at the Police Executive Research Forum (PERF), the University of South Carolina, University of Miami, and outside advisors, a sampling frame of 800 municipal and county police agencies was selected. Using a national mailing list compiled by the International City Managers Association (ICMA), a randomly selected group consisting of 40% large agencies (N=320) and 60% smaller jurisdictions (N=480) was selected for an initial mailing. For our purposes, the point of division between large and small jurisdictions was placed at 100,000 population.

Once selected, our survey group was examined for obvious duplications and inaccuracies before the initial mailing. From this review, 26 agencies were removed from the sampling frame.

Included were agencies that no longer existed or had been merged or consolidated into larger jurisdictions or departments. Our remaining sample now consisted of 778 agencies. With our first wave of mailings, another 36 surveys were returned by the post office as undeliverable although accurate addresses for eight of these were identified. Though many missing jurisdictions were unknown to project staff, our estimate is that all were from sparsely populated communities. In all, our first wave survey sample consisted of 746 law enforcement agencies.

Each survey in the initial wave was addressed to the responding agency's chief executive and included a requested return by the second week of November 1994. With our instructions we acknowledged that the information requested was quite detailed and might require a longer time for some agencies to complete.

While a one-month completion date was requested, responses were returned regularly throughout the month of November. As such, project staff decided to postpone a second mailing for approximately one week until the returns from the first wave were exhausted. In fact, by the last week of November, 322 responses (43%) had been received. Following several days with no additional returns, a second wave mailing to the 424 nonresponding agencies was completed with additional instructions stressing the importance of the project. For this wave, a completion date of December 20, 1994 was requested to encourage departments to complete the instrument before the Christmas holidays.

By the end of the year, an additional 68 responses were received which brought the response rate to more than 52%. During January 1995, PERF staff contacted the remaining 356 agencies by telephone. From the telephone contacts, project staff found another nine agencies that no longer existed independently. This further reduced the sample total to 737. Many others

reported a change in their chief executive and explained that they had not received the survey request since personalized mail was forwarded to the addressee. In those cases, the request for participation was repeated and a copy of the survey instrument was sent to the new executive by fax. Other agencies reported that they had simply failed to complete their questionnaires. Where it was still available staff requested that they do so; where it was not, a third copy was faxed to them as well. From these requests another 46 instruments were received raising the overall response rate to more than 59%. Of the remaining 301 nonresponding agencies, only 17 (2%) reported a desire not to participate. The other 284 (38%) informed us that they could not supply the requested information because their agencies did not collect it. As such, we are reluctant to label this group nonrespondents.

In sum, contact was made with 737 agencies. Four hundred thirty-six agencies completed useable data, 284 agencies reported that they did not collect or maintain the information and 17 agencies refused to participate. It is important to recognize that 38% of the agencies reported that they could not provide the necessary information because it was not collected. This is a discouraging and alarming figure that reflect the dismal state of record keeping as it relates to pursuit driving information. It is encouraging that only 17 agencies (4%) which collected the information refused to provide it.

Our respondent sample included one hundred and forty-nine agencies which had 1-25 sworn officers (34%), ninety-seven agencies with 26-150 sworn officers (22%), one hundred agencies with 151-500 sworn officers (23%), forty-nine agencies with more than 500 sworn officers (11%) and 41 agencies which did not report their size (10%).

Pursuit Incident Reports

In Metro-Dade, specific information concerning pursuits was being collected before this project was initiated. In that agency, officers were accustomed to completing the “Pursuit Reporting Form” and reporting numerous data elements. At the Aiken County Sheriff’s Office, there had been no data collection effort prior to this project. However, pursuits were reported by deputies on their daily logs. Unfortunately, these logs did not include as much information as the other agencies collected. The Sheriff was pleased to adapt the pursuit reporting form used by Metro-Dade police for his agency and this form was used to capture the data for the pursuits in which the Aiken County deputies were involved. Copies of the forms are available in the Attachments.

In Omaha, there was no specific form for pursuits, but officers submitted “Chief’s Reports,” which are a narrative account of pursuits, uses of force, or other unusual incidents. Once completed, this form is referred to the department’s Internal Affairs division where an investigation is conducted if necessary, though no clear criteria for this decision could be determined. Once completed, other reports resulting from the incident and filed by the original officers (i.e., incident, accident, or officer injury reports) are attached and the entire package is then filed centrally. For this project, the department provided staff with full access to this file; in fact, one project assistant was designated an “Internal Affairs Intern” so that permission would not be repeatedly required.

Since these Chief’s Reports require only a narrative account of the incident, a separate “Police Pursuits Form” was designed by the project to assist with data collection and the process of data coding (Attachments). We believe that the additional structure that this step introduced

not only simplified the collection itself but improved the reliability and consistency of the process. Still, given the limits of the data available, incomplete accounts of pursuits were common. Additionally, since the data being collected involves events that had just occurred, project staff repeatedly inquired about incidents under investigation, where civil action was pending, or where officers had delayed reporting since those reports might not be in the central files being examined. On each occasion, we were assured that all were available and that for each incident officers were required to complete their reports by shift's end.

One final note of caution is important. Since the files for each pursuit incident generally include only reports filed by the officers involved, often the outcome of the incident or the department's review was not available. As such, our analysis and any interpretation of results must account for the lack of completeness in our data.

Public Opinion

Aiken County South Carolina

The interviewing for the pursuit and excessive force study was conducted in a central WATS facility on the University of South Carolina campus. The interviewers were dedicated to this study, and the hours of dialing were from 3:00 p.m. until 9:00 p.m. March 7-9. A full-time, on-site supervisor provided sample and interviewing control during the course of the interviewing. Seven USC students, both graduate and undergraduate majors in business conducted the survey. Prior to interviewing, the interviewers participated in a training session, where the sampling procedure and questionnaire were explained and any questions answered prior to the start of interviewing. Interviewers trained by questioning each other under the

direction of the survey manager. Quota control sheets were used to monitor the composition of the sample during the course of interviewing, in terms of gender, age, and the cities and towns in Aiken County.

Systematic sampling was used to generate a random, probability sample. For a probability sample, each sampling unit must have some known, nonzero chance of being selected, and before sampling takes place, every possible sample of a given size must be capable of being specified from the population. The primary advantage of a probability sample is that this sample allow statistical projection of the results to the target population.

Interviewers were given the following instructions for sample selection:

- Select the bottom name in the first column for each page in the telephone listing pages that you receive.
- If there is no answer, the line is busy or it is a business or inoperative number, dial the number directly above.

To ensure that the sample was representative of households with unlisted as well as listed numbers, the plus-one dialing method was used by the interviewers. In this method, the interviewer adds 1 to the last digit of the phone number selected through the systematic sampling method, and then dials that number. (For example, if the telephone number of the last name in the first column is 777-6074 the interviewer dialed 777-6075.) According to the most recent census data for Aiken County, the sample interviewed was similar to the population according to age, gender and geographic area. The sample of 255 residents was collected under similar circumstances to data collection in Omaha.

Omaha, Nebraska

During the summer of 1994, staff located in Omaha conducted 300 telephone surveys with randomly selected Omaha residents. The interview guide included the same questions as the one used in Aiken with the exclusion of additional questions added by the Aiken County Sheriff's Office. The interviews were conducted during a four week period in May. A total of three interviewers were used for this data collection. No differences in their rates of interview rejection were found.

The sample was selected from the white pages of the Omaha telephone directory. Systematic sampling was used to generate a random, probability sample, similar to the process used in Aiken. Randomization was insured by the selection of the first name in the upper left corner of every other phone book page. The last digit of the telephone number for the name chosen was then increased by one and that person was called and requested to complete a brief interview. In cases where the person called declined to be interviewed or the number selected was not in service, was assigned to a business, or the resident was unavailable, the interviewer moved to the next name and repeated the process. Few respondents (n=22; 7%) refused the interview and, in fact, most showed great interest in the topic as well as in the opportunity to influence police policy. As in Aiken County, the sample interviewed was representative of the population in Omaha.

Police Officers and Supervisors

The survey administered to officers and supervisors was identical with the exception of one additional question asked to supervisors that was omitted on officer's surveys. The instrument included questions about pursuits, characteristics of fleeing suspects, characteristics

of officers or supervisors who pursue, and departmental questions. General demographics and information about incidents involving the responding officer or supervisor were also included to aid in analysis. A section on opinions about pursuit driving was included in surveys administered in Aiken County, Mesa, and Metro-Dade Police Department in Miami. The section was administered in Omaha but at a different time.

Metro-Dade Police Department

The Metro-Dade Police Department (MDPD) is the largest police agency in the southeast, serving approximately 2 million residents and many other tourists and visitors in more than 1,900 square miles of Dade County. It has jurisdiction in all unincorporated Dade County and has cooperative agreements with cities and towns within the county. In fact, MDPD conducts the investigative work in many of the smaller cities in Dade County.

During April and May 1994, a sample of the 2733 sworn police officers was administered a copy of the survey instruments. Our goal was to achieve a 10% sample of the sworn officers, which was reached. A total of 270 officers and 50 supervisors provided useable data, although some of the respondents did not indicate their gender or ethnicity. The administration of the questionnaires took place during regularly scheduled training, which includes all officers, sergeants and first lieutenants. Officers are selected randomly from each station and specialized department to attend the two-day sessions, which run continuously. The officer in charge of creating the master schedule for training reports that this selection process is designed to bring together for training a representative group of officers. We were able to take advantage of the opportunity to have officers together in a classroom setting. Our sample resulted in a slight

overrepresentation of white males.

The questionnaires were distributed during the morning of the second day of training. Officers were assured that their responses were anonymous and were instructed not to write their names or identification numbers on the forms once the Informed Consent Page was removed.

**Demographic Comparison Between Police Officer Sample and
Department Population (Sworn Officers)**

Characteristic	Department		Survey Sample	
	Number	%	Number	%
Male	2196	80	209	86
Female	537	20	34	14
TOTAL	2733	100	243	100
Anglo	1424	52	127	54
Black	448	16	34	14
Hispanic	847	31	76	32
Other	14	1	--	--

The administration of the questionnaires took place during regularly scheduled training, which includes all officers, sergeants and first lieutenants. Officers are selected randomly from each station and specialized department to attend the two-day sessions, which run continuously. The officer in charge of creating the master schedule for training reports that this selection process is designed to bring together for training a representative group of officers. The officers were assembled in a classroom setting and the survey was administered.

The questionnaires were distributed in a classroom setting during the morning of the second day of training. Officers were assured that their responses were anonymous and were

instructed not to write their names or identification numbers on the forms once the Informed Consent Page was removed. Some information was incomplete and resulted in missing data.

Omaha, Nebraska Police Department

Project staff in Omaha, a city of 347,000, administered two surveys (one designed for supervisors and one for officers) to the sworn, field personnel of the Omaha Police Division. The first phase of the officer and supervisor surveys was completed during February 1994. For a three week period, all field personnel rotated through a one day in-service training program. At the conclusion of this training, division trainers agreed to allow project staff to administer the survey. While no officers were required to complete the survey, almost all apparently considered it a part of the training and answered without comment. Only two officers refused to participate. Although efforts were made to reschedule those officers reporting sick or absent on injury leave, most were permitted by the division to forego the training (and, therefore the survey) altogether. In all, 491 of the department's 627 sworn personnel responded (78%). Those surveyed (14% female, 86% male, 11% black and 88% white), represented the population of the agency according to gender and ethnicity.

The second portion of the survey (concerning opinions about police pursuits) was administered during April 1994 over several days as sworn personnel reported for the division's mandatory firearms qualifications. This time, however, each officer was asked to complete the questionnaire prior to his or her training activity. As before, no officers were required to complete the questionnaire and few objected to any real degree. Once again, efforts were made to reschedule officers reporting sick or injured, however, most of this group were also allowed to

bypass their qualification altogether. An additional fourteen officers declined to participate during this wave of data collection with most citing a lack of belief that their responses would impact departmental policy as the reason. To this second part of the survey, 459 of the department's 627 (73%) officers responded. In all, 101 supervisors completed the survey.

Aiken County, South Carolina

The Aiken County Sheriff's Office (ACSO) has the main law enforcement responsible for the unincorporated area of Aiken County and many of the smaller cities which do not have their own police departments. The population of the county was approximately 130,000. In addition, the ACSO assists many of the other agencies in the 173 square mile county. It is a relatively large and rural county. The sworn deputies of the ACSO were 53 white males, 5 white females, 6 Black males, 1 Black female and 1 "other" (Native American) female. In Aiken County, each of these 66 sworn deputies (except the elected Sheriff) was requested for a personal interview and asked to complete the survey instrument. Forty-three deputies and nine supervisors completed useable surveys (79%). The deputies who were not interviewed were either sick or on vacation when the surveys were conducted. These interviews were conducted during April and May 1994. The sample approximated the sworn force by age, gender, and ethnicity.

Mesa, Arizona Police Department

The Mesa, Arizona police department has approximately 484 sworn officers. The department has 76% white males, 2% Black males, 6% Hispanic males, 8% white females, 1% Black females, 1% Hispanic females and 5% other males. In Mesa, during March 1994, officers

on the swing shift were asked to complete the survey instrument at roll call briefing at the beginning of the shift. Officers who were out sick, at training, or on vacation were not included in the sample. Seventy-seven of the eighty-eight officers on-duty completed the survey (88%) as did the 14 (100%) on-duty supervisors. The sample approximated the sworn force by gender and ethnicity but younger officers were slightly over-represented.

Police Officer Recruits

Miami-Dade Community College - Police Training Academy

Police recruits at the Police Training Academy, Miami-Dade Community College, were administered questionnaires during the first week and last week of their training. The first phase of the data collection was completed in March 1994 and the second phase was completed in September 1994. There were 33 recruits who began the training and we received useable data from 100% of them. By the end of the training, 29 recruits remained in the class and we received useable data from all of them.

The South Carolina Criminal Justice Academy and The South Carolina Highway Patrol

Two groups of recruits were surveyed from South Carolina. First, we administered questionnaires to police recruits at the South Carolina Criminal Justice Academy during their first and last week of their training. The first phase of the data collection was completed in March 1994 and the second phase was completed in July 1994. There were 49 recruits who began the training and we received useable data from 45 of them (92%). By the end of the training, 41 recruits remained in the class and we received useable data from 38 of them (93%). These recruits represent the entire state of South Carolina as the Criminal Justice Academy is the only police training facility in the state for municipal or county officers. The only other training in the state is for South Carolina Highway Patrol Officers. Our second group from South Carolina were Highway Patrol recruits. we administered questionnaires to police recruits at the South Carolina Highway Patrol Training Academy during their first and last week of their training. The first phase of the data collection was completed in May 1994 and the second phase

was completed in October 1994. There were 51 recruits who began the training and we received useable data from all of them. By the end of the training, 48 recruits remained in the class and we received useable data from all of them.

St. Petersburg Junior College - Criminal Justice Institute

Police recruits at the Criminal Justice Institute at St. Petersburg Junior College were administered questionnaires during the first week and last week of their training. The first phase of the data collection was completed in June 1994 and the second phase was completed in December 1994. There were 31 recruits who began the training and we received useable data from 100% of them. By the end of the training, 30 recruits remained in the class and we received useable data from all of them.

Suspects

Omaha

Data were collected from arrested persons who may have fled from the police, either currently or on previous occasions. To gain access to this sample of respondents, it was requested that interviewer from the Omaha Drug Use Forecasting (DUF) project include a brief suspect questionnaire with that project's on-going jail survey. Conducted quarterly (February, May, August, and November), the DUF interviewers contacted all persons arrested during the survey month (n estimated at 100) for a voluntary interview about drug use, drug involvement, and crime. This project's pursuit and excessive force questionnaire was added at the conclusion of the DUF instrument. A brief training on the pursuit questions was included prior to the February administration.

Interestingly, during the first and second administrations, overall response rates for both DUF and the pursuit survey were good. During the third administration, however, DUF staff reported some reduction in the number of suspects who acknowledged having fled. This pattern continued during the final period. It is interesting to note, that this change in suspect responses (August) corresponds closely to changes in the police division's policy on pursuits (July). That change was a revision of earlier procedures to permit greater discretion for officers in their response to suspects who flee for nonviolent crimes, misdemeanors, and even traffic violations. In all, a total of 38 suspect surveys were collected during 1994.

Miami

As in Omaha, members of the Miami Drug Use Forecasting (DUF) project were asked to administer the suspect interview. The DUF project interviews all persons arrested at the Dade County jail on a quarterly basis. These interviews are conducted for fifteen consecutive days every four months. At the conclusion of the DUF interview, all arrestees were asked if they attempted to elude the police during the past twelve months while they were driving a vehicle. Suspects who fled the police were interviewed during 1994. A total of 74 successful surveys were collected in Miami. All suspects who admitted fleeing from the police consented to participate in the study.

South Carolina

Jail inmates in Lexington and Richland Counties were interviewed. The inmates were visited in their cells and asked if they would cooperate and answer some questions. The initial screening question was, "Have you fled from the police in your vehicle during the past 12 months?" The interviews were held in January and February 1994 and resulted in 34 successful surveys.

CHAPTER VI

THE NATIONAL SURVEY ON PURSUIT

The national survey on pursuits and use of police force was conducted between October 1994 and May 1995. The purpose of the survey was to collect pursuit and use-of-force information from police agencies throughout the country. Contact was made with 737 agencies. Four hundred and thirty-six agencies completed useable data, 284 agencies reported that they did not collect or maintain the information and 17 agencies refused to participate. It is important to recognize that 38% of the agencies reported that they could not provide the necessary information because it was not collected. This is a discouraging and alarming figure that reflects the dismal state of record keeping as it relates to pursuit driving information. It is encouraging that only 17 agencies (4%) which collected the information refused to provide it.

Our respondent sample included one hundred and forty-nine agencies which had 1-25 sworn officers (34%), ninety-seven agencies with 26-150 sworn officers (22%), one hundred agencies with 151-500 sworn officers (23%), forty-nine agencies with more than 500 sworn officers (11%) and 41 agencies which did not report their size (10%).

Results

Nearly all the agencies (91%) reported having written policies governing pursuit situations, though the dates that their current policies were implemented varied considerably from as early as 1970 to as recently as 1995. Most, however, had implemented their current pursuit policy since 1990 (57%) while a sizable group (42%) had done so since 1992. Further, nearly half (48%), reported having modified their pursuit policy within the past two years. Most

of those (87%) noted that the modification had made the policy more restrictive than the earlier version. Similarly, most of the responding agencies (72%) had their pursuit policies reviewed by a legal authority prior to its adoption. Data in Table 1 compare the availability of pursuit policies, policy modifications during the previous two years, and policies on the use of force by police by the type and size of agency responding.

Table 1
PURSUIT AND USE OF FORCE POLICIES BY AGENCY TYPE

Agency Type	Pursuit Policy		Policy Modified in Past 2 Years		Use of Force Policy	
	Yes	No	Yes	No	Yes	No
City	271 (95%)	14 (5%)	143 (51%)	138 (49%)	267 (93%)	19 (7%)
County	103 (87%)	15 (13%)	54 (46%)	63 (54%)	110 (92%)	9 (8%)
Unknown	21 (81%)	5 (19%)	12 (52%)	11 (48%)	20 (77%)	6 (23%)
Agency Size	Yes	No	Yes	No	Yes	No
Below 100 Officers	203 (89%)	24 (11%)	95 (43%)	128 (57%)	208 (91%)	20 (9%)
101-500 Officers	114 (100%)	---	72 (63%)	42 (37%)	113 (99%)	1 (1%)
501-2,500 Officers	44 (98%)	1 (2%)	25 (56%)	20 (44%)	44 (96%)	2 (4%)
Over 2,501 Officers	3 (100%)	---	1 (33%)	2 (67%)	3 (100%)	---

Similarly, the data in Table 2 compare the availability of statistics and other data on pursuits and use of force incidents. From these data, municipal agencies and larger agencies are more likely routinely to collect such information, a difference that may be related to the frequency of occurrence for these

events.

Table 2
AVAILABILITY OF PURSUIT AND USE OF FORCE STATISTICS

Agency Type	Pursuit Data		Use of Force Data	
	Yes	No	Yes	No
City	105 (37%)	180 (63%)	121 (44%)	152 (56%)
County	26 (22%)	91 (78%)	43 (38%)	71 (62%)
Unknown	4 (15%)	22 (85%)	11 (42%)	15 (58%)

Agency Size	Pursuit Data		Use of Force Data	
	Yes	No	Yes	No
Below 100 Officers	46 (20%)	181 (80%)	69 (32%)	148 (68%)
101-500 Officers	56 (50%)	57 (50%)	62 (56%)	49 (44%)
501-2,500 Officers	25 (56%)	20 (44%)	28 (65%)	15 (35%)
Over 2,500 Officers	3 (100%)	---	3 (100%)	---

In addition, those agencies which collect such data apparently do so voluntarily since only 11% of our respondents reported that their data collection programs for pursuits are state mandated. Interestingly, while respondents from 10 states advised that they operated under a state requirement, in only three of those states (CA, NJ, and MN) were the responding agencies in agreement. For example, in Minnesota while eight departments told us of a state mandated pursuit data collection program, three others apparently were not aware of such a requirement. In six other states only one

responding agency believed data collection was required. From this, it would appear that the value of pursuit and use of force data, and the issues and requirements of collection, has not yet been clearly defined at local departmental levels.

A Review of the Incidents

Although only 135 (31%) of the agencies maintain police pursuit statistics or data systematically, 308 (71%) could offer estimates of the numbers of pursuits their officers had engaged in during 1993, the last full year before the survey. The estimates offered ranged from 0 (N=34) to 870 pursuits with large agencies obviously experiencing greater numbers of incidents than smaller ones. When pursuit incidents per officer were examined, however, it was the smaller and municipal agencies that experienced the highest rates of pursuing. Despite this, the rate of pursuit related accidents increased substantially with agency size. The data in Table 3 present pursuits and related accidents by agency type and size.

Contrasting Pursuit Policies

Recall that nearly half our responding agencies reported modifying their pursuit policies within the past two years and that in nearly each instance the results were more restrictive than the policies in place before the modification. Even so, when the individual elements of each agency's policies are examined, interesting differences emerge. For example, while departments were evenly split over permitting pursuits for any offense (48%), some restricted officer chases to incidents involving violent felonies (16%). Most permitted only marked vehicles to conduct a pursuit (58%) though a few restricted pursuing speeds to a specific maximum over the speed limit (11%). Overwhelmingly, supervisors were assigned the responsibility of terminating a pursuit (79%) while most agencies also placed responsibility on the officers involved (69%). Many (40%) required that

pursuits be terminated once a suspect's identity becomes known.

Beyond these cumulative results, however, some agencies clearly had differing expectations. Municipal agencies, for example, were significantly more likely to restrict pursuits to felony incidents (19%) than were their county counterparts (11%). Similarly, municipal agencies restricted pursuits to marked vehicles (64% vs. 53%) and imposed supervisory responsibility (85% vs. 77%) far more often than did county departments. Among those who had modified their policies within the past two years, the differences were even more remarkable.

Table 3
PURSUIT AND PURSUIT RELATED ACCIDENTS BY AGENCY TYPE AND SIZE
(PER 1,000 OFFICERS)

Agency Type	Pursuits Per 1,000 Officers	Accidents	<i>Per 1,000 Pursuits</i>			Deaths
			Ofc Injuries	Susp Inj	Other Inj	
City	112	324	25	70	19	2.4
County	105	198	27	82	24	8.6
Agency Size by Officer						
Below 100	181	164	22	72	20	4.1
101-500	109	297	26	71	18	5.7
501-2,500	124	394	46	129	30	3.2
Over 2,501	99	577	24	61	26	2.0

For example, of those departments recently modifying their pursuit policies, 68% restricted pursuits to marked vehicles. Of those with unchanged policies, however, only 54% imposed a similar limit. At least 89% of those with revised policies gave the supervisor responsibility for deciding whether to terminate a chase, though fewer than 77% of those agencies' policies that had not changed, had a similar requirement. While significant for all types of responding agencies, the

patterns of policy change were most pronounced between county and Sheriff's departments. As such, among those who had recently modified their policies, few significant differences between city and county policy were found. From those where recent modifications had not occurred, however, county officers were consistently less restricted on either their pursuit actions or supervision. The data in Table 4 show these differences.

In addition to when they can pursue, recent policy modifications appear to have imposed changes on how officers pursue as well. When asked about alternatives allowed, nearly half reported that roadblocks (42%) were permitted though more (47%) advised that pursuits should be terminated once the offender's license plate number was determined. Far fewer permitted vehicle immobilization techniques (5%), channelization efforts (20%), ramming (12%), or had portable barrier strips available (15%).

Table 4

POLICY DIFFERENCES BY AGENCY TYPE

Agency Type	<u><i>Policy Modified</i></u>			<u><i>No Policy Change</i></u>		
	Marked Veh Only	Supv. Resp	End If Susp Id	Marked Veh Only	Supv. Resp	End If Susp Id
City	70%	91%	44%	57%	80%	42%
County	64%	89%	49%	44%	79%	36%

While few differences based on agency size or type could be found, county officers were significantly more likely to be permitted to employ roadblocks (55% vs. 43%), spinouts (10% vs. 3%), or barrier strips (30% vs. 10%) than officers from municipal departments. Similarly, mid-sized departments (501 to 2,500 officers) were significantly more likely to employ roadblocks (67%) but

less likely to have barrier strips available than were agencies of any other size.

Pursuit Training and Review

Despite the knowledge of pursuit driving and the understanding it can result in accidents or injuries, many departments acknowledged taking only limited steps as to officer preparation or incident review. As a result, a general absence of corrective measures should not be surprising. For example, although 60% of the agencies provide entry level pursuit driving training at the academy, the average time devoted to these skills was estimated at less than 14 hours. Once in service, the amount of additional training offered averaged only slightly more than three additional hours per year. In contrast, nearly 83% of these same agencies required in-service training in the use of force with the training in these skills averaging over eight hours per year. These differences exist although 12% reported five or more incidents each during the previous year where vehicle pursuits ended with one or more suspects fleeing from officers on foot, nearly 16% had one or more pursuits result in assaults on officers, and almost 13% had at least one pursuit result in an intentional ramming of a police vehicle. Further, with a pursuit related accident rate nearly 40% below the municipal departments, the county agencies provide an average of nearly two additional hours of academy-based pursuit driving training to entry level officers. The mid-sized departments (501 to 2,500 officers) have a pursuit related accident rate more than twice that of the small departments (less than 100 officers) yet offer less than half the in-service training in pursuit driving. Still, those agencies that have modified their pursuit policies within the past two years required from their officers both more hours of training in pursuit decision-making (both entry and in-service) and practical exercises at a driving track or similar setting.

Beyond training for such situations, our responding agencies reported important differences

in their follow-up evaluations once an actual pursuit incident had occurred. While most (89%) routinely conducted some follow-up, for many that amounted to nothing more than an informal supervisory review (33%) or a report addressing the incident by the pursuing officer (47%). Others, however, require a formal supervisory review (46%) while a few (8%) initiate an internal investigation into all incidents. Internal investigations were more commonly used in response to pursuits resulting from inappropriate actions or that ended in an accident or injuries.

Disciplining Officers

Given their regularity, it is probably inevitable that officer error and misconduct will sometimes result from vehicle pursuits. In fact, slightly more than 12% of the agencies responding reported having to discipline officers at least once during 1993 for pursuit related actions. The actual discipline offered ranged from simple counseling with an oral reprimand to the termination of two officers.

Another area of information requested concerned litigation. As the data in Table 5 demonstrate, pursuit-related litigation affects many agencies. Nearly 16% of our sample of police agencies reported that during 1993, they had been involved in litigation resulting from pursuits. Eighteen (4% of the sample; 26% of those involved in litigation) of those agencies either lost or settled the actions against them. Municipal agencies that had modified their pursuit policies within the past two years, and larger agencies were more likely to be involved in such actions, although only agency size was associated with significant differences in the legal outcomes. Unfortunately, we were unable to determine whether the previously reported pursuit policy modifications were a result of, or were caused by the litigation during 1993.

Table 5**INVOLVEMENT IN PURSUIT RELATED LITIGATION DURING 1993**

Agency Type	Involved		Lost or Settled	
	Yes	No	Yes	No
City	53 (20%)	216 (80%)	13 (5%)	247 (95%)
County	11 (9%)	106 (91%)	3 (3%)	109 (97%)
Agency Size	Involved		Lost or Settled	
	Yes	No	Yes	No
Below 100 Officers	10 (4%)	217 (96%)	2 (1%)	223 (99%)
101-500 Officers	31 (30%)	73 (70%)	6 (6%)	91 (94%)
501-2,500 Officers	20 (49%)	21 (51%)	5 (14%)	31 (86%)
Over 2,500 Officers	1 (100%)	—	1 (100%)	—
Policy Status	Involved		Lost or Settled	
	Yes	No	Yes	No
Modified in Past 2 Years	44 (22%)	154 (78%)	12 (6%)	180 (94%)
No Recent Modifications	25 (12%)	177 (88%)	6 (3%)	187 (97%)

Additionally, we noted that training requirements and intensity were generally greater for use of force issues than for pursuits. While the risks to others posed by police chases may be greater, our results suggest that the responses (both internal and external) to force incidents are more serious. For example, while 12% of our respondent agencies administered discipline for pursuit related actions, more than 18% employed discipline in response to a police use of force.

Further, nearly 5% of our agencies reported disciplining officers five or more times during 1993 whereas fewer than 2% did so with such frequency in response to pursuit violations. In addition, the range of disciplinary action was more limited for pursuit than use-of force. Discipline for pursuit driving was normally a form of a reprimand (82% of all actions taken), while discipline for use-of-force violations included reprimands alone (7% of actions taken), reprimands with suspensions, demotions, or terminations (44%), suspensions alone (25%), additional training (10%), and termination or retirement (7%). Finally, when combined, pursuits and the uses of force that result, can be especially problematic. During 1993, 25% (109) of our sample of departments experienced police pursuits which resulted in officers using force in addition to the pursuit itself to apprehend a suspect. In only a few of those incidents (24), however, were allegations filed that the force used was excessive or unreasonable. In half (12) those allegations were sustained. Fortunately, the trends for the future appear positive as most (68%) of the participating agencies see either no change or a decrease in complaints of excessive pursuit related force over the past two years.

Chapter VII

An Empirical Analysis of the Pursuit Data

The analysis of the pursuit data collected from Metro-Dade and Omaha will be presented in two stages. As there were only 17 pursuits, the data for Aiken County will be presented in a limited manner. In each jurisdiction, we will examine selected descriptive statistics detailing the characteristics of the sample of pursuits, including the number and duration of pursuits, the reason for beginning the pursuits, and the outcomes of the pursuits (i.e. arrests, deaths, escapes, accidents, injuries and property damage). After the descriptive data is presented, we will examine relationships between the pursuit outcomes and various officer and situational characteristics for Metro-Dade and Omaha. This is accomplished by conducting a multi-variate analysis separately for each type of outcome. We will analyze the data by jurisdiction, beginning with those from the Metro-Dade Police. The second section of chapter VII, includes an analysis of force used after a pursuit to take the suspect into custody.

A Descriptive Analysis of The Metro-Dade Pursuit Data

The following analyses document the pursuits conducted by Metro-Dade officers between the years 1990 and 1994. Although there were changes in the pursuit policy, we chose to combine the data from more than one thousand pursuits. Comparisons between and among the different years will be an important step for future research. One must use caution when interpreting these data. We have not attempted to isolate the various combination of effects that might explain variance in the outcomes. For example, while speed may not be important overall, it may be a critical variable if we considered pursuits in residential areas.

TABLE 1.
OVERVIEW OF METRO-DADE POLICE PURSUITS

Number of Pursuits:	1990	323		
	1991	352		
	1992	279		
	1993	51		
	1994	<u>44</u>		
		1049		
Duration of Pursuits:	1 minute or less	10	3%	
	2 minutes	10	3%	
	3 minutes	12	3%	
	4 minutes	15	4%	
	5-10 minutes	206	59%	
	11-15 minutes	54	15%	
	16-20 minutes	22	7%	
	21-30 minutes	9	2%	
	>30 minutes	14	4%	
Reason for Pursuits:	Traffic	448	45%	
	BOLO		45	4%
	Felony/Suspected		344	35%
	Suspect Vehicle		157	16%
Pursuits Ending in Arrest:	784	75%		
Pursuits Ending in Escape:	206	20%		
Pursuits Terminated by Police:	53	5%		
Pursuit-Related Deaths:	5	<1%		
Pursuit Related Accidents:	428	41%		
Pursuit Related Injuries:	213	20%		
Pursuit-Related Property Damage:	257	25%		

As indicated by the data in Table 1, 1049 pursuits were analyzed in the present study. Forty-seven of the pursuits (13% of which data were available) lasted less than five minutes. Two hundred and six (59%) lasted between five and ten minutes, and the remaining pursuits (28%) for which information was available, lasted more than ten minutes.

Four hundred and forty-eight pursuits were initiated for traffic violations (45%), while 344 were initiated for felonies or suspected felonies (35%). Sixteen percent were initiated because of suspect vehicles, and 4% were initiated for BOLO (Be On Look Out) situations. A more specific analysis of felony situations for the most recent years revealed that 35% of the felony situations were armed robbery, 20% were vehicular assault, 11%, were aggravated assault, 11% were stolen vehicles, 9% were burglary, and the remainder involved robbery, BOLO, rape, shooting, hit and grab, and kidnaping. Seven hundred and eighty-four offenders (75%) were arrested, while 206 (20%) escaped. Fifty-three (5%) of the pursuits were terminated by the police, and 5 (<1%) resulted in a pursuit-related death. Four hundred and twenty-eight of the pursuits (41%) ended in an accident. Two hundred and thirteen of the pursuits resulted in personal injuries (20% of all pursuits). Seventeen percent of the pursuits resulted in injuries to the suspect or a rider, 5% resulted in injuries to an officer, and bystanders were injured in 2% of the pursuits. Pursuit-related property damage occurred in 257 of the pursuits (25%).

A More Detailed Analysis

There are several alternative ways to review the data on police pursuits. Focusing on the outcome of the pursuit may not be the best method of determining a good pursuit, but it is an important criterion that can be measured, and the outcome of pursuit driving is the major concern of interested parties. Additionally, what has been written about pursuits directs attention to their

dangerousness. Specifically, there has been concern over the hazards of the traffic-related pursuit in relation to the relatively minor traffic infractions often provoking the chase. These issues concerning the danger of pursuits are addressed in the data presented in Table 2: an inspection of the bi-variate relationship between reasons for pursuing and the outcome of the pursuit.

TABLE 2. OUTCOME OF PURSUIT BY REASON FOR PURSUIT METRO-DADE COUNTY, FLORIDA					
Reason for Pursuit					
Outcome	Traffic	BOLO	Felony	Suspect Veh.	Total (Av.%)
Suspect Arrested	333 (74%)	38 (84%)	271 (79%)	103 (66%)	745 (75%)
Suspect Escaped	93 (21%)	5 (11%)	60 (17%)	42 (27%)	200 (20%)
Suspect Killed	1 (<1%)	1 (<1%)	1 (<1%)	0 (0%)	3 (<1%)
Accident	167 (37%)	21 (47%)	159 (46%)	65 (41%)	412 (41%)
Voluntary Termination	21 (5%)	1 (2%)	13 (4%)	11 (7%)	46 (5%)

Note: Column percentages may total to more than 100% because some cases fit into more than one category of outcome (i.e. accident and arrest).

The data presented in Table 2 reveal the relationship between two important pursuit variables: why they are initiated, and how they end. Four hundred and forty-eight pursuits were initiated for traffic violations (45%), while 344 were initiated for felonies or suspected felonies (35%). Sixteen percent were initiated because of suspect vehicles, and 4% were initiated for

BOLO situations.

There are five categories of pursuit outcome: the arrest, escape, or killing of the suspect, in addition to the pursuit ending in an accident or a voluntary termination on the part of the police. Obviously, more than one of these outcomes may happen in a single pursuit. For example, a suspect may be arrested and the pursuit may end in an accident. Therefore, these columns total to more than one hundred percent. Seventy-five percent of the pursuits resulted in the suspect being arrested. Twenty percent of the suspects escaped, and less than 1% were killed. Forty-one percent ended in an accident, and 5% were voluntarily terminated by the police.

Pursuits initiated by BOLO calls were the most likely to end in an arrest (84%), while pursuits initiated because of suspected vehicles resulted in the smallest proportion of arrests (66%). Suspects were most likely to escape in suspect vehicle pursuits (27%), and least likely to escape in BOLO initiated pursuits (11%). Pursuits ending with the suspect being killed were spread evenly across traffic, BOLO and felony initiated chases. Accidents were most likely in BOLO and felony stops (47% and 46% respectively). The pursuits least likely to end in an accident were pursuits initiated because of traffic stops (37%). Voluntary terminations by the police were most likely in pursuits initiated for suspect vehicles (7%), and least likely in BOLO initiated chases (2%). The next section will look, in a cautious way, at what these data mean.

Measuring Outcome of Pursuits

The next step in the analysis is to determine which characteristics of pursuits and of the officers predict specific types of outcome. For the purposes of this analysis, we have devised several measures of negative outcome. These include whether or not there was an accident, whether or not the suspect escaped, and whether or not there was an injury to the suspect, officer

or bystanders. Since we found that nearly all of the property damage was the result of accidents, we do not report the results of the analysis on property damage separately.

First we will determine which officer and pursuit characteristics predict each type of negative outcome using discriminant analysis, and then explain how the characteristics relate to the outcome with cross-tabulation tables. For each of the three measures of specific negative outcomes, we present a discriminant analysis table showing which variables best predict that type of outcome. Then we present a cross-tabulation table for each of the significant variables to examine the relationships more thoroughly.

TABLE 3.
DISCRIMINANT ANALYSIS OF ACCIDENT/NO ACCIDENT
Metro-Dade County, Florida

Discriminating Variable Summary				
Measures	Standardized Coefficients	Means		F*
		No Accident	Accident	
Pursuit on Expressway	.554	0.10	0.17	.990
Number of Police Cars	.498	1.31	1.42	.984
Rural Area	-.454	0.05	0.03	.979
Reason for Pursuit	.331	0.31	0.38	.976

Results From Function Test

U = .98 X2 = 23.22 d.f. = 4 p < .0001 R(can) = .154

Classification Results

<u>Predicted Group Memberships</u>				
	<u>N</u>	<u>Centroids</u>	<u>No Accident</u>	<u>Accident</u>
No Accident	583	-.1320	386 (66%)	197 (34%)
Accident	412	.1837	224 (54%)	188 (46%)

Percentage of Cases Correctly Classified: 58%

*All values represent transformations of Wilke's lambdas

Accidents

The findings from the first discriminant analysis, on the accident/no accident measure, are summarized in Table 3. In this analysis, four variables contributed significantly to the prediction of accidents: whether or not the pursuit was on an expressway, the number of police cars involved in the pursuit, whether or not the pursuit was conducted in a rural area, the reason for initiating the pursuit. This discriminant analysis is significant at the .0001 level and has a canonical correlation of .154. While the predictive strength of the factors in this first analysis is not strong, they did result in classifying fifty-eight percent of the cases correctly into the two categories of accident and no accident.

Now that the discriminant analysis has helped identify the significant variables, we need to look more closely at the effect of each of these variables on the outcome. To accomplish this, a cross-tabulation was computed on each of the four variables as it relates to the outcome measure.

TABLE 3a.
Cross-Tabulation of Accident/No Accident with Chase on Expressway

	No Accident	Accident	Total
Not on Freeway	554 (61%)	354 (39%)	908 (100%)
Freeway Chase	67 (48%)	74 (52%)	141 (100%)
Total	621	428	1049

Phi = .094 Sig. = .002

The data in Table 3a indicate that it is the pursuits conducted on an expressway that are the most likely to end in accidents (52%) when compared to pursuits not conducted on an expressway. Thirty-nine percent of the pursuits not conducted on expressways resulted in accidents. Apparently the environment, and probably more significant, the potentially higher speeds make these expressway chases more dangerous.

The second important factor predicting accidents is the number of police cars involved in the chase. These data are summarized in Table 3b. There was a slightly greater likelihood of accidents if the pursuit involved more than one police car (46%), when compared to pursuits involving only one police car (38%). It seems obvious that while the more police cars involved the less likely the suspect is to escape, it is also true that the more police cars involved the greater the likelihood of an accident.

TABLE 3b. Cross-Tabulation of Accident/No Accident with Number of Police Cars Involved			
	No Accident	Accident	Total
One Police Car	419 (62%)	252 (38%)	671 (100%)
Two+ Police Cars	200 (54%)	172 (46%)	372 (100%)
Total	619	424	1043

Phi = .085 Sig. = .006

The relationship of conducting the chase in a rural or not-rural area to having an accident is summarized in Table 3c. Pursuits conducted in rural areas have a lower probability of getting in an accident (27%) than pursuits conducted in non-rural areas (41%). Apparently, the lower

level of traffic in rural areas, and having fewer other physical obstacles to run into results in rural chases being less dangerous than chases in residential or business areas.

TABLE 3c. Cross-Tabulation of Accident/No Accident with Pursuit in Rural Area			
	No Accident	Accident	Total
Non- Rural Area	591 (59%)	417 (41%)	1008 (100%)
Rural Area	30 (73%)	11 (27%)	41 (100%)
Total	621	428	1049

Phi = -.057 Sig. = .063

In Table 3d, the relationship between the reason for initiating the pursuit (felony and non-felony) and the probability of an accident is summarized. Non-felony pursuits are less likely to get into an accident (39%) than felony initiated pursuits (46%). This may be due to the greater lengths the pursuing officer is willing to go to catch a felon, and /or the greater lengths the fleeing suspect is willing to go to escape being apprehended for a serious crime.

TABLE 3d. Cross-Tabulation of Accident/No Accident with Reason for Pursuit			
	No Accident	Accident	Total
Non-Felony	397 (61%)	254 (39%)	651 (100%)
Felony	186 (54%)	158 (46%)	344 (100%)
Total	583	412	995

Phi = .067 Sig. = .035

Apprehension vs. Escape

The data in Table 4 summarize the results of the discriminant analysis on suspects escaping from the pursuing officer. There are five variables that contribute significantly to the prediction of escape/no escape. These include the number of police units involved in the chase, if the chase was conducted in a business district, whether the chase was conducted during the day, whether or not other police were involved in the chase, and whether the officer was Hispanic. This discriminant is significant at the .0000 level and has a canonical correlation of .201. While the strength of the factors are not great, they do result in 60% of the cases being classified correctly into the two groups (escape and no escape). As the discriminant analysis has identified the significant factors contributing to the prediction of the escape/no escape outcome variable, we will examine each of the five factors more closely with cross-tabulation analysis.

TABLE 4.
DISCRIMINANT ANALYSIS OF ESCAPE/NO ESCAPE
Metro-Dade County, Florida

Discriminating Variable Summary				
Measures	Standardized Coefficients	No Escape	Means Escape	F*
Number of Police Cars	.490	1.39	1.23	.969
Business District	.531	0.31	0.19	.970
Chase During the Day	.503	0.34	0.22	.969
Other Police Involved	.263	0.13	0.07	.962
Hispanic Officer	-.236	0.36	0.42	.962

Results From Function Test

U = .96 X2 = 39.99 d.f. = 5 p < .0000 R(can) = .201

Classification Results

Predicted Group Memberships

	<u>N</u>	<u>Centroids</u>	<u>No Escape</u>	<u>Escape</u>
No Escape	841	.1036	492 (59%)	349 (41%)
Escape	206	-.4070	68 (33%)	138 (67%)

Percentage of Cases Correctly Classified: 60%

*All values represent transformations of Wilke's lambdas

TABLE 4a. Cross-Tabulation of Escape/No Escape with Number of Police Cars Involved			
	No Escape	Escape	Total
One Police Car	515 (77%)	156 (23%)	671 (100%)
Two+ Police Cars	322 (87%)	50 (13%)	372 (100%)
Total	837	206	1043

Phi = -.118 Sig. = .0001

Table 4a outlines the data showing the relationship between the number of police units involved in a chase and the escape or apprehension of the suspect. Chases employing more than one police vehicle have significantly fewer escapes (13%) than chases that employ only one police vehicle (23%). As the policy under which the MDPD officers operate limits the number of police vehicles during a pursuit to two, it can be assumed that at least two police cars is preferable to just one for apprehending the suspect. This advantage is offset by the greater possibility of an accident when more than one police car is involved in a chase (see Table 3b). The data on the second factor predicting apprehension or escape, whether the chases occurred in a business district or not, are summarized in Table 4b. There are fewer escapes when the chase is in a business district (13%) than when they are in a residential or rural area (22%).

TABLE 4b. Cross-Tabulation of Escape/No Escape with Pursuit in Business District			
	No Escape	Escape	Total
No-Business District	573 (78%)	165 (22%)	738 (100%)
Business District	270 (87%)	41 (13%)	311 (100%)
Total	843	206	1049

Phi = -.105 Sig. = .0006

Table 4c indicates a significant difference in the percentage of escapes between chases conducted during the day and those conducted at other times. Fourteen percent of the chases result in escapes when conducted during the day, compared to 22% of the chases conducted at other times. This finding is significant in that many people think that it is much more difficult to catch a fleeing offender at night. Apparently this is true of the evening as well.

TABLE 4c. Cross-Tabulation of Escape/No Escape with Pursuit During the Day			
	No Escape	Escape	Total
Evening & Night	552 (78%)	159 (22%)	711 (100%)
Chase During Day	291 (86%)	47 (14%)	338 (100%)
Total	843	206	1049

Phi = -.099 Sig. = .001

In Table 4d, the findings outline the relationship between whether other police were involved in the chase and whether the offender escaped or not. It is interesting that suspects in chases involving other police have a lower likelihood of escape (11%), when compared to the chases not involving other police (21%). In spite of the greater deal of coordination required of

these chases, escapes happen only half as often as when other police are not called in.

TABLE 4d. Cross-Tabulation of Escape/No Escape with Pursuits Involving Other Police			
	No Escape	Escape	Total
No Other Police	723 (79%)	192 (21%)	915 (100%)
Other Police	118 (89%)	14 (11%)	132 (100%)
Total	841	206	1047

Phi = -.087 Sig. = .005

In Table 4e, the last factor predicting whether or not the offender will escape is described. This factor is whether or not the pursuing officer was Hispanic or not. It is the weakest of the five factors, but is statistically significant. Hispanic officers have slightly more escapes (22%) than other officers (18%). While this is only a slight difference, it is significant in that this is the only officer characteristic that predicted any of the outcome measures. In other words, officer characteristics including age, gender, ethnicity, and years of service, do not account for differences in the outcomes of pursuits. Apparently the policies implemented and the training given to officers has been successful to the extent that all officers seem to chase in a uniform fashion, rendering officer characteristics insignificant for predicting pursuit outcomes.

TABLE 4e. Cross-Tabulation of Escape/No Escape with Pursuits Involving Hispanic Officers			
	No Escape	Escape	Total
Not Hispanic	542 (82%)	120 (18%)	662 (100%)
Hispanic Officer	301 (78%)	86 (22%)	387 (100%)

TABLE 4e.

Cross-Tabulation of Escape/No Escape with Pursuits Involving Hispanic Officers

Total	843	206	1049
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Phi = .050 Sig. = .107

Personal Injury

The next category of negative outcome is personal injury. The discriminant analysis (see Table 5) identified four variables that contribute significantly to the prediction of personal injury.

These are the number of police cars, the involvement of other police departments in the chase, the top speed during the pursuit, and the location of the chase in a residential area. The discriminant analysis is significant at the .0000 level and the canonical correlation is .244. This discriminant analysis classified 64% of the cases correctly into the injury/no injury categories. A more in-depth analysis of each of the predictors identified by the analysis follows.

TABLE 5.
DISCRIMINANT ANALYSIS OF PERSONAL INJURY/NO INJURY
Metro-Dade County, Florida

Discriminating Variable Summary				
Measures	Standardized Coefficients	Means		F*
		No Injury	Injury	
Number of Police Cars	.569	1.31	1.55	.973
Other Police Involved	.531	0.09	0.23	.953
Top Speed During Pursuit	.331	56.86	61.58	.944
Residential Area	-.269	0.69	0.57	.940

Results From Function Test

U = .94 X2 = 59.51 d.f. = 4 p < .0000 R(can) = .244

Classification Results

<u>Predicted Group Memberships</u>				
	<u>N</u>	<u>Centroids</u>	<u>No Injury</u>	<u>Injury</u>
No Injury	832	-.1282	565 (68%)	267 (32%)
Injury	212	.4941	109 (51%)	103 (49%)

Percentage of Cases Correctly Classified: 64%

*All values represent transformations of Wilke's lambdas

Table 5a outlines the findings about injuries from comparing chases with only one police car to chases with two or more police cars. The chases involving only one police car have a smaller chance of personal injuries (16%) than chases involving two or more police cars (28%). Again, this difference may be due to the increased emotion generated by a more involved chase,

or the greater likelihood of an accident with more police cars involved.

TABLE 5a.
Cross-Tabulation of Injury/No Injury with Number of Police Cars Involved

	No Injury	Injury	Total
One Police Car	561 (84%)	110 (16%)	671 (100%)
Two+ Police Cars	269 (72%)	103 (28%)	372 (100%)
Total	830	213	1043

Phi = .134 Sig. = .0001

TABLE 5b.
Cross-Tabulation of Injury/No injury with Pursuits Involving Other Police

	No Injury	Injury	Total
No Other Police	749 (82%)	166 (18%)	915 (100%)
Other Police	85 (64%)	47 (36%)	132 (100%)
Total	834	213	1047

Phi = .144 Sig. = .0000

The data in Table 5b indicate that chases in which other police agencies are involved result in a greater percentage of injuries than chases that do not have help from other police departments. Thirty-six percent of the chases involving other police led to injuries, while only 18% of the other cases involved injuries. It is difficult to determine the reason for this difference. It may be due to the greater level of emotion generated by the combined chase, or simply that these chases are more serious than others in which other departments are not called in. In either case, the finding calls for further research on multi-jurisdictional pursuits.

Table 5c.
Average Top Speed During Chase for Pursuits with and without Injuries
Metro-Dade County, Florida

	No. of cases	Mean	SD
No Injury	833	56.74	16.24
Injury	213	61.53	16.14

F Ratio = 2.03 F Prob. = .0013

Chases that resulted in personal injury averaged significantly higher speeds than did chases that did not have personal injuries (see Table 5c). Pursuits involving personal injury averaged 62 MPH, compared to an average of 57 MPH for chases without personal injury. An analysis of variance indicates that the two means are statistically significant at the .001 level. Obviously, the higher the speed reached during a chase, the greater the risk of accident and injury. In addition, in cases where the injuries occurred after the chase, officers may be more highly charged during a chase at higher speeds and be more prone to injure the suspect.

The findings in Table 5d indicate that chases taking place in residential areas are much less likely to result in personal injuries than pursuits in other areas. Eighteen percent of the chases in residential areas result in personal injuries, while 25% of chases in non-residential areas involve personal injuries.

TABLE 5d.
Cross-Tabulation of Injury/No Injury with Pursuit in Residential Area

	No Injury	Injury	Total
Non-Residential Area	267 (75%)	91 (25%)	358 (100%)
Residential Area	568 (82%)	123 (18%)	691 (100%)
Total	835	214	1049

Phi = -.090 Sig. = .004

A DESCRIPTIVE ANALYSIS OF OMAHA PURSUITS

The analysis of the pursuit data collected for Omaha will follow the same procedure as just reported for Metro-Dade, and will be presented in two stages. First we will examine some descriptive statistics detailing the characteristics of the sample of pursuits, including the number and duration of pursuits, the reason for beginning the pursuits, and the outcomes of the pursuits (i.e. arrests, deaths, escapes, accidents, injuries and property damage). After the descriptive data is presented, we will examine relationships between the pursuit outcomes and various officer and situational characteristics. This is accomplished by conducting a multi-variate analysis separately for each type of outcome.

TABLE 6.
OVERVIEW OF OMAHA POLICE PURSUITS

Number of Pursuits:	1992	85		
	1993	17		
	1994	122		
	Unk.	5		
		229		
Duration of Pursuits:	1 minute	119	54%	
	2 minutes	70	32%	
	3 minutes	14	6%	
	4 minutes	5	2%	
	5-10 minutes	10	5%	
	11-14 minutes	3	1%	
Reason for Pursuits:	Traffic	112	51%	
	Felony/Suspected	89	40%	
	Reckless Driving/DUI	8	4%	
	Known Previous Pursuit	3	1%	
	Suspect Vehicle	7	3%	

Pursuits Ending in Arrest:	118	52%
Pursuits Ending in Escape:	59	26%
Pursuits Terminated by Police:	51	22%
Pursuit-Related Deaths:	1	<1%
Pursuit Related Accidents:	72	32%
Pursuit Related Injuries:	31	14%
Pursuit-Related Property Damage:	91	40%

As indicated by the data in Table 6, 229 pursuits were analyzed in the present study. One hundred and nineteen of the pursuits (54% for which data were available) lasted one minute or less. Seventy pursuits (32%) lasted two minutes, and the remaining pursuits (14%) for which information was available, lasted between three and fourteen minutes.

One hundred and twelve pursuits were initiated for traffic violations (51%), while 89 were initiated for felonies or suspected felonies (40%). Eight (4%) were initiated for reckless driving or DUI's, 7 (35%) were initiated because of suspect vehicles, and 3 (1%) were initiated because the driver was known from a previous pursuit situations. A more specific analysis of felony situations revealed that there were numerous different felonies that provoked the chases. The most frequent felonies were stolen vehicles (40%), shooting incidents (14%), and hit and run situations (11%). The rest are scattered among 17 other felonies.

One hundred and eighteen offenders (52%) were arrested, while 59 (26%) escaped. Fifty-one or 22% of the pursuits were terminated by the police, and 1 (<1%) resulted in a pursuit-related death. Seventy-two of the pursuits (32%) ended in an accident. Thirty-one of the pursuits resulted in personal injuries (14% of all pursuits). Twenty-five of the pursuits resulted in injuries to the suspect or a rider, four resulted in injuries to an officer, and bystanders were injured in two of the pursuits. Pursuit-related property damage occurred in 91 (40%) pursuits.

A More Detailed Analysis

There are several alternative ways to review the data on police pursuits. Focusing on the outcome of the pursuit may not be the best method of determining a good pursuit, but it is an important criterion that can be measured, and the outcome of pursuit driving is the major concern of interested parties. Additionally, what has been written about pursuits directs attention to their dangerousness. Specifically, there has been concern over the hazards of the pursuit in relation to the relatively minor traffic infractions often inciting the chase. These issues concerning the danger of pursuits are addressed in the data presented in Table 2: an inspection of the bi-variate relationship between reasons for pursuing and the outcome of the pursuit.

TABLE 7. OUTCOME OF PURSUIT BY REASON FOR PURSUIT OMAHA, NEBRASKA Reason for Pursuit					
Outcome	Traffic	Reckless/DUI	Felony	Suspect Veh.	Total (Av.%)
Suspect Arrested	58 (52%)	6 (75%)	47 (51%)	3 (43%)	114 (52%)
Suspect Escaped	93 (21%)	0 (0%)	30 (33%)	2 (29%)	55 (25%)
Suspect Killed	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Accident	38 (34%)	2 (25%)	30 (33%)	1 (14%)	71 (33%)
Voluntary Termination	30 (27%)	2 (29%)	15 (16%)	2 (29%)	49 (22%)

Note: Column percentages may total to more than 100% because some cases fit into more than one category of outcome (i.e. accident and arrest).

The data presented in Table 7 reveal the relationship between two important pursuit

variables: why they are initiated, and how they end. One hundred and eleven pursuits were initiated for traffic violations (51%), while 92 were initiated for felonies or suspected felonies (42%). Three percent were initiated because of suspect vehicles, and 4% were initiated for reckless driving and DUI situations.

There are five categories of pursuit outcome: the arrest, escape, or killing of the suspect, in addition to the pursuit ending in an accident or a voluntary termination on the part of the police. Obviously, more than one of these outcomes may happen in a single pursuit. For example, a suspect may be arrested and the pursuit may end in an accident. Therefore, these columns total to more than one hundred percent. Fifty-two percent of the pursuits resulted in the suspect being arrested. Twenty-five percent of the suspects escaped, and none was killed. Thirty-three percent ended in an accident, and 22%percent were voluntarily terminated by the police.

Pursuits initiated for reckless driving or DUIs were the most likely to end in an arrest (75%), while pursuits initiated because of suspected vehicles resulted in the smallest proportion of arrests (43%). Suspects were most likely to escape in felony pursuits (33%), and least likely to escape in pursuits initiated for reckless driving and DUI situations (0%). Accidents were most likely in traffic and felony stops (34% and 33%, respectively). The pursuits least likely to end in an accident were pursuits initiated because of suspect vehicles (14%). Voluntary terminations by the police were most likely in pursuits initiated for suspect vehicles (29%), and least likely in chases initiated for felonies (16%). The next section will look, in a cautious way, at what these data mean.

Measuring Outcome of Pursuits

The next step in the analysis is to determine which characteristics of pursuits, and of the officers, predict specific types of outcome. For the purposes of this analysis, we have devised several measures of negative outcome. These include whether or not there was an accident, whether or not the suspect escaped, and whether or not there was an injury to the suspect, officer or bystanders. Since we found that nearly all of the property damage was the result of accidents, we do not report the results of the analysis on property damage separately.

First we will determine which officer and pursuit characteristics predict each type of negative outcome using discriminant analysis, and then explain how the characteristics relate to the outcome with cross-tabulation tables. For each of the three measures of specific negative outcomes, we calculate a discriminant analysis to indicate which variables best predict that type of outcome. Then we present a cross tabulation table for each of the significant variables to examine the relationships more thoroughly. The discriminants for accident/no accident and injury/no injury were not significant statistically. This means that none of the variables used in our analysis would predict these two outcomes. The predictor variables were the number of police units involved in the chase, the age of the officer, the months the officer has been employed by the police department, the gender of the officer, the time elapsed during the chase, wet or dry road conditions, whether or not the chase took place on an expressway, the top speed of the pursuit, whether or not other police departments were involved in the chase, whether or not the supervisor helped, traffic flow, ethnicity of the officer, time of day of the chase, type of district (business, residential, or rural), and whether the chase was initiated for a traffic offense or a felony. Even though all of these variables failed to predict accidents or injury, they did predict

whether or not the suspects escaped.

TABLE 8.
DISCRIMINANT ANALYSIS OF PERSONAL ESCAPE/NO ESCAPE
Omaha, Nebraska

Discriminating Variable Summary				
Measures	Standardized Coefficients	No Escape	Means	Escape F*
Supervisor Helped	.658	0.90	0.67	.924
Number of Police Cars	.328	1.28	1.12	.903
Top Speed During Pursuit	-.431	60.48	64.81	.889
Residential Area	-.421	0.40	0.54	.872
Traffic Flow	.324	1.11	1.06	.859

Results From Function Test

U = .86 X² = 34.18 d.f. = 5 p < .0000 R(can) = .376

Classification Results

Predicted Group Memberships

	<u>N</u>	<u>Centroids</u>	<u>No Injury</u>	<u>Injury</u>
No Escape	119	.3882	81 (68%)	38 (32%)
Escape	110	-.4200	40 (36%)	70 (64%)

Percentage of Cases Correctly Classified: 66%

*All values represent transformations of Wilke's lambdas

Apprehension vs. Escape

The discriminant analysis (see Table 8) identified five variables that contribute significantly to the prediction of escape. These include supervisor helping, the number of police cars involved in the chase, the top speed of the chase, whether or not the chase was conducted in a residential area, and the traffic flow. This discriminant is significant at the .0000 level and has a canonical correlation of .376. While the strength of the factors are not great, they do result in 66% of the cases being classified correctly into the two groups (escape/no escape). As the discriminant analysis has identified the significant factors contributing to the prediction of the escape/no escape outcome variable, we will examine each of the five factors more closely with cross-tabulation analysis.

Table 8a outlines the findings about escapes by comparing chases in which the supervisor assisted, to chases in which the supervisor did not assist. The chases in which the supervisor did not assist, had a greater likelihood of the suspect escaping (75%) than chases in which the supervisor did assist (41%). Apparently, a supervisor being in a position to help with the decision-making during the chase results in fewer escapes.

TABLE 8a. Cross-Tabulation of Escape/No Escape with Supervisor Help			
	No Escape	Escape	Total
No Help	12 (25%)	36 (75%)	48 (100%)
Supervisor Help	105 (59%)	73 (41%)	178 (100%)
Total	117	109	226

Phi = -.278 Sig. = .0000

TABLE 8b.

Cross-Tabulation of Escape/No Escape with the Number of Police Cars

	No Escape	Escape	Total
One Police Car	83 (47%)	95 (53%)	178 (100%)
Two + Police Cars	34 (71%)	14 (29%)	48 (100%)
Total	117	109	226

Phi = -.198 Sig. = .0029

The data in Table 8b indicate that chases with only one police car involved result in a greater percentage of escapes than chases that have more than one police car involved. Fifty-three percent of the chases involving one police car resulted in escapes, while only 29% of the chases involving more than one police car allowed the suspect to escape.

Table 8c.
Average Top Speed During Chase for Pursuits Resulting in Escapes/No Escapes
Omaha, Nebraska

	No. of cases	Mean	SD
No Escape	118	60.57	15.57
Escape	110	64.81	13.64

t-value = -2.18 Sig. = .03

Chases that resulted in escapes averaged significantly higher speeds than did chases that did not have escapes (see Table 8c). Pursuits involving escapes averaged 65 MPH, compared to an average of 61 MPH for chases without escapes. T-tests analysis indicates that differences

between the two means are statistically significant at the .03 level. Obviously, the higher the speed reached during a chase, the greater the difficulty in apprehending the suspects.

The findings in Table 8d indicate that chases taking place in residential areas are much more likely to result in an escape than pursuits in other areas. Fifty-five percent of the chases in residential areas result in escapes, while only forty-two percent of chases in non-residential areas ended in the suspects escaping.

TABLE 8d. Cross-Tabulation of Escape/No Escape with Pursuit in Residential Area			
	No Escape	Escape	Total
Non-Residential Area	70 (58%)	51 (42%)	121 (100%)
Residential Area	48 (45%)	59 (55%)	107 (100%)
Total	118	110	228

Phi = -.090 Sig. = .004

TABLE 8e. Cross-Tabulation of Escape/No Escape with Traffic Flow			
	No Escape	Escape	Total
Light Traffic	88 (52%)	81 (48%)	169 (100%)
Heavy Traffic	10 (83%)	2 (17%)	12 (100%)
Total	98	83	181

Phi = -.156 Sig. = .035

While most of the pursuits were conducted in light traffic, the few in heavy traffic resulted in far fewer escapes. Forty-eight percent of the pursuits in light traffic resulted in

escapes, while only 17% of the chases in heavy traffic concluded with the suspects escaping.

A DESCRIPTIVE ANALYSIS OF PURSUITS IN AIKEN COUNTY

The analysis of the pursuit data collected from the Aiken County Sheriff's Office is limited to those conducted during 1993 and 1994. As there were only 17 pursuits reported, our analysis will be limited. After the descriptive data is presented, we will examine relationships between the pursuit outcomes and the reason the pursuit was initiated.

TABLE 9.
OVERVIEW OF AIKEN POLICE PURSUITS

Number of Pursuits:	1993	7		
	1994	10		
		17		
Duration of Pursuits:	<5 minutes	1	6%	
	5 minutes	4	24%	
	10-15 minutes	5	30%	
	20-29 minutes	4	24%	
	30+ minutes	3	17%	
Reason for Pursuits:	Traffic	5	36%	
	Felony/Suspected	6	43%	
	Reckless Driving/DUI	1	7%	
	Suspect Vehicle	2	14%	
Pursuits Ending in Arrest:	14	82%		
Pursuits Ending in Escape:	1	6%		
Pursuits Terminated by Police:	1	6%		
Pursuit-Related Deaths:	1	6%		
Pursuit Related Accidents:	8	47%		
Pursuit Related Injuries:	2	12%		
Pursuit-Related Property Damage:	4	24%		

As indicated by the data in Table 9, 17 pursuits were analyzed in the present study. One of the pursuits (6% for which data were available) lasted less than five minutes. Four pursuits (24%) lasted five minutes, five pursuits (30%) lasted between ten and fifteen minutes, four (24%) lasted between twenty and twenty-nine minutes, and the remainder three (17%) went thirty minutes or longer.

Five pursuits were initiated for traffic violations (36%), while six were initiated for felonies or suspected felonies (43%). One (7%) was initiated for reckless driving or DUI's, and two (14%) were initiated because of suspect vehicles. A more specific analysis of felony situations revealed that there were several different felonies that prompted these chases. The most frequent felonies were stolen vehicles (44%) and armed robbery (33%). The remainder were for discharge of weapons (11%) and drug purchases (11%).

Fourteen of the offenders (82%) were arrested, while one (6%) escaped. One (6%) of the pursuits were terminated by the police, and 1 (6%) resulted in a pursuit-related death. Eight of the pursuits (47%) ended in an accident. Two of the pursuits resulted in personal injuries (12% of all pursuits). Both of the injuries were to the suspect or a rider. Pursuit-related property damage occurred in 4 (24%) of the pursuits.

A More Detailed Analysis

There are several alternative ways to review the data on police pursuits. Focusing on the outcome of the pursuit may not be the best method of determining a good pursuit, but it is an important criterion that can be measured, and the outcome of pursuit driving is the major concern of interested parties. Additionally, what has been written about pursuits directs attention to their dangerousness. Specifically, there has been concern over the dangerousness of the pursuit in

relation to the relatively minor traffic infractions often initiating the chase. These issues concerning the danger of pursuits are addressed in the data presented in Table 10: an inspection of the bi-variate relationship between reasons for pursuing and the outcome of the pursuit.

TABLE 10. OUTCOME OF PURSUIT BY REASON FOR PURSUIT AIKEN, SOUTH CAROLINA Reason for Pursuit					
Outcome	Traffic	Reckless/DUI	Felony	Suspect Veh.	Total (Av.%)
Suspect Arrested	3 (60%)	1 (100%)	4 (68%)	0 (0%)	8 (47%)
Suspect Escaped	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (6%)
Suspect Killed	0 (0%)	0 (0%)	1 (17%)	0 (0%)	1 (6%)
Accident	2 (40%)	0 (0%)	3 (50%)	2 (100%)	7 (41%)
Voluntary Termination	0 (0%)	0 (0%)	1 (17%)	0 (0%)	1 (6%)

Note: Column percentages may total to more than 100% because some cases fit into more than 100%

There are five categories of pursuit outcome: the arrest, escape, or killing of the suspect, in addition to the pursuit ending in an accident or a voluntary termination on the part of the police. Obviously, more than one of these outcomes may happen in a single pursuit. For example, a suspect may be arrested and the pursuit may end in an accident. Therefore, these columns total to more than one-hundred percent. Eight (47%) of the pursuits resulted in the suspect being arrested. One of the suspects escaped, and one was killed. Seven (41%) ended in

an accident, and 1 (6%) was voluntarily terminated by the police.

Because of the small number of total pursuits, the cross-tabulation findings should be interpreted with caution, but they do give us some interesting information. Pursuits initiated for reckless driving or DUIs were the most likely to end in an arrest (100%), while pursuits initiated because of suspected vehicles resulted in the smallest proportion of arrests (0%). There was no outcome data on the one suspect who escaped. Accidents were most likely in pursuits initiated for suspect vehicles (100%). The pursuits least likely to end in an accident were pursuits initiated because of traffic stops (40%). Voluntary terminations by the police were all for felony stops.

Summary and Conclusions

The data presented in this section represent facts and figures of police pursuits from three jurisdictions: Metro-Dade Police Department (Miami), Omaha, Nebraska, and Aiken County, South Carolina. We have chosen to analyze systematically the process and outcome of pursuit driving in the two larger jurisdictions and present a limited analysis of the data from Aiken County.

The data presented are important for several reasons. First, the data represent a substantial number of police pursuits in two metropolitan areas and in one rural county. Earlier research on pursuit driving is limited either by the number of pursuits studied, the lack of information collected on the incidents, or by the specific nature of the pursuits studied (i.e. freeway pursuits). Second, the current data are highly informative for other jurisdictions struggling with the problems associated with pursuit driving. Many departments are in the process of deciding what is necessary to include in a comprehensive pursuit policy, and what

can be expected if implemented.

One of the more interesting results from the present study is the impact of policy changes. The two major sites, Metro-Dade and Omaha, went through substantial policy changes during the period of study. Metro-Dade changed its policy and limited its officers' discretion. The department adopted a "violent-felony only" policy in late 1992. As the data reveal, pursuits in Metro-Dade went from 279 in 1992 to 51 in 1993 as a direct result of the change in policy. The Omaha Police Department also changed its policy but in the opposite direction. In 1993, the Omaha policy changed from restrictive to judgmental, permitting pursuits for offenses that previously had been prohibited. The results of this policy change is reflected by the 17 pursuits reported in 1993 and the 122 pursuits reported in 1994. These two policy changes are important to guide administrators. These data report the dramatic impact of a change in policy.

One of the more important findings in the Metro-Dade data is the **lack** of significant predictor variables. Taken by itself, this may not appear important but it represents a major shift from findings reported in the late 1980s. Prior research indicated that officer characteristics were important in the prediction of costs and benefits of pursuit. This indicated a difference in how male officers and female officers were conducting pursuits and that there were differences among anglo, black and Hispanic officers. The data reported in the present study indicate that all officer characteristics fell out of the analysis (except Hispanic officers in the escape analysis - and it was the weakest predictor). This lack of predictor variables indicates that officers are conducting pursuits in a uniform or consistent pattern and making the same types of decisions. Our interpretation of these changes is that officers are better and more uniformly trained and that personal preferences and immediate 'gut-level' reactions have been replaced with administrative

requirements, supported and enforced by supervisors.

Another critical finding relates to the predictors of accidents. The data from Metro-Dade indicate that pursuits on expressways, the number of police cars, rural location and the reason for the pursuit help predict whether or not a pursuit will result in an accident. These predictors must be considered in policy, supervisory and officer training. Unfortunately, the way to consider or interpret some of these data is unclear. For example, the more police cars involved in a pursuit, the more likely it will result in a collision. However, the more police cars that are involved in a pursuit, the more likely an apprehension will be made. Therefore, in appropriate pursuits for violent felonies, it may be reasonable to increase slightly the risk of traffic accidents by raising the number of police vehicles permitted to be involved as the likelihood of apprehension is improved. This finding does not endorse the uniform increase of police units involved in a pursuit but it does suggest that policy makers should re-think the use of police vehicles to parallel the pursuit or converge at designated locations **at reasonable speeds**, perhaps within the speed limit. One way to address the issue is to provide the supervisor with the ability to assign cars to the chase, in addition to the primary and secondary units. Of course, this will require rules, regulations and training for the supervisor, as it is he or she who must recognize the need to raise risks to the public. A similar concern must be made for interjurisdictional pursuits. In any case, an officer must not just provide support for other officers without assessing the situation and making sure that the pursuit is within his agency's policy. The data are clear that the more vehicles involved in the chase, the greater the likelihood of an accident.

The data from the Omaha Police Department reveal the strong effect of a change in policy. The data also reveal that the pursuits are often between one and two minutes. Only 1%

of the pursuits lasted beyond 11 minutes. Apparently, there were many chases for stolen vehicles (40%). There were five factors that helped predict the apprehension of a fleeing suspect in Omaha: These included supervisory assistance, number of police vehicles, lower speeds, pursuits in areas other than residential and heavy traffic flow. As in all pursuit studies, the data do not reveal why these variables are important. Whether or not suspects were apprehended in heavy traffic because they gave up or crashed is a question which we must address in future analyses.

The limited data from Aiken County reveal relatively long pursuits but ones initiated for reasons slightly different than those conducted in Miami and Omaha. The pursuits in Aiken County were lengthy but the nature of the environment must be considered when interpreting the time variable. There was a higher percentage of pursuits conducted for suspected felons than traffic offenders in Aiken County, which reversed the trend found in Miami and Omaha. The number of pursuits resulting in an apprehension was higher than in other areas. In fact, only one suspect escaped and that was when the deputy terminated his pursuit. As in Omaha, there were a large percent of pursuits conducted for stolen vehicles.

We have presented only selected findings and interpretations. Many other aspects of the data are less clear, require further data analysis and raise questions of interpretation. We believe that interpretations should be left to the readers, whether they are police administrators or police critics. Hopefully, this research will continue to stimulate discussion and raise the consciousness about the costs and benefits of pursuit. Our goal has been to build a source document, which can be used by and adapted to other jurisdictions, including small and medium sized police departments. However, the findings of this research do have important policy implications and should play a meaningful role in helping to develop policies and training

throughout the various police jurisdictions.

Police Pursuits and the Use of Force

The previous section reviewed the nature and extent of pursuits in our study sites. It is clear from the available literature and our data that there are at least three aspects of pursuit on which there is agreement: 1) pursuits are dangerous; 2) pursuits must be controlled; and 3) involvement in a pursuit causes an increase in the participants' adrenalin and excitement. Certainly, there is disagreement among practitioners and researchers to the **degree** of danger, control and increase in excitement and adrenalin, but no one has disputed their presence. In fact, there is evidence that these aspects vary among pursuits. That is, some pursuits are more dangerous than others, some need more control than others and some affect the participants more than others. There is also variance among the participants on these aspects (Alpert and Fridell, 1992). In one study, Homant et al. (1993: 293-294) warned that "Any attempt ... to regulate or rationalize police pursuit requires that attention be paid to individual-level personality variables, that may affect the patrol officer's decision making."

The consequences of the presence of danger, need for control and increased excitement have been the foci of the debate on the reasonableness of pursuit and its management (Urbonya, 1991). The factors of danger or risk and need for control are central to the decision to continue or terminate a pursuit and the increase in excitement and adrenalin is important for the supervision of a pursuit. This change in behavior during a pursuit has been referred to by more than one driving instructor as a "pucker factor." The present chapter reviews our data on police officers' use of force following their driving in a high energy, adrenalin-driven pursuit.

First, driving decisions are likely to be affected by increased excitement and adrenalin. That is the heat of the chase is likely to impact negatively on rational and reasonable decisions

(Alpert and Fridell, 1992 and Nowicki, 1989). Second, excitement and adrenalin are likely to impair the ability to drive tactically or intelligently. The techniques of steering, braking, turning and proximity to the fleeing suspect are likely to be impaired by the emotional impact of a pursuit (Beach et al., 1993, Nowicki, 1989, International Association of Directors of Law Enforcement Standards and Training, 1989 and Scotti, 1988).

The third category of effects, increased excitement and adrenalin, involves the events that take place after the driving has terminated and the officer(s) is making the physical apprehension of the suspect. That is, the emotions of just having driven at high speeds, erratically, dangerously and creating risk to himself and others, are likely to effect the ways in which he physically controls the suspect. Under the conditions following a vehicular pursuit, whether there has been an accident or the suspect is fleeing on foot (or both), the officer may not use optimal restraint!

It would be quite difficult to identify the individual effects of excitement, adrenalin, perceived peer pressure, competition or machismo on the officers' actions during or following a pursuit. We will make no attempt to conduct such an analysis and will merely look at the actions or force used by police following pursuits.

Pursuits and Use of Force

The earliest study documenting force used after a pursuit indicated that approximately 30% of injuries suffered by suspects occurred after the vehicles had stopped and the suspect was being taken into custody (Alpert and Dunham, 1990). These data were collected from several agencies in the Miami, Florida area between 1985 and 1987. A majority of the injuries (87%) were minor and resulted in cuts, scrapes and bruises. However, some of the injuries were serious

and required hospital care. Unfortunately, use of force data from voluntary terminations were not distinguished from force used after an accident. As data collection efforts have improved, a more thorough analysis of force used after a pursuit is possible.

The more recent data from the Metro-Dade police department reveal a declining trend in the use of force to make an arrest after a pursuit. Although a downward trend is indicated, it must be remembered that these data are from one agency. During the years 1990-1994, injury data from driving accidents were similar to the earlier years (17% for the mid 80s and 20% for the 90s) but the injuries suffered by suspects as a result of the arrest declined to 13% overall. The recent data are presented below.

Pursuit and Use of Force

Agency	Years	Pursuits	Total Arrests	Arrest with Accident	Arrest without Accident	Use of Force - Accident	Use of Force-no Accident	Death
MDPD	90-94	1049	784	354	428	40	61	5
Aiken	93-94	17	14	8	6	3	2	1
Omaha	92-94	229	118	57	61	1	3	1

In 101 of the 784 arrests, force was used to make the arrest of the suspect. It is informative to review the use of force by the police based upon whether or not the suspect was involved in an accident. The recent data revealed that 428 arrests were made when no accident occurred (the suspect stopped voluntarily). Sixty-one use-of-force reports were completed from these arrests (14%). In pursuits where suspects were involved in an accident resulting from a pursuit (354 incidents), 40 control of persons reports were completed (28%). In other words, police used force to effect an arrest twice as often on a suspect who had become involved in an accident

compared to a suspect who stopped voluntarily.

In many of these cases, suspects voluntarily stopped the car and ran from the police on foot. If involved in an accident, many suspects were not injured seriously or able to recover from any injury sustained in the accident and ran from the police. The data presented here show when force was used to apprehend suspects who were involved in a foot chase after a vehicular pursuit.

Suspects Who Flee on Foot, Arrests and Use of Force

Agency	Years	Suspects Who Flee	Arrests	Escapes	Use of Force	Deaths
MDPD	90-94	479	357	115	45	1
Aiken	93-94	6	5	0	3	1
Omaha	92-94	71	45	26	3	0

The Metro-Dade data reveal that 479 suspects became involved in a foot chase. Three hundred and fifty-seven arrests were made (76%) and 115 (24%) suspects successfully escaped immediate apprehension. Force was used in 45 (13% of those arrested) confrontations which resulted in an apprehension. One death resulted from the use of force. In most other cases, the injuries resulting from the use of force was minor (85%).

In the Aiken County Sheriff's Office (South Carolina), the number of pursuits was low and must be interpreted cautiously. The agency had approximately 65 sworn officers. During the years 1993 and 1994, they engaged in 17 pursuits. Fourteen pursuits resulted in arrests, two pursuits involved accidents with injuries (16%) and one pursuit resulted in a death (<1%). These pursuits also generated 5 use-of-force reports. That is, 5 of the 14 pursuits (36%) resulted in force being used to make the arrest. Six suspects ran from the police on foot. Five were arrested and three of those arrests involved the use of force. One suspect was killed: none escaped.

In Omaha, Nebraska, there were 229 pursuits between 1992 and 1994. There were 655 sworn officers in the department. One hundred and eighteen pursuits resulted in arrests (52%), 26 pursuits involved accidents with injuries (11%) and 1 pursuit resulted in death. Fifty-seven arrests involved accidents, 26 of which included injuries. Sixty-one arrests were made when an accident did not occur. Use-of-force reports were filed in 4 arrests, 1 after an accident and three when there was no accident. Seventy-one suspects ran from the police. Forty-five arrests were made while 26 suspects escaped. As a result of the 45 arrests, 3 use-of-force reports were filed and no deaths occurred as a result of apprehending a suspect fleeing on foot.

Officer Interviews

The officers and supervisors were asked a variety of questions concerning pursuit driving and the use of force. Specifically, we asked, “What percent of arrests after a pursuit result in the use of force?” and “What percent of arrests after a pursuit result in excessive force?” The data from these questions are reported below.

PERCENT OF ARRESTS RESULTING IN THE USE-OF-FORCE

	0		1-25		26-50		51-75		76+		Mean
	N	%	N	%	N	%	N	%	N	%	%
MDPD Officers	6	2	91	34	89	33	42	16	37	14	43
Supervisors	0	0	12	25	23	46	8	16	6	12	48
Omaha Officers	5	1	89	24	118	31	63	17	103	27	53
Supervisors	0	0	28	28	32	32	24	24	15	15	48
Aiken Officers	0	0	9	21	14	33	8	19	11	26	54
Supervisors	0	0	2	22	6	67	1	11	0	0	39
Mesa Officers	0	0	12	16	28	37	7	9	29	38	61

Supervisors	0	0	3	23	4	31	2	15	4	31	54
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These data reflect opinions which must be interpreted cautiously as each agency operated under different policies and procedures. For example, in Mesa, pursuits were permitted for only the most serious offenses under very restrictive conditions. In Aiken County, there was no written policy until 1993. In Omaha, the policy had changed from restrictive to judgmental and in Metro-Dade, the policy had become more restrictive. Although the type of policy is no excuse for the use of excessive force, it may explain some of the variance in the use-of-force if the offender is suspected of a violent offense and resists arrest with violence. The use of force may reflect only the level of resistance by the suspect.

Most officers report that the use-of-force occurs in approximately one-half of the arrests which follow a pursuit. The average percentage of arrests following pursuits in which force is used ranged from 43% for MDPD officers to 61% for Mesa officers. In MDPD, only 14% of the officers report that they believe force was used in 75% or more of the arrests. Thirty-eight percent of the Mesa officers reported that they believed that force was used in more than 75% of the arrests. Six (2%) of the MDPD officers and 5 (1%) of the Omaha officers report that 0% of the arrests result in the use of force. The Aiken deputies believed, as did the majority of officers, that force is used in most arrests.

The supervisors reported a slightly different picture in some of the agencies. The average percentage of arrests following pursuits reported by supervisors ranged from 39% in Aiken to 54% in Mesa. In MDPD, the supervisors reported figures which mirror their officers' reports. They differ only between the 1-25% and 26-50% categories, with the supervisors reporting

slightly higher percentages of arrests resulting in the use-of-force after a pursuit than their officers. In Mesa, the officers and supervisors appear to have similar views of the use-of-force following a pursuit. The Omaha supervisors differed from their officers at the upper percentage categories, 51-75% and 76+%, with the supervisors reporting figures lower than their officers. The Aiken County supervisors report that force is utilized in fewer arrests than the number reported by their deputies.

The reported use of excessive force differs from the use-of-force because there is no reason or excuse for the use of force beyond what is necessary to affect an arrest. While most officers reported that excessive force is used in some arrests after a pursuit, many report that no excessive force is ever used. These figures are reported below.

PERCENT OF ARRESTS RESULTING IN EXCESSIVE FORCE

	0		1-25		26-50		51-75		76+		Mean
	N	%	N	%	N	%	N	%	N	%	
MDPD Officers	46	17	168	64	36	14	7	3	7	3	16
Supervisors	4	8	35	71	10	20	0	0	0	0	15
Omaha Officers	110	30	202	54	40	11	10	3	10	3	13
Supervisors	13	13	71	74	10	10	3	3	5	0	14
Aiken Officers	3	7	31	74	6	14	2	5	0	0	15
Supervisors	1	11	7	77	1	11	0	0	0	0	12
Mesa Officers	36	49	34	46	3	4	1	1	0	0	7
Supervisors	2	15	9	70	2	15	0	0	0	0	11

The average percentage of arrests following pursuits which involved excessive force as reported by the officers ranged from 16%(MDPD) to 7% (Mesa). Forty-six MDPD officers (17%)

reported that excessive force is never used. One hundred and sixty-eight officers (64%) reported that excessive force is used in 1-25% of the arrests and 36 officers (14%) report that excessive force is used in 26-50% of the arrests following a pursuit. In Omaha, 110 officers (30%) reported that excessive force is never used but 202 (54%) reported it used in 1-25% of the arrests. In Aiken, 31 deputies (74%) reported that excessive force was used in 1-25% of the arrests. In Mesa, almost one-half of the officers reported that no excessive force was used in arrests following a pursuit and most of the remaining officers reported excessive force was used in 1-25% of the arrests following a pursuit.

In general, the supervisors reported that they are aware of the use of excessive force in some arrests of suspects following a pursuit. The average percentage of arrests following pursuits which involved excessive force as reported by the supervisors ranged from 15% (MDPD) to 11% (Mesa). In MDPD, 35 supervisors (71%) reported that excessive force was used in 1-25% of the arrests made after a pursuit. They also reported that excessive force was used in no more than 50% of the arrests. In Aiken, the supervisors reported that excessive force was used in approximately the same number of arrests as their deputies. In Mesa, most of the supervisors reported that excessive force was used in 1-25% of the arrests.

The figures on the use-of-force are difficult to interpret but the acknowledged use of excessive force by so many officers and supervisors can only be seen as a serious problem for the agencies. The opinions provided by the officers and supervisors reveal much more force and excessive force than the figures which are available on the official pursuit report forms. Apparently, more force is used than reported but the majority of the force, whether excessive or not, probably does not result in many injuries. The experiences of the suspects provide a picture

more in line with the officers' opinions as opposed to what they report.

Suspect Interviews

The suspects we interviewed had another perspective on use of force after a pursuit. Unfortunately, the individuals who were interviewed do not constitute the same offenders who ran from the agency from which we have data on use of force. In other words, these individuals were jailed but could have been arrested or chased by an agency unrelated to the ones included in our study. For example, the inmates in the Dade county jail could have been arrested by an officer from any one of the 27 police agencies in the county. Similarly, the inmate could have been pursued by an officer from any agency. In fact, the suspect interviews in South Carolina were conducted in Richland and Lexington county jails, not in the Aiken county jail. These data are presented as another way to understand police use of force.

In Miami, 28 of the 51 (55%) persons interviewed reported being beaten by the police. In South Carolina, 11 of the 32 (34%) inmates reported being beaten and in Omaha, 15 of the 35 (43%) subjects reported being beaten by the police. On average, 46% of the subjects reported being beaten by the police after they were caught and while being apprehended. There is little doubt that the officers and suspects report use-of-force at a different rate (Alpert and Smith, 1994). It is clear that the officers and suspects report that force is used significantly more often than what is provided on the official pursuit reporting form.

Summary and Conclusions

Pursuit driving creates danger or excitement for those involved or those who happen to be in the area. One consequence of an exciting and adrenalin-driven pursuit is the force used by the

police to apprehend the suspect. The use of force after a pursuit is an issue that must be addressed by police policy makers and trainers. Unfortunately, unraveling the nature and extent of that force depends upon who is asked and under what circumstances. The pursuit forms collected from each agency reveal one set of “facts.” These forms document the official action of the officers. In Metro-Dade, 13% of the arrests made after a pursuit utilized force. In Aiken County, 36% of the arrests used force and in Omaha, only 3% of the arrests reported the use-of-force. None of the forms indicated or admitted that any force was excessive.

The officers’ interviews provided another picture of the use-of-force after a pursuit. The officers reported that force was used in slightly more than one-half of the arrests following a pursuit. The supervisors revealed that force was used in just under 50% of the arrests following a pursuit. The officers reported that excessive force was used in slightly under 13% of the arrests and the supervisors reported a similar number.

The suspects provided a third snapshot of force used to make an arrest following a pursuit. Forty-six percent of the suspects reported that they were beaten by the police as they were being arrested. It is interesting that the officers’ interview data and the suspects’ reports are more closely related than the departmental reports. These differences raise some important organizational issues, concerns and implications.

There may be several (and alternative) explanations as to why the differences exist. First, these differences may be a result of *perspective*, as some force may be perceived as reasonable by one officer but not another or a suspect. Certainly, the meaning of ‘excessive’ or ‘beating’ is open to more than one interpretation and the differences may be measurement error. Second, the differences may be a result of an officer’s *unwillingness to report* force and especially force that

might be considered excessive. It is unlikely that an officer will admit that he used unnecessary force. These two explanations in the differences of reported use of force may be influenced by the excitement and danger of the pursuit incident. In any case, the nature and extent of force utilized and the differences in that force as recorded on the forms, and reported by officers and suspects, raises some management issues.

The nature and extent of force used to take a suspect into custody after a pursuit suggests an immediate need for corrective measures. The target of reform must be agency policies, officers and their supervisors. First, departments must incorporate in their pursuit policies a component that requires any officer (a secondary officer) other than the primary pursuit officer to make the physical arrest of the suspect, if at all possible. This permits an officer who has not been caught up in the heat of the chase, to make physical contact with the suspect. This secondary officer is less likely to use force beyond what is necessary to take control compared to an officer who has been in an adrenalin-driven chase, who is highly excited or extremely angry at the suspect. It is the suspect who has disregarded the officer's order to stop, placed himself, the officer and the public at risk and committed the serious offense of "contempt of Cop." Second, officers must be trained to understand the dynamics of pursuit and its effect on their mentality. This training must include the need to manage one's anger and frustration. While it may be a natural desire to "teach the suspect a lesson" or provide a little "street justice," it is unprofessional and unacceptable to use more force than is necessary to take the suspect into custody (see Sykes, 1986). Beach et al. (1993) and Homant et al. (1993) both suggest that training should include the warning to officers and supervisors that personality factors may affect their decision-making. Training officers must recognize that the emotions can not be eliminated

but they can be controlled (IADLEST, 1989: 3.2).

Supervisors hold the key to controlling the anger, emotions and the use of force and excessive force. Ineffective or incompetent supervision is translated into permission for officers to do what comes naturally. If officers were given total discretion, there would be no need for supervision. However, as police officers require guidance and management, it should be serious direction not “winking” at violations or finding ways to circumvent policy. Supervision includes direction, training and discipline. Each element must be taken seriously and supported by the administration. This responsibility falls into the final category, departmental accountability systems. These systems must hold officers and supervisors responsible for their decisions and actions. In the area of pursuit, the formal reporting forms must be reviewed and the information provided must be investigated to assure the quality of the information. This is not to say that all pursuits must be subjected to an exhaustive investigation, but if officers realize that an inventive report will remove any further scrutiny or responsibility, it is likely that reports will become more and more creative. However, it is important to find out from the witnesses’ perspective what occurred during a pursuit and the level of force that was used to apprehend a suspect. If this suggestion were taken seriously, investigators could randomly investigate pursuits, even ones which resulted in no accident or significant injury. This would certainly help establish support from the public which is concerned about pursuit driving and would tend to keep officers from submitting creative reports. In addition, such investigations may well keep officers from engaging in the use of excessive force.

This suggestion to investigate and verify the actions of police during and after a pursuit may appear as an unnecessary control tactic over what is an infrequent and inconsequential

event. After all, it is the suspect who has directed a highly-dangerous pursuit and who may be receiving “what he deserves.” Does it really cause any harm to modify the report a little to justify the administration of street justice? As Hunt and Manning have informed us, many police agencies routinely engage in “normal” lies which are acceptable to some audiences such as fellow officers (Hunt and Manning, 1991:53). Specifically, these researchers report, “In the police academy, instructors encouraged recruits to lie in some situations, while strongly discouraging it in others” (Harris and Manning, 1991: 54).

It may be that creative writing occurs in pursuit reports, and that it is known and approved, “winked at” or not reviewed by supervisors in some departments because only the ‘guilty’ get what they deserve. If this is true, the effects on the officers, supervisors and public may have multiple and long-term consequences. Officers and supervisors may develop customs and practices which are not only bad police procedures but also violations of civil and criminal law. However, the most serious consequence of this type of action is its effect on the officers and the organization if they believe the lies.

Chapter VIII

Attitudes toward Police Pursuit Driving

Introduction

The information contained in the remainder of Chapter VII includes attitudinal data from police personnel, the public and those who have run from the police. Many of the answers to the questions are reported in percentages to provide the reader with an understanding of how members of each group responded. Additionally, critical pursuit concepts were operationalized into chase scenarios by creating categories which corresponded to the existing empirical information which affect officers' decisions to engage in pursuit driving. The benefits of pursuit, or the need to immediately apprehend included eight levels of potential law violations. The potential costs or risks to the public included three categories: area of pursuit, traffic and weather conditions. The areas in which the chase occurred had four levels. The traffic and weather conditions each had two levels.

Subjects were asked to imagine that they, or a police officer, initiated a traffic or felony stop and that the suspect refused to pull over and actively attempted to flee and avoid apprehension. Consistent with prior research and discussions with officers after pre-testing the instrument, subjects were asked not to rank the aggressiveness or degree of pursuit but to respond as a simple yes/no dichotomy.

The next section will begin with attitudes of recruits, followed by the attitudes of officers, supervisors, the public and suspects who have eluded the police. The findings are presented with brief explanations.

Recruits

The sections below deal with the attitudes of police recruits toward engaging in a vehicular pursuit of a suspect who will not stop. The first section presents the recruits with a series of increasingly serious law violations and reports their approval rate of giving chase, first in an environment (traffic conditions, weather, road quality, etc.) of low risk conditions and then in an environment of high risk conditions. As a means of comparison, “Time 1” indicates the recruits’ approval of pursuits before they attended training class, while “Time 2” indicates their approval of pursuits after the class.

The second section looks at more detailed information on recruits’ attitudes on the subject of pursuit driving. The relative influences of wanting to enforce the law while minimizing the associated risks to public safety are examined through statistical analyses that reveal which specific crimes committed, chase areas, and traffic and weather conditions might alter the recruits’ attitudes of engaging in a pursuit.

Section I

Low-Risk Conditions

*Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a **traffic violation**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	71%	46%	25%
St. Petersburg	58%	24%	34%
SC Academy	78%	83%	5%
SC Highway Patrol	56%	54%	2%

Before the training class, over 50% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a traffic violation. Those from South Carolina Academy (78%) and Miami-Dade (71%) were most likely to give chase, while those from St. Petersburg (58%) and South Carolina Highway Patrol (56%) were less willing to do the same.

After the training class, recruits from South Carolina Academy were the only ones who would engage in pursuit more often than they would before. Percentages of recruits who would give chase reduced in the three other groups. While affirmative answers given by recruits from South Carolina Highway Patrol fell by only 2%, they decreased 25% in Miami-Dade and 34% in St. Petersburg. Therefore, after the class, over 80% of South Carolina Academy recruits would engage in a pursuit for a traffic violation. Approximately 50% of recruits from either Miami-Dade or South Carolina Highway Patrol would do the same, as would 24% of those from St. Petersburg.

*Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a **property crime - misdemeanor**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	41%	33%	8%
St. Petersburg	58%	17%	41%
SC Academy	69%	63%	6%
SC Highway Patrol	49%	46%	3%

Prior to the training class, between 41% and 69% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a property crime-misdemeanor. Those from St. Petersburg (58%) and South Carolina Academy (69%) were most likely to give chase, while those from South Carolina Highway Patrol (49%) and Miami-Dade (41%) were less willing to do the same.

Though in each group the percentage willing to give chase fell after the training class, only one decreased by over 10%. Following the class, 41% fewer recruits from St. Petersburg would engage in pursuit under the noted conditions. As a result, South Carolina Academy recruits were most likely (63%) to give chase. Slightly under half (46%) of those from South Carolina Highway Patrol, and one-third (33%) of those from Miami-Dade would do the same. Only 17% of recruits from St. Petersburg would engage in pursuit.

*Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a **property crime - felony**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	69%	67%	2%
St. Petersburg	73%	52%	21%
SC Academy	82%	96%	14%
SC Highway Patrol	77%	57%	20%

Before the training class, between 69% and 82% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a property crime-felony. Only 13% separated the group of recruits most likely (South Carolina Academy, 82%) and the group of recruits least likely (Miami-Dade, 69%) to give chase. Between these two fell those from South Carolina Highway Patrol (77%) and St. Petersburg (73%).

There was more variation in responses after the training course. While 14% more of the recruits from South Carolina Academy would engage in pursuit at this time, fewer recruits from the other three groups indicated they would do the same. The largest differences came from the groups from South Carolina Highway Patrol (20% less) and St. Petersburg (21% less). Only 2% fewer Miami-Dade recruits would give chase after taking the training class. As a result of these changes, almost every recruit (96%) from South Carolina Academy would engage in pursuit under these conditions. This was at least 29% more than any other group.

*Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a **stolen vehicle**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	86%	73%	13%
St. Petersburg	77%	59%	18%
SC Academy	94%	94%	0%
SC Highway Patrol	79%	70%	9%

Prior to the training class, between 77% and 94% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a stolen vehicle.

South Carolina Academy recruits were most likely to give chase, followed by those from Miami-Dade (86%), South Carolina Highway Patrol (79%), and St. Petersburg (77%).

After the class, the greatest decrease (18%) in those willing to engage in pursuit was seen in the group of St. Petersburg recruits. In comparison, 13% fewer Miami-Dade and 9% fewer South Carolina Highway Patrol recruits would still give chase. There was no change in the responses from South Carolina Academy recruits; after the class, at least 20% more recruits from this group would engage in pursuit than would those from either Miami-Dade, St. Petersburg or South Carolina Highway Patrol.

*Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a **DUI**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	100%	73%	27%
St. Petersburg	81%	57%	24%
SC Academy	98%	93%	5%
SC Highway Patrol	93%	84%	9%

Before the training class, between 81% and 100% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a DUI. All of the recruits from Miami-Dade would give chase, while only slightly less (98%) from South Carolina Academy would do the same. The number of recruits willing to engage in pursuit stood at 93% for those from South Carolina Highway Patrol and 81% for those from St. Petersburg.

Following the class, fewer recruits from each group were willing to give chase under the stated conditions. The largest drops were experienced in the recruits from Miami-Dade (27% less) and St. Petersburg (24% less). The drops in percentages of willing recruits from South Carolina Academy and South Carolina Highway Patrol also dropped but not nearly as much. As a result, recruits from South Carolina Class were the ones most likely (93%) to engage in pursuit.

Behind them were those from South Carolina Highway Patrol (84%), Miami-Dade (73%) and St. Petersburg (57%).

*Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a **violent felony - no death**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	100%	79%	21%
St. Petersburg	87%	90%	3%
SC Academy	89%	96%	7%
SC Highway Patrol	91%	84%	7%

Prior to the training class, between 87% and 100% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a violent felony-no death. All of the recruits from Miami-Dade would give chase, while 91% of those from South Carolina Highway Patrol, 89% of those from South Carolina Academy, and 87% of those from St. Petersburg would do the same.

After the class, 21% fewer recruits from Miami-Dade said they would give chase under the stated conditions. The other group to experience a decrease was South Carolina Highway Patrol, but it was much less (7%) in comparison. More recruits from both St. Petersburg and South Carolina Academy would be willing to engage in a pursuit. Therefore, Miami-Dade recruits became the least likely (79%) and South Carolina Academy recruits the most likely (96%) willing to give chase. Between the two were those from South Carolina Highway Patrol (84%) and St. Petersburg (90%).

Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving a violent felony - death:

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	100%	97%	3%
St. Petersburg	97%	100%	3%
SC Academy	96%	100%	4%
SC Highway Patrol	95%	97%	2%

Before the training class, between 95% and 100% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving a violent felony-death. All of the recruits from Miami-Dade would give chase, while 97% of those from St. Petersburg, 96% of those from South Carolina Academy, and 95% of those from South Carolina Highway Patrol would do the same.

After the class, 100% of the recruits from both St. Petersburg and South Carolina Academy answered that they would give chase under the stated conditions. Miami-Dade recruits were slightly less willing and South Carolina Highway Patrol recruits slightly more willing than before to engage in pursuit, which resulted in 97% of recruits from either group saying they would give chase.

Percentages of recruits saying they would engage in a pursuit under low risk conditions for incidents involving an officer shot:

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	100%	94%	6%
St. Petersburg	97%	100%	3%
SC Academy	96%	100%	4%
SC Highway Patrol	95%	92%	3%

Before the training class, between 95% and 100% of recruits from each location said they would engage in a pursuit under low risk conditions for incidents involving an officer shot. All of the recruits from Miami-Dade would give chase, while 97% of those from St. Petersburg, 96% of those from South Carolina Academy, and 95% of those from South Carolina Highway Patrol would do the same.

Following the training class, 100% of the recruits from both St. Petersburg and South Carolina Academy answered that they would give chase under the stated conditions. Recruits from the other two groups willing to engage in pursuit decreased to 94% for those from Miami-Dade and 92% for those from South Carolina Highway Patrol.

High-Risk Conditions

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a **traffic violation**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	15%	7%	8%
St. Petersburg	7%	0%	7%
SC Academy	43%	24%	19%
SC Highway Patrol	26%	11%	15%

Before the training class, between 7% and 43% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a traffic violation. Those from South Carolina Academy (43%) were by far the most willing to give chase, with those from South Carolina Highway Patrol (26%) and Miami-Dade (15%) less likely to do the same. Only 7% of St. Petersburg recruits said they would engage in a pursuit.

After the training class, almost one-fourth (24%) of the recruits from South Carolina Academy would still give chase, signifying a drop of 19%. Fewer recruits from the other groups were willing to engage in pursuit as well. The South Carolina Highway Patrol group recruits experienced a decrease of 15% and Miami-Dade a decrease of 8%. After the class, none of those from St. Petersburg would give chase under the noted circumstances.

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a **property crime - misdemeanor**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	11%	7%	4%
St. Petersburg	13%	10%	3%
SC Academy	24%	22%	2%
SC Highway Patrol	14%	11%	3%

Prior to the training class, between 11% and 24% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a property crime-misdemeanor. Those from South Carolina Academy (24%) were most likely to give chase, while those from South Carolina Highway Patrol (14%), St. Petersburg (13%), and Miami-Dade (11%) were less willing to do the same.

Though the percentage in every group fell after the training class, the changes were relatively minor. The greatest shift came from the Miami-Dade group, with a decrease of 4%. Twenty-two percent of South Carolina Academy recruits would still engage in a pursuit under the noted conditions. Behind this group were recruits from South Carolina Highway Patrol (11%), St. Petersburg (10%) and Miami-Dade (7%).

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a **property crime - felony**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	22%	20%	2%
St. Petersburg	10%	3%	7%
SC Academy	55%	49%	6%
SC Highway Patrol	43%	30%	13%

Before the training class, between 10% and 55% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a property crime-felony. Recruits from South Carolina Academy (55%) were over five times as likely as those from St. Petersburg (10%) to give chase. Between these two extremes were South Carolina Highway Patrol recruits (43%) and Miami-Dade recruits (22%).

Each group was less likely to engage in a pursuit after the training class. Although the decreases ranged from a high of 13% in South Carolina Highway Patrol to a low of 2% in Miami-Dade, the order of groups did not change. Forty-nine percent of South Carolina Academy recruits were still willing to give chase, followed by those from South Carolina Highway Patrol (30%), Miami-Dade (20%) and St. Petersburg (3%).

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a **stolen vehicle**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	43%	33%	10%
St. Petersburg	35%	0%	35%
SC Academy	75%	62%	13%
SC Highway Patrol	57%	49%	8%

Prior to the training class, between 35% and 75% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a stolen vehicle. Three-quarters (75%) of South Carolina Academy recruits said they would give chase, and over half (57%) from South Carolina Highway Patrol would do the same. Recruits from Miami-Dade (43%) and St. Petersburg (35%) were somewhat less likely to engage in a pursuit.

After the class, the greatest decrease by far was in the group from St. Petersburg; no longer was any recruit willing to give chase under the noted circumstances. The percentage of willing recruits from the other groups also fell, but not to this extreme. Sixty-two percent of South Carolina Academy recruits, 49% of South Carolina Highway Patrol recruits and 33% of Miami-Dade recruits would still engage in a pursuit following the training.

Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a DUI:

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	68%	52%	16%
St. Petersburg	57%	10%	47%
SC Academy	96%	100%	4%
SC Highway Patrol	84%	73%	11%

Before the training class, between 57% and 96% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a DUI. Almost all (96%) of the recruits from the South Carolina Academy would give chase, while only somewhat less (84%) from South Carolina Highway Patrol would do the same. The number of recruits willing to pursue stood at 68% for those from Miami-Dade and 57% for those from St. Petersburg.

Following the class, an even greater difference was seen between groups. This was due to the fact that while the number of recruits from the South Carolina Academy willing to engage in a pursuit increased to 100%, only 10% of those from St. Petersburg were still willing to do the same. There was some decrease in the other groups, but after the class 73% of South Carolina Highway Patrol recruits and 52% of Miami-Dade recruit still said they would give chase.

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a **violent felony - no death**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	86%	57%	29%
St. Petersburg	76%	70%	6%
SC Academy	81%	83%	2%
SC Highway Patrol	88%	69%	19%

Prior to the training class, between 76% and 88% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a violent felony-no death. Eighty-eight percent of the recruits from South Carolina Highway Patrol would give chase, while 86% of those from Miami-Dade, 81% of those from the South Carolina Academy, and 76% of those from St. Petersburg would do the same.

There were more fluctuations seen between the groups' responses after the training class. Of the recruits from Miami-Dade, 29% fewer were willing to engage in a pursuit under the stated conditions. The South Carolina Academy became the group most likely to give chase as recruits willing to take this action increased to 83%. They were followed by those from St. Petersburg (70%), South Carolina Highway Patrol (69%), and Miami-Dade (57%).

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving a **violent felony - death**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	100%	84%	16%
St. Petersburg	90%	97%	7%
SC Academy	96%	100%	4%
SC Highway Patrol	100%	100%	0%

Before the training class, between 90% and 100% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving a violent felony-death. All of the recruits from both Miami-Dade and South Carolina Highway Patrol would give chase, while 96% of those from the South Carolina Academy and 90% of those from St. Petersburg would do the same.

After the class, all of the South Carolina Highway Patrol recruits would still engage in a pursuit. Every recruit from South Carolina Academy and almost all of those (97%) from St. Petersburg would also give chase. Only Miami-Dade recruits were less likely to engage in a pursuit than before; after the class, only 84% of recruits said they would take this action under the noted conditions.

*Percentages of recruits saying they would engage in a pursuit under high risk conditions for incidents involving an **officer shot**:*

<u>Recruits from:</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Difference</u>
Miami-Dade	100%	94%	6%
St. Petersburg	97%	100%	3%
SC Academy	98%	100%	2%
SC Highway Patrol	100%	97%	3%

Before the training class, between 97% and 100% of recruits from each location said they would engage in a pursuit under high risk conditions for incidents involving an officer shot. Every recruit from both Miami-Dade and South Carolina Highway Patrol would give chase compared to 98% of those from South Carolina Academy and 97% of those from St. Petersburg.

Following the training class, the percentage of recruits willing to engage in a pursuit increased to 100% in St. Petersburg and the South Carolina Academy. The opposite occurred in the other two groups. Of those from Miami-Dade, only 94% would still give chase, while in South Carolina Highway Patrol the percentage decreased to 97%.

Section II

This section was designed to elicit attitudinal information on pursuit driving. Specifically assessed was the influence of the two critical factors on the decision to pursue: 1) the need to immediately apprehend (enforcement of laws) and 2) the risk to the public (public safety). Recruits were provided a set of pursuit scenarios. Each scenario contained four bits of information depicting the environment of a pursuit including the need to immediately apprehend the suspect (the known offense) and the risk factors (the area in which the chase occurred, the traffic and weather conditions).

Each subject was provided a questionnaire that included chase scenarios. The critical pursuit concepts were operationalized in the chase scenarios by creating categories which corresponded to the existing empirical information which affected the recruits' decisions to engage in pursuit driving. The benefits of pursuit, or the need to immediately apprehend included eight levels of potential law violations. The potential costs or risks to the public included three categories: area of pursuit, traffic and weather conditions. The areas in which the chase occurred had four levels. The traffic and weather conditions each had two levels.

Subjects were asked to imagine that they initiated a traffic or felony stop and that the suspect refused to pull over and after a short distance, actively attempted to flee and avoid apprehension. Consistent with prior research and discussions with officers after pre-testing the instrument, subjects were asked not to rank the aggressiveness or degree of pursuit but to respond as a simple yes/no dichotomy. The specific methodology and analysis are presented and discussed in Chapter V.

The data presented below represent the parameter estimates and tests of statistical fit for the dummy variables for the combined sample of recruits. The factor "need to apprehend" shows a significant difference from the base "traffic violation" in all cases. The pooled results for all recruits prior to training (Recruit 1) represents the parameter estimates and tests of statistical fit for the dummy variables for the combined sample of 160 respondents. The factor 'need to apprehend' was viewed at all levels as significantly different from the base of traffic violation. Respondents reported that they were less likely to chase for a misdemeanor over the base of traffic violation; the odds ratio was .72:1. A significant difference existed between all levels of violations. The odds ratio ranged from 8.72:1 for a felony-property crime to 403.44:1 for a violent felony with a death.

Prior to training, recruits were less likely to chase in all areas when compared to the base of a freeway situation. A significant difference exists between all areas when recruits considered the chase areas, the traffic conditions, and the weather. Recruits reported being more likely to pursue when the traffic was non-congested compared to congested, and the weather was dry as opposed to wet.

Parameter Estimates for Pooled Logistic Regression-All Recruits Time 1

<u>Level</u>	<u>Coefficient</u>	<u>Exp(B)</u>	<u>Statistic</u>	<u>df</u>	<u>P-value</u>
<i>Need to Apprehend</i>					
Traffic violation*	0.00				
Misdemeanor	-.328	.72	8.86	1	.00
Felony-property	.31	1.37	8.72	1	.00
Stolen car	1.11	3.03	95.90	1	.00
DUI	1.61	5.0	191.6	1	.00
Violent felony- no death	2.07	7.98	271.9	1	.00
Violent felony- with death	3.28	26.46	403.44	1	.00
Officer shot	4.37	79.14	382.35	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.07	.94	.51	1	.00
Inner City	-.19	.82	4.16	1	.04
Residential	-.56	.57	39.59	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.28	3.58	333.7	1	.00
Weather:					
Wet*	0.00				
Dry	.71	2.04	108.29	1	.00

*Base

The pooled results for all recruits following training (Recruit 2) represent the combined sample of 145 respondents. A significant difference exists between all levels of violations.

Recruits were less likely to chase for a misdemeanor over the base of traffic violation and more likely to chase for all other violations. The odds for chase ranged from 2.35:1 for a misdemeanor to 369.49:1 for a police officer shot.

When considering risks to the public, recruits were less likely to chase in all areas compared to the base of freeway. Recruits reported being more likely to chase in non-congested

areas over congested ones and dry conditions over wet conditions. A significant difference existed in all comparisons with the exception of commercial areas.

Parameter Estimates for Pooled Logistic Regression-All Recruits Time 2

<u>Level</u>	<u>Coefficient</u>	<u>Exp(B)</u>	<u>Statistic</u>	<u>df</u>	<u>P-value</u>
<i>Need to Apprehend</i>					
Traffic violation* 0.00					
Misdemeanor	-.21	.81	2.35	1	.12
Felony-property	.58	1.79	21.44	1	.00
Stolen car	1.22	3.4	90.01	1	.00
DUI	1.78	5.95	180.65	1	.00
Violent felony- no death	2.39	10.94	292.56	1	.00
Violent felony- with death	3.79	44.24	430.35	1	.00
Officer shot	5.09	162.9	369.49	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.16	.85	2.32	1	.13
Inner City	-.37	.69	11.83	1	.00
Residential	-.48	.62	22.09	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.35	3.84	310.36	1	.00
Weather:					
Wet*	0.00				
Dry	.54	1.72	52.57	1	.00

*Base

All groups reported the factor “Need to Apprehend” as the most important part of the decision to pursue. When considering risks to the public, the most important consideration was traffic conditions. The importance of weather conditions and the violation increased after training. The area of pursuit decreased in importance upon completion of training.

Group Parameter Estimates And Factor Importance

<u>Level</u>	<u>Time 1</u>	<u>Time 2</u>
<i>Need to Apprehend</i>		
Traffic violation*	0.00	0.00
Misdemeanor	-.328	-.21
Felony-property	.31	.58
Stolen car	1.11	1.22
DUI	1.61	1.78
Violent felony- no death	2.07	2.39
Violent felony- with death	3.28	3.79
Officer shot	4.37	5.09
<i>Risks to the Public</i>		
Chase Area:		
Freeway*	0.00	0.00
Commercial	-.07	-.16
Inner City	-.19	-.37
Residential	-.56	-.48
Traffic Conditions:		
Congested*	0.00	0.00
Non-congested	1.28	1.35
Weather:		
Wet*	0.00	0.00
Dry	.71	.54
Relative Importance of Factors		
Need to Apprehend	65%	69%
Area of Pursuit	8%	6%
Traffic Conditions	18%	18%
Weather Conditions	1%	7%

*Base

To assess potential differences among the three groups of respondents, contrasts were constructed at the 95% confidence level by adding and subtracting 1.96 times the pooled standard error to the coefficients estimated at the group level. Nonoverlapping intervals indicate significant differences between two groups. The only significant difference between the recruits prior to training and after training was for an inner city chase.

Significant Contrast

Variable	Recruit Time 1 vs Recruit Time 2
<i>Need to Apprehend</i>	
Misdemeanor	N
Felony-property	N
Stolen car	N
DUI	N
Violent felony- no death	N
Violent felony- with death	N
Officer shot	N
<i>Risks to the Public</i>	
Chase Area:	
Commercial	N
Inner City	Y
Residential	N
Traffic Conditions:	
Non-congested	N
Weather:	
Dry	N

*All Contrasts at the $\alpha = .05$ level

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

South Carolina Criminal Justice Academy

Time 1

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.12	.89	.21	1	.64
Felony-property	.63	1.87	7.05	1	.01
Stolen Car	1.20	3.35	23.89	1	.00
DUI	1.66	5.25	44.75	1	.00
Violent felony - no death	2.58	13.24	86.55	1	.00
Violent felony - with death	4.37	78.80	93.38	1	.00
Officer shot	6.52	676.12	40.70	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.00	1.00	.00	1	.99
Inner City	-.11	.90	.28	1	.60
Residential	-.47	.63	5.71	1	.02
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.25	3.49	69.28	1	.00
Weather:					
Wet*	0.00				
Dry	.72	2.06	23.88	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

Miami-Dade Community College Criminal Justice Institute

Time 1

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.49	.61	2.06	1	.15
Felony-property	.24	1.23	.63	1	.43
Stolen Car	1.20	3.31	15.21	1	.00
DUI	2.13	8.38	44.40	1	.00
Violent felony - no death	2.43	11.35	52.56	1	.00
Violent felony - with death	3.36	28.78	74.27	1	.00
Officer shot	5.40	221.96	50.88	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	.00	1.00	.00	1	.99
Inner City	-.01	.99	.00	1	.96
Residential	-.41	.66	2.69	1	.10
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.10	3.01	36.11	1	.00
Weather:					
Wet*	0.00				
Dry	.60	1.82	10.91	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

St. Petersburg Junior College Criminal Justice Institute

Time 1

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.54	.58	2.25	1	.13
Felony-property	.55	1.73	3.13	1	.08
Stolen Car	.85	2.34	7.20	1	.01
DUI	1.46	4.31	22.69	1	.00
Violent felony - no death	2.50	12.23	55.53	1	.00
Violent felony - with death	2.98	19.72	73.91	1	.00
Officer shot	3.73	41.72	84.78	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	.04	1.04	.02	1	.88
Inner City	.06	1.06	.06	1	.81
Residential	-.44	.65	3.37	1	.07
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.08	2.95	40.25	1	.00
Weather:					
Wet*	0.00				
Dry	.61	1.84	12.78	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

Miami-Dade Community College Criminal Justice Institute

Time 2

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.22	.80	.52	1	.47
Felony-property	.82	2.27	9.70	1	.00
Stolen Car	1.40	4.02	27.37	1	.00
DUI	2.65	14.10	92.14	1	.00
Violent felony - no death	2.77	15.96	100.35	1	.00
Violent felony - with death	4.54	93.53	152.72	1	.00
Officer shot	6.12	453.32	118.68	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.13	.88	.39	1	.53
Inner City	-.31	.73	2.09	1	.15
Residential	-.33	.72	2.72	1	.10
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.26	3.52	68.81	1	.00
Weather:					
Wet*	0.00				
Dry	.81	2.25	30.19	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

St. Petersburg Junior College Criminal Justice Institute

Time 2

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.43	.65	.30	1	.58
Felony-property	.86	2.36	1.86	1	.17
Stolen Car	2.22	9.12	14.11	1	.00
DUI	2.55	12.79	20.04	1	.00
Violent felony - no death	4.86	128.91	69.89	1	.00
Violent felony - with death	6.15	470.15	86.13	1	.00
Officer shot	7.00	1091.47	94.75	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	.02	1.02	.00	1	.95
Inner City	-.04	.96	.01	1	.92
Residential	-.58	.56	3.64	1	.06
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.70	5.48	36.48	1	.00
Weather:					
Wet*	0.00				
Dry	.38	1.46	1.79	1	.18

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

South Carolina Highway Patrol

Time 1

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.16	.85	.62	1	.43
Felony-property	.25	1.29	1.53	1	.22
Stolen Car	1.52	4.59	33.75	1	.00
DUI	2.00	7.41	52.77	1	.00
Violent felony - no death	2.07	7.96	53.28	1	.00
Violent felony - with death	2.60	13.44	75.33	1	.00
Officer shot	4.06	58.26	91.31	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.27	.76	1.89	1	.17
Inner City	-.46	.63	5.44	1	.02
Residential	-.84	.43	23.11	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.88	6.58	103.98	1	.00
Weather:					
Wet*	0.00				
Dry	1.14	3.11	38.70	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

South Carolina Criminal Justice Academy

Time 2

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.62	.54	4.57	1	.03
Felony-property	.56	1.75	4.72	1	.03
Stolen Car	1.23	3.43	21.34	1	.00
DUI	1.80	6.03	39.60	1	.00
Violent felony - no death	2.1	8.17	52.67	1	.00
Violent felony - with death	3.65	38.34	82.36	1	.00
Officer shot	5.55	256.49	54.90	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.20	.82	.83	1	.36
Inner City	-.38	.68	2.76	1	.10
Residential	-.28	.76	1.65	1	.20
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.33	3.78	63.77	1	.00
Weather:					
Wet*	0.00				
Dry	.59	1.80	13.20	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

South Carolina Highway Patrol

Time 2

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.06	.95	.06	1	.80
Felony-property	.65	1.91	8.57	1	.00
Stolen Car	1.53	4.60	35.19	1	.00
DUI	1.71	5.50	42.67	1	.00
Violent felony - no death	2.04	7.71	52.89	1	.00
Violent felony - with death	2.77	15.92	80.52	1	.00
Officer shot	4.11	60.98	86.45	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.22	.80	1.15	1	1.15
Inner City	-.57	.57	7.75	1	.01
Residential	-.81	.44	19.37	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.91	6.77	133.22	1	.00
Weather:					
Wet*	0.00				
Dry	.61	1.85	21.53	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

All Recruits

Time 1

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.33	.72	8.86	1	.03
Felony-property	.31	1.37	8.72	1	.00
Stolen Car	1.11	3.03	95.91	1	.00
DUI	1.61	5.00	191.60	1	.00
Violent felony - no death	2.08	7.98	271.90	1	.00
Violent felony - with death	3.28	26.46	403.44	1	.00
Officer shot	4.37	79.14	382.35	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.07	.94	.51	1	.48
Inner City	-.19	.82	4.16	1	.04
Residential	-.56	.57	39.59	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.28	3.58	337.70	1	.00
Weather:					
Wet*	0.00				
Dry	.71	2.04	108.29	1	.00

PARAMETER ESTIMATES FOR LOGISTIC REGRESSION

All Recruits

Time 2

Level	Coefficient	Exp(B)	Statistic	df	P-Value
<i>Need to Apprehend</i>					
Traffic Violation*	0.00				
Misdemeanor	-.21	.81	2.35	1	.12
Felony-property	.58	1.79	21.44	1	.00
Stolen Car	1.22	3.40	90.01	1	.00
DUI	1.78	5.95	180.65	1	.00
Violent felony - no death	2.39	10.93	292.56	1	.00
Violent felony - with death	3.79	44.24	430.35	1	.00
Officer shot	5.09	162.90	369.49	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.16	.85	2.32	1	.13
Inner City	-.37	.69	11.84	1	.00
Residential	-.48	.62	22.09	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.35	3.84	310.38	1	.00
Weather:					
Wet*	0.00				
Dry	.54	1.72	52.57	1	.00

Parameter Estimates and Factor Importance
St. Petersburg Junior College Criminal Justice Institute

Level	Time 1	Time 2
<i>Need to Apprehend</i>		
Traffic Violation*	0.00	0.00
Misdemeanor	-.54	-.43
Felony-property	.55	.86
Stolen Car	.85	2.22
DUI	1.46	2.55
Violent felony - no death	2.50	4.86
Violent felony - with death	2.98	6.15
Officer shot	3.73	7.00
<i>Risks to the Public</i>		
Chase Area:		
Freeway*	0.00	0.00
Commercial	.04	.02
Inner City	.06	-.04
Residential	-.44	-.58
Traffic Conditions:		
Congested*	0.00	0.00
Non-congested	1.08	1.70
Weather:		
Wet*	0.00	0.00
Dry	.61	.38
Relative Importance Factor		
Need to Apprehend	64%	72%

Area of Pursuit	8%	6%
Traffic Conditions	18%	18%
Weather Conditions	10%	4%

**Parameter Estimates and Factor Importance
All Recruits**

Level	Time 1	Time 2
<i>Need to Apprehend</i>		
Traffic Violation*	0.00	0.00
Misdemeanor	-.33	-.21
Felony-property	.31	.58
Stolen Car	1.11	1.22
DUI	1.61	1.78
Violent felony - no death	2.08	2.39
Violent felony - with death	3.28	3.79
Officer shot	4.37	5.09
<i>Risks to the Public</i>		
Chase Area:		
Freeway*	0.00	0.00
Commercial	-.07	-.16
Inner City	-.19	-.37
Residential	-.56	-.48
Traffic Conditions:		
Congested*	0.00	0.00
Non-congested	1.28	1.35
Weather:		
Wet*	0.00	0.00
Dry	.71	.54
Relative Importance Factor		
Need to Apprehend	63%	68%

Part 3

The final part of the survey asked officers whether or not they had been involved in a pursuit(s) in the last twelve months. There were further questions concerning the characteristics of the pursuit(s). The results are as reported below with a breakdown by city.

First, officers were asked whether or not they had been involved in a pursuit as a primary driver in the past 12 months. The following numbers indicate the percentage of affirmative responses:

All officers	26%
Metro-Dade	34%
Omaha	20%
Aiken	38%
Mesa	16%

Officers were asked how many pursuits they were involved in over the last 12 months:

All officers	3%	73%	11%	13%
Metro-Dade	4%	89%	6%	1%
Omaha	n/a	n/a	n/a	n/a
Aiken	n/a	n/a	n/a	n/a
Mesa	n/a	n/a	n/a	n/a

young male officers, with little variance between individual groups.

An average of 52% of officers believe that the majority of pursuits are conducted by

All officers	52%
Metro-Dade	51%
Omaha	50%
Aiken	58%
Mesa	61%

Officers that agree with this statement are as follows:

Research shows that the majority of pursuits are conducted by young male officers.

also believe this to be true.

officers believe that no pursuits result in the use of excessive force while 49% of Mesa officers

pursuits result in the use of excessive force. Looking at individual groups, only 7% of Aiken

of excessive force. Also worth noting is the average of 26% of all officers who believe that no

Fifty-eight percent of officers believe that between 1%-25% of pursuits result in the use

All officers	26%	58%	11%	5%	5%
Metro-Dade	17%	64%	14%	5%	5%
Omaha	30%	54%	11%	5%	
Aiken	7%	74%	14%	5%	
Mesa	49%	46%	4%	1%	
<hr/>					
None	1%-25%	26%-50%	>50%		

force. The following responses were reported:

Officers were asked what percent of arrests after a pursuit result in the use of excessive

officers believe the range of these incidents is 25% or below.

the use of force, with the numbers fairly consistent across groups. Twenty-eight percent of

Thirty-three percent of all officers believe that between 26%-50% of all pursuits result in

	<=25%	26%-50%	51%-75%	> 75%
All officers	28%	33%	16%	23%
Metro-Dade	37%	34%	17%	14%
Omaha	25%	31%	17%	27%
Aiken	21%	33%	19%	26%
Mesa	16%	37%	9%	38%

following responses were reported:

Officers were asked what percent of arrests after a pursuit result in the use of force. The

26%-50%.

time. Forty-eight percent of Aiken officers believe the range of impaired drivers is between

driving impaired by drugs or alcohol. Metro-Dade officers believe this to be true 62% of the

Thirty-seven percent of all officers believe that 25% or below of all suspects who flee are

	<=25%	26%-50%	51%-75%	> 75%
All officers	37%	36%	16%	11%
Metro-Dade	62%	28%	7%	3%
Omaha	24%	39%	21%	16%
Aiken	18%	48%	17%	17%
Mesa	31%	37%	20%	12%

drugs or alcohol. The responses were as follows:

Officers were asked what percent of the suspects who run are driving while impaired by

They have something to hide:

All officers	95%
Metro-Dade	96%
Omaha	95%
Aiken	86%
Mesa	95%

They are just scared and want to escape:

All officers	39%
Metro-Dade	36%
Omaha	39%
Aiken	61%
Mesa	40%

Most officers believe suspects flee because they have something to hide, with the average being 95% for all officers. Slightly more than half (56%) believe that suspects have committed a serious offense. Thirty-nine percent of all officers believe that suspects are scared and want to escape.

Officers were asked what percent of suspects would flee from police after being ordered to stop if their department had a "no pursuit" policy that was known to the public. The following percentages were recorded:

	<=25%	26%-50%	51%-75%	76%-100%
All officers	31%	17%	17%	35%
Metro-Dade	20%	21%	17%	42%
Omaha	37%	16%	31%	
Aiken	26%	14%	30%	30%
Mesa	42%	13%	13%	32%

An average of 35% of all officers believe that between 76%-100% of suspects would flee if they knew they would not be pursued. Similarly, 31% of all officers believed the range of suspects that would flee was less than 25%.

The most frequent response was 6-9 months by an average of 40% of all officers. Fifty-five percent of Mesa officers approved of this term while only 25% of Aiken officers held this opinion.

Of the officers approving of incarceration, the recommended term fell in the following

categories for years in prison:

	<i>1yr</i>	<i>2-5yrs > 5yrs</i>
All officers	53%	39%
Metro-Dade	46%	43%
Omaha	70%	23%
Aiken	47%	47%
Mesa	25%	67%
		8%

Fifty-three percent of all officers recommended one year as the length of a prison term for fleeing suspects. The range was wide with 70% of Omaha officers recommending this term

compared to only 25% of Mesa officers approving. An average of only 8% of all officers

approved of a prison term of over five years.

Officers were asked if they believed that suspects flee for the following reasons (percent responding "yes" reported):

<i>They have committed a serious offense:</i>	56%
Metro-Dade	63%
Omaha	50%
Aiken	48%
Mesa	66%

	<i>1mth</i>	<i>2-5mths</i>	<i>6-9mths</i>	<i>10-12mths</i>	<i>> 12mths</i>
All officers	24%	21%	40%	13%	2%
Metro-Dade	24%	21%	37%	17%	1%
Omaha	27%	21%	42%	8%	2%
Aiken	29%	25%	25%	21%	---
Mesa	10%	19%	55%	14%	2%

jail:

approving of incarceration, the recommended term fell in the following categories for months in

approval rate ranged from 88% of Omaha officers to 99% of Mesa officers. Of the officers

Ninety percent of all officers approved of incarceration for fleeing suspects. The

All officers	90%
Metro-Dade	90%
Omaha	88%
Aiken	95%
Mesa	99%

indicate the "yes" responses recorded:

Officers were asked if incarceration would be appropriate. The following percentages

with 54% of Omaha officers falling in this category.

The range most recommended for a fine was the \$101-\$500 group at 44% for all officers,

	<i>\$100</i>	<i>\$101-\$500</i>	<i>\$501-\$1000</i>	<i>Above \$1000</i>
All officers	10%	44%	27%	19%
Metro-Dade	6%	37%	33%	24%
Omaha	16%	54%	21%	8%
Aiken	4%	50%	28%	18%
Mesa	---	17%	28%	55%

Half of all officers believe they have been adequately trained in the use of force, with the lowest percentage (36%) from Omaha officers and the highest from Metro-Dade officers (64%). Eighty-seven percent of officers believe they have been trained adequately in the use of force. Only 22% of all officers agree that during a pursuit they find themselves focusing only on apprehending the offender. Thirty-four percent believe that pursuits are worth the risks to the officer and the public, with a low of 13% of all Mesa officers and a high of 25% of Metro-Dade officers.

Part 2

Officers were questioned as to the appropriate punishment for someone who refused to stop his or her vehicle after being ordered to do so. First, they were asked if a fine would be appropriate. The following percentages indicate the "yes" responses recorded:

All officers	80%
Metro-Dade	88%
Omaha	73%
Aiken	80%
Mesa	90%

Most officers agree with a fine for fleeing suspects, with the average being 80%. The lowest score came from Omaha at 73%, and Mesa officers approved of a fine 90% of the time. Of officers approving of a fine, the recommended amount fell in the following categories:

Section I

In parts one and two of this section, officers were asked about the various aspects of a chase, ranging from why the suspect would flee in the first place to opinions on the punishments the suspects should be given once caught. The third part centered solely on the officers' experiences with pursuits during the previous twelve months. (Responses in the first part are organized in paragraph form, while in the second and third parts they are in tables.)

Part I

The questions posed to officers about feelings during a pursuit revealed that 84% of them feel excited during a pursuit. Seventy-five percent feel stimulated and 76% feel nervous. Only 37% reported feeling angry during a pursuit, with averages from individual cities falling close to the total average.

Officers are most concerned with catching the suspect during a pursuit, with an average of 96% of all officers expressing this concern. The range began with a low of 95% from Omaha officers and ended with a high of 98% from Aiken officers. Teaching the suspect a lesson was of least concern to officers, with the average being 21% for all officers.

When asked their opinions concerning departmental policies, 85% of all officers agreed that the department they belonged to had a very restrictive pursuit policy. Only 6% agreed that their department's pursuit policy permitted total discretion. Seventy-seven percent of all officers agreed that they understand their department's pursuit policy, with a low of 67% of Omaha officers and a high of 92% of Mesa officers.

Officers

The sections below deal with the attitudes of police officers toward the different aspects of a pursuit. In the first section, the officers are questioned on their individual experiences with pursuit driving and the different characteristics of a chase, including recommended punishments and suspect attributes.

In the second section, the officers are questioned regarding their engaging in a vehicular pursuit of a suspect who will not stop. As in the section on recruits, approval for both low-risk and high-risk conditions are shown (though here they are on the same table) in conjunction with a variety of criminal offenses. In addition to breaking down the respondents by location, each table also groups them by their years of experience as an officer.

The third section looks at more detailed information on officers' attitudes and the subject of pursuit driving. The relative influences of wanting to enforce the law while minimizing the associated risks to public safety are examined through statistical analyses that reveal which specific crimes committed, chase areas, and traffic and weather conditions might alter the officers' attitudes of engaging in a pursuit.

In the final section, the results of a series of open-ended opinion questions asked of the officers are presented. These covers such topics as why they believe suspects run in the first place and how they would describe fellow officers who take different courses of action during and after a pursuit.

Area of Pursuit	8%	7%
Traffic Conditions	19%	18%
Weather Conditions	10%	7%

Next, the officers were asked to report how many pursuits:

** Resulted in accidents:*

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		56%	40%	1%	3%
Metro-Dade		46%	45%	3%	6%
Omaha	67%	33%	---	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

**Resulted in injuries:*

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		75%	23%	1%	1%
Metro-Dade		64%	32%	2%	2%
Omaha	89%	11%	---	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

**Resulted in death:*

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		97%	3%	---	---
Metro-Dade		95%	5%	---	---
Omaha	100%	---	---	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

The number of pursuits that resulted in the officer feeling physically threatened by the suspect:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		55%	38%	4%	4%
Metro-Dade		53%	33%	6%	8%
Omaha	61%	38%	1%	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

The number of pursuits that resulted in their having to use force to apprehend the suspect:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		37%	51%	6%	6%
Metro-Dade		36%	43%	10%	11%
Omaha	44%	55%	1%	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

During the past 12 months, officers reported being involved in the following number of pursuits and not reporting it to communication:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		71%	26%	2%	1%
Metro-Dade		68%	30%	1%	1%
Omaha	67%	29%	3%	1%	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

The number of pursuits officers terminated voluntarily during the past 12 months because they felt it was too risky:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		53%	39%	7%	1%
Metro-Dade		53%	40%	6%	1%
Omaha	46%	44%	9%	1%	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

In the following 12 months supervisors terminated the following number of pursuits because they were too risky:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		67%	28%	3%	2%
Metro-Dade		59%	35%	3%	3%
Omaha	73%	23%	3%	1%	
Aiken		n/a	n/a	n/a	n/a

Mesa	n/a	n/a	n/a	n/a
------	-----	-----	-----	-----

The number of pursuits in the last 12 months that could have resulted in the use of force but did not:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All officers		60%	35%	3%	2%
Metro-Dade		54%	39%	4%	3%
Omaha	64%	33%	3%	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

Section II

*Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a **traffic violation**:*

Group	Low Risk	High Risk	Difference
Total Officers	43%	10%	33%
<i>Departments:</i>			
Metro-Dade	51%	14%	37%
Omaha	40%	8%	32%
Aiken	77%	4%	73%
Mesa	14%	---	14%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	51%	14%	37%
Metro-Dade > 5 yrs	53%	12%	41%
Omaha <= 5 yrs	40%	8%	32%
Omaha > 5 yrs	40%	11%	29%
Aiken <= 5 yrs	77%	4%	73%
Aiken > 5 yrs	71%	8%	63%
Mesa <= 5 yrs	14%	---	14%
Mesa > 5 yrs	27%	9%	18%

Overall, 43% of the police officers said that they would engage in a pursuit under low risk conditions for an incident involving a traffic violation. Under high risk conditions, 10% of

the officers said they would do the same. This resulted in a difference of 33%. Officers from Aiken County and Mesa differed the most from the average. In Aiken County, 77% of the respondents would engage in a pursuit under low risk conditions compared to 4% who would do so under high risk conditions, creating a difference of 73%. In Mesa, only 14% of the respondents would engage in a pursuit under low risk conditions compared to 0% who would do so under high risk conditions, creating a difference of 14%.

When the officers were separated into those with five years or less and those with over five years experience, Mesa showed the most fluctuation. The more experienced officers from this department were almost twice as likely to engage in a pursuit for a traffic violation under low risk conditions. Under high risk conditions, 9% of more experienced officers would engage in pursuit compared to none of the newer officers.

*Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a **property crime - misdemeanor**:*

Group	Low Risk	High Risk	Difference
Total Officers	42%	17%	25%
<i>Departments:</i>			
Metro-Dade	47%	23%	24%
Omaha	41%	16%	25%
Aiken	56%	10%	46%
Mesa	16%	7%	9%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	45%	25%	20%
Metro-Dade > 5 yrs	50%	23%	27%
Omaha <= 5 yrs	44%	10%	34%
Omaha > 5 yrs	43%	16%	27%
Aiken <= 5 yrs	57%	9%	48%
Aiken > 5 yrs	54%	15%	39%
Mesa <= 5 yrs	16%	7%	9%
Mesa > 5 yrs	14%	5%	9%

Generally, 42% of responding police officers said that they would engage in a pursuit under low risk conditions for an incident involving a property crime - misdemeanor. Under high risk conditions, 17% of the officers said they would do the same. This yielded a difference of 25%. Answers from the officers in the Aiken County and Mesa departments differed most from the overall average. Of all respondents from Aiken County, 56% said they would engage in a pursuit under low risk conditions while 10% would pursue under high risk conditions. Of all respondents from Mesa, only 16% said they would engage in a pursuit under low risk conditions while 7% would pursue under high risk conditions.

When the respondents in each police department were broken down by their years on the force, there was relatively little difference seen in their opinions on giving chase under either low or high risk conditions. The largest variation was seen in Omaha and Aiken County; under high risk conditions, officers with over five years experience in either department would engage in pursuit 6% more of the time than would their fellow officers in the same department with five years or less experience.

*Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a **property crime - felony**:*

Group	Low Risk	High Risk	Difference
Total Officers	64%	34%	30%
<i>Departments:</i>			
Metro-Dade	71%	42%	29%
Omaha	60%	35%	25%
Aiken	90%	33%	57%
Mesa	42%	9%	33%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	69%	40%	29%
Metro-Dade > 5 yrs	74%	45%	29%
Omaha <= 5 yrs	62%	25%	37%
Omaha > 5 yrs	59%	36%	23%
Aiken <= 5 yrs	91%	38%	53%
Aiken > 5 yrs	92%	31%	61%
Mesa <= 5 yrs	41%	14%	27%
Mesa > 5 yrs	43%	5%	38%

In total, 64% of the police officers said that they would engage in a pursuit under low risk conditions for an incident involving a property crime - felony. Under high risk conditions, 34% of the officers said they would do the same. This resulted in a difference of 30%. Officers from Aiken County were close to the average in their responses regarding giving chase in high risk conditions, but under low risk conditions the percentage agreeing to a pursuit was 26% higher than the average in that category. This represented a difference of 57% within Aiken County. Responses from Mesa revealed that under low risk conditions 42% of responding officers would give chase, while under high risk conditions only 9% said they would pursue.

Within each department, answers from officers with over five years experience were generally similar to those from less experienced officers when the conditions were low risk. There were two cases, however, in which responses from these two groups of officers differed by over 9% when questioned whether they would give chase under high risk conditions for an

incident involving a property crime - felony; in Omaha, the officers with greater experience would engage in pursuit more often, while in Mesa those with fewer years in the department were more likely to give chase.

*Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a **stolen vehicle**:*

Group	Low Risk	High Risk	Difference
Total Officers	65%	37%	28%
<i>Departments:</i>			
Metro-Dade	73%	50%	23%
Omaha	60%	33%	27%
Aiken	93%	48%	45%
Mesa	43%	13%	30%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	76%	54%	22%
Metro-Dade > 5 yrs	76%	50%	26%
Omaha <= 5 yrs	71%	26%	45%
Omaha > 5 yrs	56%	34%	22%
Aiken <= 5 yrs	96%	44%	52%
Aiken > 5 yrs	92%	54%	38%
Mesa <= 5 yrs	42%	22%	20%
Mesa > 5 yrs	41%	5%	36%

Overall, 65% of the respondents said that they would engage in a pursuit under low risk conditions for an incident involving a stolen vehicle. Under high risk conditions, 37% of the officers said they would do the same. This yielded a difference of 28%. In the category of low risk conditions, major deviations from the above average of 65% was seen in the responses from officers from both Aiken County (28% higher) and Mesa (22% lower). Responses in the category of officers who would give chase under high risk conditions also varied from the average of 37%; officers from Metro-Dade and Aiken County were approximately 12% more likely to enter into a pursuit, while Mesa officers were 24% less likely to pursue.

When the responding officers within each department were grouped into those having more than five years and those having five years and less experience, several fluctuating response rates were seen. In Omaha, for example, officers with more than five years experience said they would give chase 15% less under low risk conditions than their counterparts with fewer years on the job. Veteran officers in Mesa responded that, compared to newer officers, there was a 17% less likelihood that they would give chase under the same high risk circumstances. In Aiken County, those with more years in the department were, under high risk conditions, 10% more willing to engage in pursuit than the less experienced officers.

Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a DUI:

Group	Low Risk	High Risk	Difference
Total Officers	70%	43%	27%
<i>Departments:</i>			
Metro-Dade	76%	56%	20%
Omaha	68%	38%	30%
Aiken	95%	63%	32%
Mesa	47%	17%	30%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	79%	62%	17%
Metro-Dade > 5 yrs	75%	53%	22%
Omaha <= 5 yrs	80%	34%	46%
Omaha > 5 yrs	66%	40%	26%
Aiken <= 5 yrs	96%	57%	39%
Aiken > 5 yrs	93%	69%	24%
Mesa <= 5 yrs	46%	19%	27%
Mesa > 5 yrs	59%	18%	41%

On average, 70% of responding police officers said that they would engage in a pursuit under low risk conditions for an incident involving a DUI. Under high risk conditions, 43% of the officers replied that they would make that same decision. This yielded a difference of 27%.

This was fairly representative of the differences within each department as well, with all four ranging between 20% and 32%. However, the individual percentages in each department showed much greater variation. In the category of officers who would give chase under low risk conditions, the respondents' approval rate from Aiken County was 25% higher than the overall percentage, while the respondents' approval rate from Mesa was 13% lower. Under high risk conditions, the response rates from Metro-Dade and Aiken County officers willing to give chase were, respectively, 13% and 20% higher than the average. Conversely, the rate from Mesa officers was 26% lower than the average.

Officers from each department were then broken down into those with more than five years and those with five years or less experience. In three cases there was at least a 10% difference between the two groups' responses as to whether they would engage in a pursuit under either set of risk conditions for incidents involving a DUI. Responding officers from Aiken County who were less experienced said they would give chase 12% less under high risk conditions than those with over five years on the job. For low risk conditions, the situation in Mesa was very similar, with the newer officers agreeing to a pursuit 13% less than their veteran counterparts. Response rates from Omaha indicated an opposing opinion, as the more experienced officers were 14% less willing than those with fewer years to give chase under low risk conditions.

*Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a **violent felony - no death**:*

Group	Low Risk	High Risk	Difference
Total Officers	87%	80%	7%
<i>Departments:</i>			
Metro-Dade	90%	86%	4%
Omaha	84%	77%	7%
Aiken	100%	85%	15%
Mesa	86%	71%	15%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	89%	87%	2%
Metro-Dade > 5 yrs	92%	87%	5%
Omaha <= 5 yrs	88%	79%	9%
Omaha > 5 yrs	86%	80%	6%
Aiken <= 5 yrs	100%	87%	13%
Aiken > 5 yrs	100%	83%	17%
Mesa <= 5 yrs	89%	86%	3%
Mesa > 5 yrs	86%	73%	13%

Police officers were asked if they would engage in a pursuit for incidents involving a violent felony - no death. Eighty-seven percent said they would do so under low risk conditions compared to 80% who would do so under high risk conditions. This resulted in a difference of 7%. In this scenario, the variations between these general averages and the departments' averages were less pronounced. Only Aiken County had 100% of responding officers willing to engage in a pursuit. Under high risk conditions, 71% of the Mesa officers would give chase.

There were few significant differences when the answering officers were divided into two groups according to whether they had served more than five years or five years and less. For example, the major variation between these groups within any one department was the 13% separating responding police officers from Mesa when asked if they would engage in pursuit under high risk conditions. More notable was the fact that both veterans and relative newcomers in the Aiken police department gave 100% rates of affirmation in the low risk category. The next

highest affirmative response rate was the 92% of answering Metro-Dade officers with over 5 years experience who said they would engage in a pursuit under low risk conditions.

Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a violent felony - with death:

Group	Low Risk	High Risk	Difference
Total Officers	96%	95%	1%
<i>Departments:</i>			
Metro-Dade	96%	95%	1%
Omaha	94%	94%	---
Aiken	100%	100%	---
Mesa	100%	95%	5%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	100%	95%	5%
Metro-Dade > 5 yrs	96%	96%	---
Omaha <= 5 yrs	94%	96%	2%
Omaha > 5 yrs	97%	93%	4%
Aiken <= 5 yrs	100%	100%	---
Aiken > 5 yrs	100%	100%	---
Mesa <= 5 yrs	100%	97%	3%
Mesa > 5 yrs	100%	100%	---

Generally, 96% of all responding police officers answered that they would engage in a pursuit under low risk conditions for incidents involving a violent felony - with death. When compared to the 95% who would do the same under high risk conditions, a difference of only 1% was seen. The trend of officers increasingly willing to give chase for more violent circumstances continued. In the individual departments, all answering officers from Aiken County were willing to give chase under both low and high risk conditions. In Mesa, the 5% difference between the categories of risk was the greatest of any department, with 100% of the officers ready to engage in a pursuit under low risk conditions but only 95% ready to do likewise under high risk

conditions.

There was even less variation when comparing the opinions of each department's respondents based on their years on the job. The largest of the differences occurred in Metro-Dade under low risk conditions; every responding officer (100%) with 5 years or less experience indicated they would engage in a pursuit for incidents involving a violent felony - with death, while 96% of those with over 5 years experience indicated they would take the same action.

Percentages of police officers saying they would engage in a pursuit under low and high risk conditions for incidents involving a police officer shot:

Group	Low Risk	High Risk	Difference
Total Officers	96%	95%	1%
<i>Departments:</i>			
Metro-Dade	97%	95%	2%
Omaha	95%	94%	1%
Aiken	100%	100%	---
Mesa	99%	97%	2%
<i>Years as officer:</i>			
Metro-Dade <= 5 yrs	97%	97%	---
Metro-Dade > 5 yrs	98%	97%	1%
Omaha <= 5 yrs	97%	94%	3%
Omaha > 5 yrs	95%	94%	1%
Aiken <= 5 yrs	100%	100%	---
Aiken > 5 yrs	100%	100%	---
Mesa <= 5 yrs	97%	95%	2%
Mesa > 5 yrs	100%	100%	---

As in cases of violent felonies - with death, 96% of responding police officers said they would engage in a pursuit under low risk conditions for incidents involving a police officer shot, while 95% of respondents would do likewise under high risk conditions. Again, a difference of only 1% was seen. Within each department, the variation between respondents willing to give

chase under low risk and high risk conditions was just as negligible. Once more, all responding Aiken County officers said they would engage in a pursuit under either set of risk conditions.

As expected, there was little variation between the opinions of officers with five years and less experience and those with over five years experience. In Mesa, the newer officers were slightly less willing, under high risk conditions, to give chase for an incident involving a shot officer than they were for a case involving a violent felony - with death. Because 100% of the more experienced officers from Mesa who answered would engage in a pursuit under the same conditions for a fellow officer being shot, this resulted in the largest difference between the two groups (5%). Besides this instance just noted, it may be seen that, of the other fifteen groupings of respondents by experience, there were only three cases in which the officers would give chase less in incidents involving an officer shot than they would for incidents including a violent felony - with death.

Section III

This section was designed to assess the influence of the two critical factors on the decision to pursue: 1) The need to immediately apprehend (enforcement of laws) and 2) risk to the public (public safety). Just as the recruits were asked to respond to a set of pursuit scenarios, the Officers were also asked to imagine that they initiated a traffic or felony stop and that the suspect refused to pull over and actively attempted to flee and avoid apprehension. Consistent with prior research and discussions with officers after pre-testing the instrument, subjects were

asked not to rank the aggressiveness or degree of pursuit but to respond as a simple "yes," "no" dichotomy. The specific methods and analysis are discussed in Chapter V.

The data presented below represent the parameter estimates and tests of statistical fit for the dummy variables for the combined sample of officers. The factor "need to apprehend" shows a significant difference from the base "traffic violation" in all cases. Officers were more likely to pursue for all violations over a traffic violation with the exception of a misdemeanor where the odds ratio was .85:1.

Parameter Estimates for Pooled Logistic Regression-All Officers

Level	Coefficient	Exp(B)	Statistic	DF	P-value
<i>Need to Apprehend</i>					
Traffic violation* 0.00					
Misdemeanor	-.17	0.85	6.01	1	.01
Felony-property	1.04	2.84	300.2	1	.00
Stolen car	1.24	3.45	400.47	1	.00
DUI	1.1	3.03	322.11	1	.00
Violent felony- no death	2.99	19.81	1871.01	1	.00
Violent felony- with death	4.32	75.42	2103.81	1	.00
Officer shot	5.4	222.70	1710.351	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.06	.94	1.52	1	.22
Inner City	-.20	.82	16.13	1	.00
Residential	-.34	.71	55.53	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.09	2.98	941.93	1	.00
Weather:					
Wet*	0.00				
Dry	.51	1.67	211.65	1	.00

*Base

The results for Metro-Dade Officers show significant differences from the base in all cases with the exception of a chase in a commercial area over the base of a chase in a freeway situation. Officers were more likely to chase for all violations over traffic (the base) with the exception of a misdemeanor. The odds for a misdemeanor compared to a traffic violation were .79:1. When considering risks to the public, Metro-Dade officers are less likely to chase in inner city and residential areas than on a freeway. Metro-Dade officers are 2.5 times more likely to chase when traffic is not congested as opposed to congested, and 2.03 times more likely to chase when conditions are dry as opposed to wet.

Parameter Estimates for Logistic Regression-Metro-Dade Officers

Level	Coefficient	Exp(B)	Statistic	DF	P-value
<i>Need to Apprehend</i>					
Traffic violation* 0.00					
Misdemeanor	-.23	.79	5.0	1	.03
Felony-property	.9	2.45	91.18	1	.00
Stolen car	1.17	3.25	146.09	1	.00
DUI	1.09	2.97	126.32	1	.00
Violent felony- no death	2.81	16.66	610.95	1	.00
Violent felony- with death	3.9	49.49	685.55	1	.00
Officer shot	5.3	199.35	508.43	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	.013	1.01	.03	1	.86
Inner City	-.18	.83	5.02	1	.03
Residential	-.23	.79	9.1	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	.92	2.5	254.69	1	.00
Weather:					
Wet*	0.00				
Dry	.71	2.03	155.09	1	.00

* Base

Omaha officers' responses showed significant differences in all situations with the exception of a misdemeanor compared with a traffic violation. Similar to Metro-Dade officers, Omaha officers are more likely to chase for all violations compared with traffic violations excluding misdemeanors in which case the difference is not significant. Omaha officers are less likely to chase in commercial, inner city, and residential, areas compared with freeway situations. Omaha officers are 3.33 times more likely to chase when traffic is not congested and 1.45 times more likely when conditions are dry.

Parameter Estimates for Logistic Regression-Omaha Officers

Level	Coefficient	Exp(B)	Statistic	DF	P-value
<i>Need to Apprehend</i>					
Traffic violation* 0.00					
Misdemeanor	-.06	.94	.39	1	.53
Felony-property	1.26	3.5	194.26	1	.00
Stolen car	1.32	3.75	205.47	1	.00
DUI	1.08	2.95	137.61	1	.00
Violent felony- no death	3.09	22.02	951.54	1	.00
Violent felony- with death	4.52	91.76	1075.12	1	.00
Officer shot	5.43	228.2	928.5	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.13	.87	3.8	1	.05
Inner City	-.21	.81	8.35	1	.00
Residential	-.37	.69	30.89	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.2	3.33	529.2	1	.00
Weather:					
Wet*	0.00				
Dry	.37	1.45	51.53	1	.00

* Base

Aiken officers are more likely to pursue for all offenses with the exception of a misdemeanor where the difference was not significant. When considering risks to the public, all scenarios showed significant differences with the exception of chases in commercial areas. Aiken officers are less likely to pursue in inner city situations (odds of .61:1) and residential situations (odds of .56:1) when compared to freeway chases. When traffic is not congested, Aiken officers are 7.3 times more likely to pursue, and when conditions are dry they are 2.5 times more likely to pursue.

Parameter Estimates for Logistic Regression-Aiken Officers

Level	Coefficient	Exp(B)	Statistic	DF	P-value
<i>Need to Apprehend</i>					
Traffic violation* 0.00					
Misdemeanor	-.54	.58	3.35	1	.07
Felony-property	.9	2.47	12.57	1	.00
Stolen car	2.24	9.36	60.81	1	.00
DUI	1.81	6.11	40.09	1	.00
Violent felony- no death	3.17	23.87	101.05	1	.00
Violent felony- with death	4.49	89.12	100.29	1	.00
Officer shot	6.04	417.94	89.1	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.04	.96	.03	1	.85
Inner City	-.49	.61	4.19	1	.04
Residential	-.58	.56	7.58	1	.01
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.99	7.3	121.92	1	.00
Weather:					
Wet*	0.00				
Dry	.9	2.5	24.71	1	.00

* Base

All violations showed a significant difference compared with a traffic violation for Mesa officers excluding a misdemeanor. When considering the chase area, the only significant difference over a freeway area was a residential area. The odds show Mesa officers were less likely to pursue in a residential area (.56:1). In non-congested areas, Mesa officers were 3.52 times more likely to pursue than in congested areas, and they are 1.42 times more likely to pursue in dry weather as opposed to wet weather.

Parameter Estimates for Logistic Regression-Mesa Officers

Level	Coefficient	Exp(B)	Statistic	df	P-value
<i>Need to Apprehend</i>					
Traffic violation* 0.00					
Misdemeanor	-.19	.83	.38	1	.54
Felony-property	.89	2.43	11.42	1	.00
Stolen car	1.05	2.86	15.27	1	.00
DUI	1.52	4.57	26.27	1	.00
Violent felony- no death	3.85	47.14	208.3	1	.00
Violent felony- with death	5.6	268.75	228.14	1	.00
Officer shot	6.3	543.32	199.5	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	.07	1.08	.18	1	.67
Inner City	-.05	.95	.06	1	.8
Residential	-.59	.56	10.54	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.26	3.52	79.5	1	.00
Weather:					
Wet*	0.00				
Dry	.35	1.42	6.13	1	.01

* Base

Group Parameter Estimates and Factor Importance

	All Officers	Metro-Dade	Omaha	Aiken	Mesa
Need to Apprehend:					
Traffic violation	0.00	0.00	0.00	0.00	0.00
Misdemeanor	-.17	-.23	-.06	-.54	-.19
Felony-property	1.04	.90	1.26	.90	.89
Stolen car	1.24	1.17	1.32	2.24	1.05
DUI	1.1	1.09	1.08	1.81	1.52
Violent felony-no death	2.99	2.81	3.09	3.17	3.85
Violent felony-with death	4.32	3.90	4.52	4.49	5.60
Officer shot	5.4	5.30	5.43	6.04	6.30
Risks to the Public:					
<i>Chase Area:</i>					
Freeway*	0.00	0.00	0.00	0.00	0.00
Commercial	-.06	.01	-.13	-.04	.07
Inner City	-.20	-.18	-.21	-.49	-.05

Residential	-.34	-.23	-.37	-.58	-.59
<i>Traffic Conditions:</i>					
Congested*	0.00	0.00	0.00	0.00	0.00
Non-congested	1.09	.92	1.20	1.99	1.26
<i>Weather:</i>					
Wet*	0.00	0.00	0.00	0.00	0.00
Dry	.51	.71	.37	.90	.35
Relative Importance of Factors					
Need to Apprehend	74%	75%	74%	65%	74%
Area of Pursuit	5%	3%	5%	6%	8%
Traffic Conditions	15%	12%	16%	20%	14%
Weather Conditions	7%	10%	5%	9%	4%
* Base					

The most important factor to officers of all cities was the need to apprehend. The split between need to apprehend and risk factors was approximately 75/25 with the exception of Aiken where the split was 65/35. Weather conditions were slightly more important to Metro-

Dade and Aiken officers, and the area of pursuit was of least importance to Metro-Dade officers.

Of the risk factors, officers found traffic conditions to be the most important.

Chase Scenarios-Probability versus Logistic Regression Results

Total officers

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	43	10	
Property crime-misdemeanor	42	17	0.85
Property crime-felony	64	34	2.84
Stolen vehicle	65	37	3.45
DUI	70	43	3.03
Violent felony-no reported death	87	80	19.81
Violent felony-death	96	95	75.42
Police officer shot	96	95	222.7

The logistic regression results reveal more insight into the magnitude of the intent to chase. An officer is almost three times more likely to chase when a police officer is shot than when a violent felony with a reported death has occurred. The probabilities show the same results of 96 for both, thus masking this insight: The probability of chase rises as the severity of the crime intensifies. The regression results show that although DUI is considered a more serious crime

than a stolen vehicle, officers are less likely to chase (3.03 vs. 3.45). When the crime is not masked in a pursuit scenario, the officers report an increased likelihood of pursuit of 5% under low risk conditions and 6% under high risk conditions.

Metro-Dade officers

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	51	14	
Property crime-misdemeanor	47	17	0.79
Property crime-felony	71	34	2.45
Stolen vehicle	73	37	3.25
DUI	76	43	2.97
Violent felony-no reported death	90	80	16.66
Violent felony-death	96	95	49.49
Police officer shot	97	95	199.35

No striking differences exist between Metro-Dade officers and the total sample. Note the same increase in the probability of pursuing for a DUI over a stolen car when the crimes are isolated as opposed to the decrease that is revealed when the crimes are masked in several scenarios and revealed in the regression results. If a police officer has been shot, Metro-Dade officers are approximately four times more likely to pursue than for a violent felony with a reported death.

Aiken officers

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	73	5	
Property crime-misdemeanor	56	10	0.58
Property crime-felony	90	33	2.47
Stolen vehicle	93	48	9.36
DUI	95	63	6.11
Violent felony-no reported death	100	85	23.87
Violent felony-death	100	100	89.11
Police officer shot	100	100	417.94

Overall, Aiken reports higher probabilities of pursuit for the individual crimes than officers as a whole. Again, Aiken officers report an increasing probability of pursuit for a DUI which the regression results dispute. When conditions increase to high risk, Aiken officers report a decreasing probability of pursuit from 73% for low risk situations to 5% for high risk situations. A violent felony will elicit a chase four times as often as a DUI. Aiken officers are four and a half times more likely to pursue when a police officer is shot than when a violent felony with a

reported death has occurred.

Mesa officers

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	14	0	
Property crime-misdemeanor	16	7	0.83
Property crime-felony	42	9	2.43
Stolen vehicle	43	13	2.85
DUI	47	17	4.57
Violent felony-no reported death	86	71	47.14
Violent felony-death	100	95	268.75
Police officer shot	99	97	543.33

When a violent felony includes a reported death, Mesa officers are over five and a half times more likely to pursue as revealed in the regression results. Mesa officers are two times more likely to pursue when a police officer is shot than when a violent felony with a death has occurred. Less than half of the officers will pursue for crimes with the severity of a DUI or less. The probabilities increase sharply for a violent felony over a DUI, with an increase of 39% for low risk situations and 54% for high risk situations.

Omaha officers

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	40	8	
Property crime-misdemeanor	41	16	0.94
Property crime-felony	60	35	3.51
Stolen vehicle	60	33	3.75
DUI	68	38	2.95
Violent felony-no reported death	84	77	22.02
Violent felony-death	94	94	91.76
Police officer shot	95	95	228.20

Omaha officers show an increase in the probability of pursuit for a DUI over a stolen vehicle and a decrease in the regression results. When a death is associated with a violent felony an officer is four times as likely to pursue as when no death has been reported. Omaha officers are two and a half times more likely to pursue when an officer has been shot as opposed to a violent felony with a death.

Section IV

Police officers and supervisors were asked one open-ended question to identify their opinions about why suspects run and begin a pursuit. Next, three questions asked officers to describe fellow officers that pursue suspects and use excessive force after catching a suspect.

Why do most suspects run and begin a pursuit?

	Don't Want To Be Arrested	Committed a Crime	Think They Can Get Away	Something To Hide	Scared	Under the Influence (Drugs/Alcohol)	Warrants Issued	Smart	Oth
Total Sample	34%	30%	22%	20%	11%	---	---	---	24'
Metro- Dade	42%	41%	18%	---	---	---	---	18%	12'
Omaha	29%	23%	25%	20%	11%	13%	---	---	34'
Aiken	33%	31%	23%	28%	27%	18%	---	---	---
Mesa	36%	27%	19%	---	17%	13%	12%	---	20'
Metro- Dade <=5 years	43%	32%	22%	22%	---	---	---	---	22
Metro- Dade	42%	39%	16%	18%	---	---	---	---	---

>5 years									
Omaha <=5 years	23%	22%	18%	29%	---	22%	---	---	50%
Omaha >5 years	31%	19%	25%	32%	---	25%	---	---	14%
Mesa <=5 years	44%	22%	19%	---	16%	---	---	---	28%
Mesa >5 years	32%	25%	25%	19%	---	14%	---	---	31%
Aiken <=5 years	22%	39%	28%	22%	28%	22%	---	---	---
Aiken >5 years	50%	25%	13%	38%	25%	19%	---	---	---

Police officers and supervisors were asked for the three words they would use to describe why most suspects run and begin a pursuit. In general, 34% said it was because the individual did not want to be arrested. Slightly less (30%) said it was because they had committed a crime. Twenty-two percent said it was due to the suspect thinking they could get away with it, 20% said the person had something to hide, and 11% said it was because the suspect was scared. Other answers were given by 24% of the respondents.

In every location, the reason most often given by respondents was that the suspects ran and began a pursuit to avoid being arrested. The suspects ran because they had committed a crime was the next most popular answer from officers and supervisors in Metro-Dade, Mesa, and Aiken. In Omaha, slightly more respondents believed the action was due to the suspects thinking they could get away with it. In Aiken, over one-fourth of the respondents answered that the suspect ran because they had something to hide or were scared. Those from Aiken were also most likely to say it was due to the suspect being under the influence of drugs or alcohol.

Within Metro-Dade and Omaha, there was not much difference between answers given by officers and supervisors with more or less than five years experience. The major variation in Metro-Dade was that 7% more of the officers and supervisors with greater experience thought the suspects ran due to having committed a crime. Compared to their less experienced counterparts, 7% more of the respondents from Omaha with over five years experience would describe the suspects as thinking they could get away with it, while 8% more said the suspects would run to avoid being arrested. Within Mesa, 12% more of the younger respondents said the reason was due to the suspect not wanting to be arrested. The same group thought the suspects might have run because they were scared, while only the older respondents from this location

said it may be due to them being under the influence of drugs or alcohol. The largest variation between more and less experienced officers and supervisors was seen in Aiken. Half of the older respondents said the suspects might have run to avoid being arrested compared to 22% of younger respondents who gave the same answer. Those with greater experience were also more likely to say it was because the suspects had something to hide. On the other hand, the younger respondents were more likely to say the suspects ran because they had committed a crime or thought they could get away with it.

What three words or phrases describe the police officer most likely to engage in a pursuit?

	Aggressive	Doing Job/ Dedicated	Young	Rookie / Inexperienced	Careful / Cautious/ Conscientious	Excited	Energetic	Hot-headed	Smart
Total Sample	45%	37%	23%	15%	13%	---	---	---	---
Metro-Dade	42%	40%	23%	23%	17%	---	---	---	---
Omaha	45%	40%	19%	12%	12%	---	---	---	---
Aiken	36%	18%	31%	36%	15%	---	---	---	---
Mesa	56%	19%	31%	39%	---	16%	---	---	---
Metro-Dade ≤5 years	33%	40%	13%	20%	17%	13%	17%	---	---
Metro-Dade >5 years	48%	42%	24%	21%	19%	---	---	---	---
Omaha ≤5 years	48%	43%	---	---	12%	---	---	---	---
Omaha >5 years	45%	40%	22%	13%	12%	---	---	---	---
Mesa ≤5 years	59%	22%	22%	22%	13%	---	---	---	---
Mesa >5 years	56%	---	63%	48%	---	30%	---	---	16%
Aiken ≤5 years	55%	25%	20%	25%	---	---	---	---	---
Aiken >5 years	33%	13%	47%	27%	20%	---	27%	13%	---

Police officers and supervisors were asked for the three words they would use to describe the

police officer most likely to engage in a pursuit. Overall, 45% used the word “aggressive,” while 37% said the officer was doing his job or was dedicated. The officer in question would also be described as young (23%), a rookie or inexperienced (15%), or careful and conscientious (13%).

There was some variation in the use of these terms when the respondents were broken down by location. “Aggressive” was the most popular reply from each area, though in Aiken the officer being a rookie or inexperienced was just as likely to be mentioned. In both Metro-Dade and Omaha, 40% of those answering characterized the officer as doing his job/dedicated, but in Aiken and Mesa this response was given by slightly less than 20% of officers and supervisors. Respondents in these two locations were more likely to call the officer young or a rookie/inexperienced.

Those answering were also divided within each department according to their years of experience. In Metro-Dade, those with over five years in the department were at least 11% more likely to call the officer aggressive or young, while respondents with fewer years applied the terms “excited” and “energetic.” In Omaha there was less variation, though only more experienced officers and supervisors would call the officer young or rookie/inexperienced. In Mesa, those with more experience used the word “young” three times as often and the words “rookie/inexperienced” twice as often as did less experienced personnel. In Aiken, 22% more of the younger respondents answered that the officer was aggressive, while 27% more of the older respondents referred to him as being young.

What three words or phrases would police officers and supervisors use to describe the police officer most likely to voluntarily terminate a pursuit?

	Quality / Experienced	Careful / Cautious / Conscientious	Smart	Mature	Level- Headed	Doing job / Dedicated	Avoid Liability	Scared / Afraid	Well- trained	Super- visor
Total Sample	38%	34%	29%	---	---	---	---	---	---	---
Metro- Dade	48%	37%	23%	24%	20%	---	---	---	---	---
Omaha	28%	32%	29%	---	15%	12%	---	---	---	---
Aiken	49%	31%	35%	19%	28%	---	---	---	---	---
Mesa	58%	37%	46%	29%	13%	---	---	---	---	---
Metro- Dade <=5 years	32%	39%	26%	---	19%	---	16%	16%	13%	---
Metro- Dade >5 years	52%	37%	18%	28%	19%	---	---	---	13%	---
Omaha <=5 years	16%	41%	31%	---	18%	15%	---	16%	---	---
Omaha >5 years	33%	30%	28%	---	14%	13%	---	---	---	---
Mesa <=5 years	47%	47%	50%	25%	25%	---	---	---	---	---
Mesa >5 years	76%	28%	45%	34%	---	---	---	14%	---	---
Aiken <=5 years	31%	32%	36%	18%	23%	---	---	---	---	---
Aiken >5 years	63%	25%	25%	25%	38%	---	---	---	13%	13%

Police officers and supervisors were asked what three words they would use to describe the

police officer most likely to voluntarily terminate a pursuit. In total, 38% of the respondents said the officer was of quality or experienced, 34% said careful and conscientious, and 29% said smart.

Most respondents answered “quality/experienced” in Metro-Dade (48%), Aiken (49%), and Mesa (58%). In Omaha, the same reply was given by only 28% of those answering.

“Careful/conscientious” was mentioned by approximately one-third of the respondents from each of the four locations. Other answers given by respondents from every area also included “smart” (from a low of 23% in Metro-Dade to a high of 46% in Mesa) and “level-headed” (from a low of 13% in Mesa to a high of 28% in Aiken). The officer was described as mature by officers and supervisors from Metro-Dade, Aiken, and Mesa, while only those from Omaha mentioned the individual as doing their job and being dedicated.

Within all locations, officers and supervisors with over five years experience were between 17% and 32% more likely to call the officer “quality/experienced” than were their less experienced counterparts. On the other hand, more younger than older respondents within each location answered that the officer was either careful and conscientious or smart.

What three words would police officers and supervisors use to describe the police officer most likely to use excessive force after a pursuit?

	Aggressive	Hot-Headed	Young	Excited	Rookie / Inexperience	Mad / Angry	Inadequate Training	Stupid	Emotional	Immature	Scared / Afraid	Energetic
Total Sample	31%	20%	16%	---	---	---	---	---	---	---	---	---
Metro-Dade	36%	17%	21%	17%	15%	---	---	---	---	---	---	---
Omaha	30%	21%	13%	19%	---	16%	---	---	---	---	---	---
Aiken	19%	42%	14%	---	26%	---	14%	---	---	---	---	---
Mesa	30%	---	18%	24%	15%	15%	---	17%	---	---	---	---
Metro-Dade <=5yrs	45%	14%	17%	17%	17%	24%	---	---	---	---	---	---
Metro-Dade >5 yrs	36%	16%	24%	21%	---	---	---	---	---	---	---	---
Omaha <=5 yrs	35%	25%	---	22%	---	15%	---	---	---	---	---	---
Omaha >5 yrs	28%	22%	17%	17%	---	17%	---	---	---	---	---	---
Mesa <=5 yrs	31%	14%	14%	17%	17%	14%	---	27%	17%	14%	---	---
Mesa >5 yrs	32%	20%	28%	36%	---	---	---	---	---	---	---	---
Aiken <=5 yrs	24%	41%	24%	---	24%	---	24%	---	---	---	---	---
Aiken >5 yrs	13%	60%	---	13%	27%	---	13%	27%	---	20%	13%	13%

Police officers and supervisors were asked for the three words they would use to describe the

Supervisors

The sections below deal with the attitudes of police supervisors toward engaging in a vehicular pursuit of a suspect who will not stop. In the first section, the supervisors are questioned on their individual experiences with pursuit driving and the different actions they took. The second section presents the supervisors with a series of increasingly serious law violations and reports their approval rate of giving chase in low and high risk environments.

The third section looks at more detailed information on supervisors' attitudes on the subject of pursuit driving. The relative influences of wanting to enforce the law while minimizing the associated risks to public safety are examined through statistical analyses that reveal which specific crimes committed, chase areas, and traffic and weather conditions might alter the supervisors' attitudes of engaging in a pursuit.

Section I

In part one of this section, supervisors were asked their feelings during a pursuit, opinions of their department's policies and procedures toward pursuit, and opinions regarding general characteristics of pursuit and use of force. These responses are given here in paragraph form.

The second part centered solely on the supervisors' experiences with pursuits during the previous twelve months. These responses are given in tabular form.

Part 1

When presented with five emotions, 86% of all supervisors indicated feeling excited during a pursuit. Forty-one percent reported feeling angry and 50% feeling irritated. Ninety percent of Metro-Dade supervisors and 74% of Omaha supervisors indicated feeling stimulated while involved in a pursuit.

Supervisors are most concerned with catching the suspect during a pursuit, with an average of 97% of all supervisors expressing this concern. Teaching the suspect a lesson was of least concern with the average being 21% for all supervisors expressing that concern.

When asked their opinions concerning departmental policies, 84% of all supervisors agreed that the department they belonged to had a very restrictive pursuit policy. Only 2% agreed that their department's pursuit policy permitted total discretion. Seventy-seven percent of all supervisors agreed that they understand their department's pursuit policy, including a low of 67% of Omaha supervisors and a high of 92% of Mesa supervisors.

Thirty-eight percent of all supervisors believe they have been adequately trained in the pursuit while 82% believe they have been trained adequately in the use of force. Only 26% of all supervisors agree that during a pursuit they find themselves focusing only on apprehending the offender. Twenty-three percent believe that pursuits are worth the risks to themselves and the public.

Part 2

Supervisors were asked whether or not they had been involved in a pursuit(s) in the last twelve months and, if so, they were further questioned concerning the characteristics of the pursuit(s). The results are as reported below with a breakdown by city.

First, supervisors were asked whether or not they had been involved in a pursuit as a primary driver in the past 12 months. The following numbers indicate the percentage of affirmative responses:

All supervisors	25%
Metro-Dade	20%
Omaha	27%
Aiken	22%
Mesa	29%

Supervisors who indicated that they had been involved in a pursuit were asked how many pursuits they were involved in during the past 12 months:

	<i>0</i>	<i>1-5</i>	<i>6-10</i>	<i>>10</i>
All supervisors	----	91%	9%	----
Metro-Dade	----	80%	20%	----
Omaha	----	93%	7%	----
Aiken	n/a	n/a	n/a	n/a
Mesa	n/a	n/a	n/a	n/a

officer most likely to use excessive force after a pursuit. Generally, the term “aggressive” was used most often (31%), with “hot-headed” (20%) and “young” (16%) also being mentioned.

In Metro-Dade, Omaha, and Mesa, “aggressive” was the also the most popular answer, being given by approximately one-third of the respondents in each location. In Aiken, “hot-headed” was mentioned by 42% of the officers and supervisors, with only 19% of them using “aggressive” as a description. Respondents from at least three out of the four areas described the officer in question as being young, excited, or a rookie/inexperienced. Answers mentioned in the different locations also included “mad/angry” (Omaha and Mesa), “inadequate training” (Aiken) and “stupid” (Mesa).

Within Metro-Dade, there was relatively little variation between the responses given by police officers and supervisors with more than five years and those with five years and less experience. The latter did use the word “aggressive” 9% more, however, and mentioned two descriptions (“rookie/inexperienced” and “mad/angry”) that the former did not. Within Omaha there was also not much variation between the two groups of respondents, though again those with less experience were more likely to call the officer aggressive. In Mesa, the largest difference came in using the term “excited,” with the more experienced officers and supervisors giving this answer 19% more than those less experienced. The younger respondents were the only ones to describe the officer as a rookie and inexperienced, mad or angry, stupid, emotional, and immature. In Aiken, there were more shifts evident. The less experienced officers and supervisors were more likely to call the officer aggressive and say he had received inadequate training. Those with greater experience were more likely to call the officer hot-headed. The older group also used terms such as “energetic,” “scared/afraid,” “immature,” and “stupid.”

Next, the supervisors were asked to report how many pursuits:

** Resulted in accidents:*

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All supervisors		57%	43%	----	----
Metro-Dade		50%	50%	----	----
Omaha	64%	36%	----	----	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

**Resulted in injuries:*

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All supervisors		84%	16%	----	----
Metro-Dade		70%	30%	----	----
Omaha	93%	7%	----	----	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

**Resulted in death:*

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All supervisors		100%	----	----	----
Metro-Dade		100%	----	----	----
Omaha	100%	----	----	----	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

The number of pursuits that resulted in the supervisor feeling physically threatened by the suspect:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>
All supervisors		59%	41%	----	----
Metro-Dade		50%	50%	---	---
Omaha	57%	43%	---	---	
Aiken		n/a	n/a	n/a	n/a
Mesa		n/a	n/a	n/a	n/a

The number of pursuits that resulted in the supervisor having to use force to apprehend the suspect:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>	
All supervisors			48%	52%	----	----
Metro-Dade		50%	50%	----	----	
Omaha	50%		50%	----	----	
Aiken		n/a	n/a	n/a	n/a	
Mesa		n/a	n/a	n/a	n/a	

During the past 12 months, supervisors reported being involved in the following number of pursuits and not reporting it to communication:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>	
All supervisors			60%	40%	----	----
Metro-Dade		40%	60%	----	----	
Omaha	67%		23%	----	----	
Aiken		n/a	n/a	n/a	n/a	
Mesa		n/a	n/a	n/a	n/a	

The number of pursuits supervisors terminated voluntarily during the past 12 months because they felt it was too risky:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>	
All supervisors			38%	58%	4%	----
Metro-Dade		27%	73%	---	---	
Omaha	36%		57%	7%	---	
Aiken		n/a	n/a	n/a	n/a	
Mesa		n/a	n/a	n/a	n/a	

In the following 12 months supervisors terminated the following number of pursuits because they were too risky:

		<u>0</u>	<u>1-5</u>	<u>6-10</u>	<u>>10</u>	
All supervisors			21%	36%	32%	11%
Metro-Dade		22%	45%	33%	----	
Omaha	19%		37%	31%	13%	
Aiken		n/a	n/a	n/a	n/a	
Mesa		n/a	n/a	n/a	n/a	

The number of pursuits in the last 12 months that could have resulted in the use of force but did not:

		<i>0</i>	<i>1-5</i>	<i>6-10</i>	<i>>10</i>	
All supervisors			54%	42%	4%	----
Metro-Dade		33%	56%	11%	----	
Omaha	57%		43%	----	----	
Aiken		n/a	n/a	n/a	n/a	
Mesa		n/a	n/a	n/a	n/a	

Section II

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **traffic violation**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	31%	7%	24%
<i>Departments:</i>			
Metro-Dade	38%	10%	28%
Omaha	28%	7%	21%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

Of responding police supervisors, 31% said they would approve of engaging in a pursuit under low risk conditions for incidents involving a traffic violation. Only 7% answered they would give approval for such a pursuit under high risk conditions, resulting in a 24% difference.

The only significant variation from the average came from the Metro-Dade police department. Under low risk conditions, 38% of answering supervisors said they would approve of a chase, signifying a shift of 7% from the average.

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **property crime - misdemeanor**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	38%	13%	25%
<i>Departments:</i>			
Metro-Dade	42%	16%	26%
Omaha	37%	15%	22%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

Overall, 38% of responding police supervisors said that they would approve of a pursuit under low risk conditions for an incident involving a property crime - misdemeanor. Under high risk conditions, 13% of the supervisors said they would do the same. This yielded a difference of 25%.

The approval rates from Omaha supervisors were closer to the average in both high and low risk categories than were the rates given by Metro-Dade supervisors. However, there was not much difference in any instance. The largest deviation from the average was that of 4%, with 42% of Metro-Dade supervisors giving approval of a chase under low risk conditions.

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **property crime - felony**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	59%	27%	32%
<i>Departments:</i>			
Metro-Dade	63%	28%	35%
Omaha	58%	29%	29%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

A total of 59% of police supervisors said that they would approve of a pursuit under low risk conditions for an incident involving a property crime - felony. Under high risk conditions, 27% of the supervisors would also approve of a chase. This resulted in a difference of 32% between the risk conditions.

In each department, any variation from these averages was similar to the scenario covering property crime - misdemeanors. In this instance, approval rates for pursuit under high risk conditions from Metro-Dade and Omaha supervisors differed from the average by, respectively, only 1% and 2%. In the low risk category, Metro-Dade supervisors provided the greatest variation in chase approval ratings, though the difference was only 4%.

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **stolen vehicle**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	59%	23%	36%
<i>Departments:</i>			
Metro-Dade	74%	26%	48%
Omaha	53%	23%	30%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

On the average, 59% of responding police supervisors said that they would approve of a pursuit under low risk conditions for an incident involving a stolen vehicle. Under high risk conditions, 23% of the supervisors replied that they would make that same decision. This yielded a difference of 36%.

Under high risk conditions, supervisors from both Metro-Dade and Omaha gave approval ratings which were close to the average. Under low risk conditions, there was some significant

variation. In Omaha, 53% of the supervisors responded that they would approve of pursuit, while in Metro-Dade, 74% of the supervisors would answer likewise. The departments' decrease in approval ratings from low to high risk conditions also fluctuated from the average of 36%. In Metro-Dade the difference was 48%, and in Omaha it was 30%.

Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a DUI:

Group	Low Risk	High Risk	Difference
Total Supervisors	71%	38%	33%
<i>Departments:</i>			
Metro-Dade	77%	44%	33%
Omaha	67%	33%	34%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

Generally, 71% of all the responding police supervisors answered that they would approve of engaging in a pursuit under low risk conditions for incidents involving a DUI. When compared to the 38% who would do the same under high risk conditions, thus resulting in a difference of 33%.

Though the differences between low and high risk approval of pursuit in each department were similar to the average, the percentages in each risk category showed some variation. In Metro-Dade, supervisors gave approval 6% more than the average under both high and low risk conditions. In contrast, Omaha supervisors gave 4% less approval under low risk conditions and 5% less under high risk conditions.

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **violent felony - no death**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	91%	77%	14%
<i>Departments:</i>			
Metro-Dade	94%	83%	11%
Omaha	90%	79%	11%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

Of all responding police supervisors, 91% said that they would approve of engaging in a pursuit under low risk conditions for incidents involving a violent felony - no death. Under high risk conditions, the approval rate decreased to 77%, resulting in a difference of 14%.

In the category of low risk conditions, approval for pursuit from Metro-Dade and Omaha supervisors were within 3% of the average. Under high risk conditions, supervisor approval from Omaha was again close to the average, but approval from Metro-Dade supervisors was slightly greater at 6% higher than the average.

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **violent felony - with death**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	98%	94%	4%
<i>Departments:</i>			
Metro-Dade	98%	94%	4%
Omaha	99%	95%	4%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

Of all responding police supervisors, 98% said they would approve of a pursuit taking place under low risk conditions for incidents involving a violent felony - with death. In comparison,

94% said they would also give approval under high risk conditions. This resulted in a difference of 4%.

The approval rate for pursuit given by Metro-Dade supervisors was exactly the same as that of the average for both types of risk conditions. Omaha supervisors' approval ratings were 1% higher for both low and high risk conditions.

*Percentages of police supervisors saying they would approve of a pursuit under low and high risk conditions for incidents involving a **violent felony - police officer shot**:*

Group	Low Risk	High Risk	Difference
Total Supervisors	97%	96%	1%
<i>Departments:</i>			
Metro-Dade	98%	98%	---
Omaha	97%	95%	2%
Aiken	n/a	n/a	---
Mesa	n/a	n/a	---

Overall, 97% of police supervisors questioned said they would approve of engaging in a pursuit under low risk conditions for incidents involving a violent felony - police officer shot. Under high risk conditions, 96% of the supervisors said they would do the same, resulting in a difference of 1%.

Neither group of supervisors gave approval rates that differed much from the averages; 98% of Metro-Dade supervisors would approve of a pursuit under both low and high risk conditions, while Omaha approval rates matched the average (97%) in low risk conditions and dropped 1% (95%) in high risk conditions.

Section III

This section is similar to the ones designed for the recruits and officers, to determine the relative effects of the need to immediately apprehend the suspect (the known offense) and the risk factors (the area in which the chase occurred, the traffic and weather conditions).

The data presented below represent the parameter estimates and tests of statistical fit for the dummy variables for the combined sample of supervisors. Supervisors' responses to these scenarios were similar to those of the officers. All levels of law enforcement personnel concur that the type of offense is the most important variable in the balance of whether or not to pursue.

Parameter Estimates for Pooled Logistic Regression-All Supervisors

Level	Coefficient	Exp(B)	Statistic	df	P-value
<i>Need to Apprehend</i>					
Traffic violation*	0.00				
Misdemeanor	-.07	.94	.17	1	.68
Felony-property	1.11	3.03	63.46	1	.00
Stolen car	1.15	3.15	64.08	1	.00
DUI	1.1	3.00	59.5	1	.00
Violent felony- no death	3.38	29.51	459.36	1	.00
Violent felony- with death	4.91	136.22	460.44	1	.00
Officer shot	5.69	296.52	404.39	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.08	.92	.52	1	.46
Inner City	-.33	.72	8.05	1	.004
Residential	-.39	.68	13.85	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.10	2.99	181.88	1	.00
Weather:					
Wet*	0.00				
Dry	.51	1.66	40.06	1	.00

*Base

Metro-Dade supervisors' responses showed a significant difference for all violations except misdemeanors and all risks to the public except the chase conditions. Metro-Dade supervisors were more likely to chase for all violations over a traffic violation. Additionally, the Metro-Dade supervisors were 3.41 times more likely to chase when traffic was non-congested as opposed to congested and 2.24 times more likely to pursue when the weather was dry as opposed to wet.

Parameter Estimates for Logistic Regression-Metro-Dade Supervisors

Level	Coefficient	Exp(B)	Statistic	df	P-value
<i>Need to Apprehend</i>					
Traffic violation*	0.00				
Misdemeanor	.07	1.07	.06	1	.81
Felony-property	1.14	3.12	21.98	1	.00
Stolen car	1.26	3.51	24.48	1	.00
DUI	1.35	3.84	28.36	1	.00
Violent felony- no death	3.62	37.4	150.29	1	.00
Violent felony- with death	5.52	250.14	103.11	1	.00
Officer shot	5.96	386.38	115.00	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.07	.93	.13	1	.72
Inner City	-.28	.75	1.84	1	.17
Residential	-.19	.83	1.00	1	.32
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.23	3.41	68.18	1	.00
Weather:					
Wet*	0.00				
Dry	.81	2.24	30.31	1	.00

*Base

Mesa supervisors showed significant differences for the more serious violations of a DUI, a violent felony with and without a death, and the shooting of an officer. As the intensity of the crime increases, Mesa supervisors were more likely to approve of a chase. When considering risks to the public, specifically the chase area, Mesa supervisors were less likely to chase in a residential area over the base of freeway (odds equal .29:1). The only other significant difference was for non-congested conditions over congested conditions. Mesa supervisors were 18.93 times more likely to pursue when the traffic was non-congested.

Parameter Estimates for Logistic Regression-Mesa Supervisors

Level	Coefficient	Exp(B)	Statistic	df	P-value
<i>Need to Apprehend</i>					
Traffic violation*	0.00				
Misdemeanor	-.41	.67	.17	1	.68
Felony-property	.28	1.32	.09	1	.77
Stolen car	.64	1.9	.36	1	.55
DUI	2.56	12.97	9.87	1	.00
Violent felony- no death	5.44	231.16	35.76	1	.00
Violent felony- with death	7.08	1185.75	31.68	1	.00
Officer shot	7.07	1179.16	42.75	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	.50	1.65	.52	1	.47
Inner City	.26	1.29	.13	1	.72
Residential	-1.23	.29	6.1	1	.01
Traffic Conditions:					
Congested*	0.00				
Non-congested	2.94	18.93	19.35	1	.00
Weather:					
Wet*	0.00				
Dry	.03	1.03	.003	1	.96

*Base

Group Parameter Estimates and Factor Importance

	All Supervisors	Metro-Dade	Omaha	Aiken	Mesa
Need to Apprehend:					
Traffic violation*	0	0	0		
Misdemeanor	-.17	-.23	-.06	n/a	n/a
Felony-property	1.04	.90	1.26	n/a	n/a
Stolen car	1.24	1.17	1.32	n/a	n/a
DUI	1.1	1.09	1.08	n/a	n/a
Violent felony-no death	2.99	2.81	3.09	n/a	n/a
Violent felony-with death	4.32	3.90	4.52	n/a	n/a
Officer shot	5.4	5.30	5.43	n/a	n/a
Risks to the Public:					
<i>Chase Area:</i>					
Freeway*	0	0	0		
Commercial	-.06	.01	-.13	n/a	n/a
Inner City	-.20	-.18	-.21	n/a	n/a

Omaha supervisors' responses showed a significant difference in all situations over the base with the exception of misdemeanor violations and commercial area chases. The supervisors are more likely to chase a suspect for all violations over traffic violations with the exception of a misdemeanor, which did not show a significant difference.

Parameter Estimates for Logistic Regression-Omaha Supervisors

Level	Coefficient	Exp(B)	Statistic	df	P-value
<i>Need to Apprehend</i>					
Traffic violation*	0.00				
Misdemeanor	-.14	.87	.43	1	.51
Felony-property	1.14	3.14	36.96	1	.00
Stolen car	1.15	3.17	36.53	1	.00
DUI	.87	2.38	20.15	1	.00
Violent felony- no death	3.32	27.54	252.36	1	.00
Violent felony- with death	4.84	126.5	271.78	1	.00
Officer shot	5.78	322.54	214.99	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.06	.94	.18	1	.67
Inner City	-.33	.72	4.74	1	.03
Residential	-.43	.65	9.58	1	.00
Traffic Conditions:					
Congested*	0.00				
Non-congested	.90	2.47	69.59	1	.00
Weather:					
Wet*	0.00				
Dry	.40	1.49	14.29	1	.00

*Base

Supervisors from Aiken were more likely to pursue for all violations over the base of traffic violation, with the exception of a misdemeanor where the difference was not significant. There were no significant differences between the chase areas. Aiken supervisors were 6.51 times more likely to pursue when the traffic was not congested over the base (congested) and 1.35 times more likely to pursue when the weather was dry over the base (wet).

Parameter Estimates for Logistic Regression-Aiken Supervisors

Level	Coefficient	Exp(B)	Statistic	df	P-value
<i>Need to Apprehend</i>					
Traffic violation*	0.00				
Misdemeanor	-.41	.67	.42	1	.52
Felony-property	1.36	3.89	4.95	1	.03
Stolen car	1.25	3.48	4.02	1	.05
DUI	1.44	4.2	5.19	1	.02
Violent felony- no death	2.58	13.16	12.8	1	.00
Violent felony- with death	2.67	14.43	13.21	1	.00
Officer shot	3.67	39.11	16.36	1	.00
<i>Risks to the Public</i>					
Chase Area:					
Freeway*	0.00				
Commercial	-.15	.86	.09	1	.77
Inner City	-.3	.74	.35	1	.56
Residential	-.6	.55	1.58	1	.21
Traffic Conditions:					
Congested*	0.00				
Non-congested	1.87	6.51	24.59	1	.00
Weather:					
Wet*	0.00				
Dry	.3	1.35	.62	1	.00

*Base

Residential	-34	-.23	-.37	n/a	n/a
<i>Traffic Conditions:</i>					
Congested*	0	0	0		
Non-congested	1.09	.92	1.20	n/a	n/a
<i>Weather:</i>					
Wet*	0	0	0		
Dry	.51	.71	.37	n/a	n/a

Relative Importance of Factors					
Need to Apprehend	74%	72%	77%	n/a	n/a
Area of Pursuit	5%	3%	6%	n/a	n/a
Traffic Conditions	14%	15%	12%	n/a	n/a
Weather Conditions	7%	10%	5%	n/a	n/a
*Base					

Chase Scenarios-Probability versus Logistic Regression Results

Total supervisors

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	31	7	
Property crime-misdemeanor	38	13	0.94
Property crime-felony	59	27	3.03
Stolen vehicle	59	23	3.15
DUI	71	38	3.00
Violent felony-no reported death	91	77	29.51
Violent felony-death	98	94	136.22
Police officer shot	97	98	296.52

Supervisors are over 4 1/2 times more likely to pursue for a violent felony when a death is involved. Similar to officers, a DUI draws a higher probability of pursuit than a stolen vehicle but the logistic regression results contradict the increase. Supervisors are over 2 times more likely to pursue when a police officer is shot than in cases of a violent felony with a reported death.

Metro-Dade supervisors

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	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	38	10	
Property crime-misdemeanor	42	16	1.07
Property crime-felony	63	28	3.12
Stolen vehicle	74	26	3.51
DUI	77	44	3.84
Violent felony-no reported death	94	83	37.4
Violent felony-death	98	94	250.14
Police officer shot	98	98	386.38

Metro-Dade supervisors report an increased probability of pursuit for a DUI over a stolen car, which is supported by the regression results. The regression results show that Metro-Dade supervisors are over 9 1/2 times more likely to pursue for a violent felony with no reported death than for a DUI. Additionally, a reported death increases the probability of pursuit for a violent felony by over 6 1/2 times.

Omaha supervisors

	<i>Low Risk</i>	<i>High Risk</i>	
	Probability	Probability	Logistic
Traffic violation*	28	7	
Property crime-misdemeanor	37	15	0.87
Property crime-felony	58	29	3.14
Stolen vehicle	53	23	3.17
DUI	67	33	2.38
Violent felony-no reported death	90	79	27.54
Violent felony-death	99	95	126.5
Police officer shot	97	95	322.54

Omaha supervisors are over 11 1/2 times more likely to chase a suspect accused of a violent felony if a death is involved. Again, the probability of pursuit increases for a DUI over a stolen vehicle, but is not supported by the decrease in the logistic results.

Public Opinion

The sections below deal with the attitudes of citizens in Aiken County and Omaha toward police behavior, principally officers engaging in pursuit driving to catch suspects. In the first section, the people are asked general questions about the police and their use of force in handling various situations. The answers are grouped by the age, gender, and socioeconomic neighborhood of the respondents.

In the second section, the citizens are questioned specifically on their opinions towards the police conducting pursuits for increasingly serious law violations, first under low risk conditions then under high risk conditions. This section concludes with a few questions which cover other areas of public opinion on the topic, such as the type of punishment the fleeing suspects should receive and the reasons why they might have initiated the chase in the first place.

Section I

On a scale including very high, high, average, low and very low, how would you rate the honesty and ethical standards of law enforcement officers? (Responses of either “very high” or “high” were grouped as “high”.)

Responses of “high” by Age Group

		<u>Aiken County Omaha</u>	
≤ 30		46%	78%
31 - 40	52%	76%	
41 - 50	57%	80%	
> 50		58%	71%
Total (Avg)		55%	74%

Responses of “high” by Gender

		<u>Aiken County Omaha</u>	
Male		67%	71%
Female	47%	76%	
Total (Avg)		55%	74%

Responses of “high” by Socioeconomic Neighborhood

		<u>Aiken County Omaha</u>	
Upper Class		59%	83%
Middle Class		58%	82%
Lower Class		49%	66%
Total (Avg)		55%	74%

When asked to rate the honesty and ethical standards of law enforcement officers, 55% of Aiken County residents and 74% of Omaha residents answered with a rating of “high.” There were some fluctuations apparent when the respondents were

broken down into groups according to age, gender and socioeconomic neighborhood. In both Aiken County and Omaha, there was a noticeable drop in ratings of “high” when moving from upper and middle to lower class neighborhood residents. Females in Aiken County answered “high” 20% less than their male counterparts. As the age group of residents in Aiken County increased, their ratings of “high” also increased.

In some places there have been charges of police brutality. Do you think there is any police brutality in Aiken County/Omaha?

Responses of “yes” by Age Group

		Aiken	
		County	Omaha
≤ 30		19%	40%
31 - 40	43%		61%
41 - 50	25%		53%
> 50		34%	78%
Total (Avg)		29%	67%

Responses of “yes” by Gender

		Aiken	
		County	Omaha
Male		25%	70%
Female	33%		65%
Total (Avg)		29%	67%

Responses of “yes” by Socioeconomic Neighborhood

Neighborhood	Aiken	
	County	Omaha
Upper Class	30%	59%
Middle Class	27%	51%
Lower Class	32%	55%
Total (Avg)	29%	67%

When asked whether or not they thought there was any presence of police brutality in their respective area, 29% of Aiken County residents answered “yes” compared to 67% of Omaha residents. Differences were seen when the respondents were broken down by age, gender and socioeconomic neighborhood. In Aiken County, for example, those age 31 to 40 answered “yes” 24% more than those age 30 and under, but the percentage dropped back down for those age 41 to 50. In Omaha, those respondents age 31 to 40 answered “yes” 21% more than those age 30 and under, then the percentage dropped 8% for those age 41 to 50 before increasing again to a new high for those over age 50.

Do you know anyone who has been physically mistreated or abused by police?

Responses of “yes” by Age Group

		Aiken	
		County	Omaha
≤ 30		4%	4%
31 - 40	13%		2%
41 - 50	4%		9%
> 50		9%	11%
Total (Avg)		8%	9%

Responses of “yes” by Gender

	<u>Aiken County Omaha</u>	
Male	6%	13%
Female	9%	6%
Total (Avg)	8%	9%

Responses of “yes” by Socioeconomic Neighborhood

	<u>Aiken County Omaha</u>	
Upper Class	6%	3%
Middle Class	6%	6%
Lower Class	13%	11%
Total (Avg)	8%	9%

When asked if they knew someone who had been physically abused or mistreated by the police, the overall responses from Aiken County and Omaha were very similar; only 8% of the former and 9% of the latter answered “yes”. In either geographic area there was a marked increase in respondents from lower class neighborhoods answering “yes”. In addition, there were large contrasts between the responses from different age groups. In Aiken County, the percentage of residents age 31 to 40 answering “yes” was more than three times greater than that of residents either under age 30 or age 41 to 50. In Omaha, the percentage of residents above age 50 answering “yes” was over four times more than that of residents age 31 to 40. It was in this grouping of respondents age 31 to 40 in which the greatest percentage of Aiken County respondents (13%) and lowest percentage of Omaha respondents (2%) said they knew of someone being physically mistreated or abused by the police.

Would you approve of a law enforcement officer striking a citizen who was attacking the policeman with his fists?

Responses of “yes” by Age Group

		Aiken	
		<u>County</u>	<u>Omaha</u>
≤ 30		81 %	100 %
31 - 40	87 %		95 %
41 - 50	85 %		95 %
> 50		85 %	96 %
Total (Avg)		82 %	95 %

Responses of “yes” by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		87 %	96 %
Female	81 %		94 %
Total (Avg)		82 %	95 %

Responses of “yes” by Socioeconomic Neighborhood

		Aiken	
		<u>County</u>	<u>Omaha</u>
Upper Class		91 %	93 %
Middle Class		81 %	97 %
Lower Class		87 %	97 %
Total (Avg)		82 %	95 %

When asked if they would approve of a law enforcement officer striking a citizen who was attacking the policeman with his fists, 82% of Aiken County respondents and 95% of Omaha respondents answered “yes”. Within each geographic

area, the approval rate was fairly consistent among all age, gender and socioeconomic neighborhood groupings. In Aiken County, respondents answering “yes” ranged from between 81 % and 87% in all categories, except for a high approval rating of 91% coming from the residents of upper class neighborhoods. In Omaha, respondents answering “yes” ranged from 93 % to 100% in all categories, with those residents age 30 and under giving the highest possible approval rating. When comparing the corresponding groups from Omaha and Aiken County, the differences between the approval ratings went from a low of 2 % from residents of upper class neighborhoods to a high of 19% from those age 30 and under; in each of these instances, as in every grouping listed, Omaha had the higher approval rating.

Would you approve of a law enforcement officer striking a citizen who was attempting to escape from custody?

Responses of “yes” by Age Group

		Aiken	
		<u>County</u>	<u>Omaha</u>
≤ 30		75 %	89 %
31 - 40	73 %		90 %
41 - 50	81 %		87 %
> 50		75 %	84 %
Total (Avg)		74 %	84 %

Responses of “yes” by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		80 %	85 %
Female	73 %		86 %

Total (Avg)	74%	84%
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Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	<u>County</u>	<u>Omaha</u>
Upper Class	75%	90%
Middle Class	78%	90%
Lower Class	73%	82%
Total (Avg)	74%	84%

When asked if they would approve of a law enforcement officer striking a citizen who was attempting to escape from custody, 74% of Aiken County respondents answered “yes” compared to 84% of Omaha respondents. Once again, within each geographic area there were no major fluctuations in the approval ratings from the various categories (age, gender, socioeconomic neighborhood) of respondents. The most noticeable shift in Aiken County was that the male residents gave a 7% higher approval rating than the female residents. In Omaha, the residents of lower class neighborhoods gave an 8% lower approval rating than either the residents of upper or middle class neighborhoods. In addition, there were several fluctuations between groupings from Aiken County and Omaha. The largest was in the age breakdown of residents aged 31 to 40, with those from Omaha giving a 17% higher approval rating than those from Aiken County.

Would you approve of a law enforcement officer striking a citizen who had said vulgar and obscene things to the policeman?

Responses of “yes” by Age Group

		Aiken	
		County	Omaha
≤ 30		15%	30%
31 - 40	17%		17%
41 - 50	20%		13%
> 50		8%	3%
Total (Avg)		13%	9%

Responses of “yes” by Gender

		Aiken	
		County	Omaha
Male		15%	11%
Female	12%		9%
Total (Avg)		13%	9%

Responses of “yes” by Socioeconomic Neighborhood

		Aiken	
		County	Omaha
Upper Class		3%	7%
Middle Class		12%	13%
Lower Class		19%	6%
Total (Avg)		13%	9%

When questioned if they would approve of a law enforcement officer striking a citizen who said vulgar and obscene things to the policeman, 13% of Aiken County respondents and 9% of Omaha respondents answered “yes”. Grouping the respondents by age and socioeconomic neighborhood revealed significant differences in approval ratings. In Aiken County age categories, approval went from a high of 20% (from

residents age 41 to 50) to a low of 8% (from those over 50); in Omaha, the difference was more pronounced as approval went from a high of 30% (from residents age 30 and under) to a low of 3% (from those over age 50). In comparing the two areas, the major contrast came from respondents age 30 and under, with those from Omaha giving twice the rate of approval as those from Aiken County. In Aiken County neighborhood groupings, approval ratings increased from 3% from residents in upper class sections to 19% from those in lower class sections. Lower class neighborhood respondents in Omaha, on the other hand, reversed a similar trend there by giving only a 6% approval rating, down from the 13% rate given by middle class respondents.

Would you approve of a law enforcement officer striking a citizen who was being questioned in a murder case?

Responses of "yes" by Age Group

		Aiken <u>County</u> <u>Omaha</u>	
≤ 30		9%	11%
31 - 40	18%		2%
41 - 50	8%		4%
> 50		5%	1%
Total (Avg)		8%	3%

Responses of "yes" by Gender

		Aiken <u>County</u> <u>Omaha</u>	
Male		11%	2%
Female	6%		4%
Total (Avg)		8%	3%

Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	<u>County</u>	<u>Omaha</u>
Upper Class	6%	3%
Middle Class	8%	3%
Lower Class	7%	3%
Total (Avg)	8%	3%

When asked if they would approve of a law enforcement officer striking a citizen who was being questioned in a murder case, 8% of Aiken County respondents gave approval compared to only 3% of Omaha respondents. The most visible fluctuations both within each area and between a comparison of the two were seen when the respondents were broken down into age and gender categories. Within Aiken County, the approval rating doubled from 9% to 18% when moving from residents age 30 and under to those between ages 31 and 40. Following this, the percentage fell back to 5% for those over age 50. In Omaha, the highest approval rate (11%) came from residents under age 30; in subsequent age groups the ratings experienced a relatively large decrease, with only 1% of those residents over age 50 giving approval. Between the geographic areas, the primary difference in approval came from those respondents between 31 and 40 years old; those from Aiken County gave an 18% rate of approval while those from Omaha gave a 2% rate of approval. Also significant was the contrast of male respondents, with 11% of Aiken County residents answering “yes” compared to only 2% of Omaha residents.

Section II

PUBLIC OPINION TOWARD PURSUIT DRIVING

1. Low Risk Conditions.

Percent of respondents approving pursuit for specified offense:

	Aiken		
	County	Omaha	Difference
Traffic Violation	68%	47%	21%
Property Crime - Misdemeanor	66%	50%	16%
Property Crime - Felony	84%	83%	1%
(other than stolen vehicle)			
Stolen Vehicle	83%	84%	1 %
DUI	88%	93%	5%
Violent Felony - No Reported Death..	91%	97%	6%
Violent Felony - Reported Death	99%	100%	1%
Police Officer Shot	98%	99%	1%

Under low-risk conditions involving traffic violations, approval for a police pursuit was given by 47% of the respondents from Omaha and 68% of the respondents from Aiken County.

Property crime-misdemeanors pursuits were approved of by only 50% of respondents from Omaha and 66% of those from Aiken. In property crime-felony pursuits (other than those involving stolen vehicles), approval for a pursuit was given by 83% of respondents from Omaha and 84% of those from Aiken county. In stolen vehicle pursuits, 84% of Omaha respondents and 83% from Aiken approved. In Omaha, 93% of respondents approved of DUI pursuits, with approval coming from 88% of those in Aiken county. In violent felony-no reported death pursuits, 97% of those from Omaha and 91% of those from Aiken county approved. All of the respondents from Omaha and 99% of those from Aiken county approved of violent felony-reported death pursuits. Ninety-nine percent of respondents from Omaha and

98% from Aiken county approved of a pursuit when a police officer was shot.

Several major differences between respondents from Omaha and Aiken county became evident upon further analysis. In traffic violation pursuits, Aiken county respondents gave a 21% higher approval than Omaha respondents for police pursuits in low risk situations. Property crime-misdemeanor pursuits were approved of by 16% more respondents from Aiken County than Omaha. Respondents from Omaha gave a 5% higher approval of DUI pursuits than Aiken county. Omaha respondents gave a 6% higher approval rating than Aiken county respondents for violent felony-no reported death pursuits.

*Would you approve of a police pursuit under low risk conditions for an incident involving a **traffic violation**?*

Responses of "yes" by Age Group

		Aiken	
		County	Omaha
≤ 30		71 %	59 %
31 - 40	48 %		51 %
41 - 50	77 %		55 %
> 50		68 %	41 %
Total (Avg)		68 %	47 %

Responses of "yes" by Gender

		Aiken	
		County	Omaha
Male		63 %	49 %
Female	72 %		46 %
Total (Avg)		68 %	47 %

Responses of “yes” by Socioeconomic Neighborhood

	Aiken County	Omaha
Upper Class	42 %	52 %
Middle Class	72 %	46 %
Lower Class	72 %	49 %
Total (Avg)	68 %	47 %

Approval of a police pursuit under low risk conditions for traffic violations was given by 68% of Aiken County residents and 47% of Omaha residents. Separating the respondents into categories of age and socioeconomic neighborhood revealed some major differences. Within Aiken County, residents age 31 to 40 had an approval rate of 48% while the approval rate of the other age groups ranged between 68% and 77%. In Omaha, residents over age 50 had an approval rate of 41% while the approval rate of the other age groups ranged from 51% to 59%. Upper class neighborhood respondents from Aiken County gave approval 30% less than either middle class or lower class neighborhood respondents from the same area. In only two instances did Omaha residents give a greater approval rating than Aiken County residents: in upper class neighborhoods, 52% of Omaha respondents gave approval compared to 42% of Aiken County respondents, and 51% of Omaha residents age 31 to 40 gave approval compared to 48% of Aiken County respondents.

Would you approve of a police pursuit under low risk conditions for an incident involving a property crime - misdemeanor?

Responses of “yes” by Age Group

		Aiken County	Omaha
≤ 30		69%	63%
31 - 40	52%		49%
41 - 50	70%		49%
> 50		69%	49%
Total (Avg)		66%	50%

Responses of “yes” by Gender

		Aiken County	Omaha
Male		68%	51%
Female	67%		50%
Total (Avg)		66%	50%

Responses of “yes” by Socioeconomic Neighborhood

		Aiken County	Omaha
Upper Class		59%	48%
Middle Class		70%	52%
Lower Class		67%	50%
Total (Avg)		66%	50%

Approval of a police pursuit under low risk conditions for incidents involving a property crime - misdemeanor was given by 66% of Aiken County respondents and 50% of Omaha respondents. In this scenario, Aiken County residents gave higher approval ratings than Omaha residents in each grouping breakdown by age, gender and socioeconomic neighborhood; in several instances, the former gave approval ratings of 17% or 18% higher

than the latter. The most significant comparison was in the 41 to 50 age group of residents, with those from Aiken County responding with a 70% approval rating in contrast to a 49% approval rating given by those from Omaha. Within Aiken County, the greatest shift was an 18% rise in approval rating from respondents age 31 to 40 to those age 41 to 50. Within Omaha, the greatest shift was the drop in the approval rating of 63% from those age 30 and under to 49% from each of the other three age groupings (31 to 40, 41 to 50, and age 50 and over).

*Would you approve of a police pursuit under low risk conditions for an incident involving a **property crime - felony**?*

Responses of "yes" by Age Group

		Aiken	
		County	Omaha
≤ 30		85%	89%
31 - 40	74%		83%
41 - 50	88%		84%
> 50		82%	82%
Total (Avg)		84%	83%

Responses of "yes" by Gender

		Aiken	
		County	Omaha
Male		86%	85%
Female	82%		82%
Total (Avg)		84%	83%

Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	County	Omaha
Upper Class	77%	90%
Middle Class	84%	85%
Lower Class	86%	81%
Total (Avg)	84%	83%

Approval of a police pursuit under low risk conditions for incidents involving a property crime - felony was given by 84% of Aiken County respondents compared to 83% of Omaha respondents. The overall approval ratings from Aiken County and Omaha were nearly identical, and there was only one comparison of groups between the two areas with an approval rate difference of over 10%: Omaha upper class neighborhood residents gave an approval rating of 90% while those from Aiken County gave a 77% approval rating. There were relatively few fluctuations elsewhere as well, with the majority of every age, gender and socioeconomic neighborhood group giving approval ratings of between 81% and 90%. The only two exceptions were from Aiken County respondents; residents age 31 to 40 gave a 74% approval rating and upper class neighborhood residents gave a 77% approval rating.

Would you approve of a police pursuit under low risk conditions for an incident involving a stolen vehicle?

Responses of “yes” by Age Group

		Aiken	
		County	Omaha
≤ 30		79%	93%
31 - 40	82%		81%
41 - 50	92%		89%
> 50		81%	82%
Total (Avg)		83%	84%

Responses of “yes” by Gender

		Aiken	
		County	Omaha
Male		81%	84%
Female	86%		84%
Total (Avg)		83%	84%

Responses of “yes” by Socioeconomic Neighborhood

		Aiken	
		County	Omaha
Upper Class		71%	86%
Middle Class		84%	85%
Lower Class		88%	83%
Total (Avg)		83%	84%

Approval of a police pursuit under low risk conditions for incidents involving a stolen vehicle was given by 83% of Aiken County respondents and 84% of Omaha respondents.

Though the overall ratings of the two areas were very close, there was one significant fluctuation between the two in each of the breakdowns of respondents by age and by socioeconomic neighborhood. For residents age 30 and under, those from Omaha gave a 14%

higher approval rating than those from Aiken County. For residents from upper class neighborhoods, those from Omaha gave a 15% higher approval rating than those from Aiken County. Groupings within Aiken County provided some additional shifts: approval ratings increased when going from upper to middle to lower class neighborhood respondents; as the age group of residents increased so did the ratings of approval (13% overall) until dropping back down 11% for those over age 50.

*Would you approve of a police pursuit under low risk conditions for an incident involving a **DUI**?*

Responses of “yes” by Age Group

		Aiken County	Omaha
≤ 30		87%	93%
31 - 40	86%		93%
41 - 50	92%		96%
> 50		89%	93%
Total (Avg)		88%	93%

Responses of “yes” by Gender

		Aiken County	Omaha
Male		87%	94%
Female	91%		93%
Total (Avg)		88%	93%

Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	<u>County</u>	<u>Omaha</u>
Upper Class	88%	90%
Middle Class	87%	93%
Lower Class	93%	97%
Total (Avg)	88%	93%

Approval of a police pursuit under low risk conditions for incidents involving a DUI was given by 88% of Aiken County respondents and 93% of Omaha respondents. When those residents were grouped by age, gender and socioeconomic neighborhood, not much fluctuation was seen between approval ratings within each geographic area. For instance, in Aiken County the largest change within a breakdown of respondents was the 6% difference between approval rates given by middle class neighborhood (87%) and lower class neighborhood residents (93%). The same difference was seen between respondents age 31 to 40 (86%) and 41 to 50 (92%). In Omaha, the largest change within a breakdown of respondents was the 7% difference between upper class (90%) and lower class neighborhood residents (97%).

Would you approve of a police pursuit under low risk conditions for an incident involving a violent felony - no reported death?

Responses of “yes” by Age Group

	Aiken	
	<u>County</u>	<u>Omaha</u>
≤ 30	85%	100%
31 - 40	87%	93%
41 - 50	96%	98%

> 50	94 %	99 %
Total (Avg)	91 %	97 %

Responses of "yes" by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		91 %	98 %
Female	92 %		97 %
Total (Avg)		91 %	97 %

Responses of "yes" by Socioeconomic Neighborhood

		Aiken	
		<u>County</u>	<u>Omaha</u>
Upper Class		88 %	100 %
Middle Class		90 %	98 %
Lower Class		96 %	97 %
Total (Avg)		91 %	97 %

Approval of a police pursuit under low risk conditions for incidents involving a violent felony - no reported death was given by 91% of Aiken County respondents compared to 97% of Omaha respondents. Approval ratings by Omaha residents were higher than those of Aiken County residents in every age, gender and socioeconomic category. The largest differences between the areas were in the groupings in which the Omaha respondents gave 100% approval ratings; Aiken county residents from upper class neighborhoods gave a 12% lower approval rating and those age 30 and under gave a 15% lower approval rating than their counterparts in Omaha. Within Aiken County itself, the major change in one category was an 11% rise in approval ratings from those age 30 and under to those age 41 to 50. The major change within Omaha was a 7% drop in approval rating from those age 30 and under to those age 31 to 40.

Would you approve of a police pursuit under low risk conditions for an incident involving a violent felony - reported death?

Responses of “yes” by Age Group

		Aiken	
		<u>County</u>	<u>Omaha</u>
≤ 30		96%	100%
31 - 40	100%		100%
41 - 50	100%		100%
> 50		100%	100%
Total (Avg)		99%	100%

Responses of “yes” by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		99%	100%
Female	99%		100%
Total (Avg)		99%	100%

Responses of “yes” by Socioeconomic Neighborhood

		Aiken	
		<u>County</u>	<u>Omaha</u>
Upper Class		97%	100%
Middle Class		99%	100%
Lower Class		100%	100%
Total (Avg)		99%	100%

Approval of a police pursuit under low risk conditions for incidents involving a violent felony- reported death was given by 99% of Aiken County respondents compared to 100% of Omaha respondents.

Ratings of approval were very consistent across all age, gender and socioeconomic categories of respondents. In Aiken County only 4% separated the lowest approval rating of 96% (from residents age 30 and under) and the highest of 100% (from several different groups). In Omaha there was no variation, as each grouping of respondents gave approval ratings of 100%.

Would you approve of a police pursuit under low risk conditions for an incident involving a police officer being shot?

Responses of “yes” by Age Group

		Aiken	
		<u>County</u>	<u>Omaha</u>
≤ 30		96 %	100 %
31 - 40	100 %		100 %
41 - 50	100 %		100 %
> 50		98 %	100 %
Total (Avg)		98 %	100 %

Responses of “yes” by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		98 %	99 %
Female	99 %		100 %
Total (Avg)		98 %	99 %

Responses of “yes” by Socioeconomic Neighborhood

		Aiken	
		<u>County</u>	<u>Omaha</u>
Upper Class		97 %	100 %
Middle Class		98 %	100 %
Lower Class		100 %	99 %

Total (Avg)

98%

99%

Approval of a police pursuit under low risk conditions for incidents involving a police officer being shot was given by 98% of Aiken County respondents compared to 99% of Omaha respondents. There was nearly universal approval in each geographical area and across every breakdown of respondents. In Aiken County, the lowest approval rating from any grouping of residents was 96% from those age 30 and under. Several groups of respondents gave approval ratings of 100%. In Omaha there was even less fluctuation. A 99% approval rating was given by both male residents and those respondents from lower class neighborhoods while every other grouping gave a 100% approval rating.

2. High Risk Conditions.

Percent of respondents approving pursuit for specified offense:

	<u>Aiken County Omaha Difference</u>		
Traffic Violation	30%	13%	17%
Property Crime - Misdemeanor	38%	21%	17%
Property Crime - Felony..... (Other than stolen vehicle)	61%	48%	13%
Stolen Vehicle	62%	44%	18%
DUI	77%	71%	6%
Violent Felony - No Reported Death..	74%	88%	14%
Violent Felony - Reported Death	90%	96%	6%
Police Officer Shot	91%	97%	6%

Under high risk conditions involving traffic violations, approval for police pursuits was given by 13% of the respondents from Omaha and 30% of the respondents from Aiken County.

Property crime-misdemeanor pursuits were approved of by only 21% of Omaha respondents

and 38% of those from Aiken County. In property crime-felony pursuits (other than those involving stolen vehicles), 48% of those from Omaha and 61% of those from Aiken County approved. When a vehicle was stolen, 44% of respondents from Omaha approved and 62% from Aiken. Seventy-one percent of Omaha respondents and 77% of Aiken County respondents approved of DUI pursuits. Violent felony-no reported death pursuits were approved of by 88% of Omaha respondents and 74% of Aiken County respondents. For violent felony-reported death pursuits 96% of those from Omaha and 90% of those from Aiken County approved. In cases in which a police officer was shot, 97% of those from Omaha and 91% of those from Aiken County approved of pursuit.

Again, further analysis reveals differences between Omaha respondents and Aiken county respondents. In traffic violation pursuits, Aiken county respondents gave a 17% higher approval than Omaha respondent for police pursuits in high-risk situations. Seventeen percent more Aiken county respondents approved of property crime-misdemeanor pursuits than those from Omaha. In property crime-felony pursuits (other than those involving stolen vehicles), Aiken county respondents gave a 13% higher approval than Omaha respondents. For stolen vehicle pursuits, respondents from Aiken county gave an 18% higher approval than those from Omaha. Six percent more respondents from Aiken approved of DUI pursuits than Omaha respondents. In violent felony-no reported death pursuits, Omaha respondents gave 14% higher approval ratings than Aiken county respondents. Omaha respondents gave a 6% higher approval rating than Aiken respondents for violent felony-reported death pursuits. In cases in which a police officer was shot, 6% more Omaha respondents approved than Aiken county respondents.

*Would you approve of a police pursuit under high risk conditions for an incident involving a **traffic violation**?*

Responses of "yes" by Age Group

		Aiken	
		<u>County</u>	<u>Omaha</u>
≤ 30		32 %	7 %
31 - 40	70 %		15 %
41 - 50	32 %		24 %
> 50		31 %	10 %
Total (Avg)		30 %	13 %

Responses of "yes" by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		27 %	16 %
Female	34 %		11 %
Total (Avg)		30 %	13 %

Responses of "yes" by Socioeconomic Neighborhood

		Aiken	
		<u>County</u>	<u>Omaha</u>
Upper Class		29 %	17 %
Middle Class		30 %	17 %
Lower Class		34 %	10 %
Total (Avg)		30 %	13 %

Approval of a police pursuit under high risk conditions for incidents involving a traffic violation was given by 30 % of Aiken County respondents and 13 % of Omaha respondents. By far the greatest contrast between the areas came from respondents age 31 to

40, as those from Aiken County gave a 55% higher approval rating than those from Omaha. Relatively less significant was a 25% drop in approval rating when comparing Aiken County respondents age 30 and under to those from Omaha. While there was a shift in the approval rating of from 8% to 14% between each subsequent age group of respondents within Omaha, Aiken County residents gave steady approval ratings except for those age 31 to 40. In this category, the approval rating jumped 38% from those age 30 and under then immediately fell back 38% from those age 41 to 50.

*Would you approve of a police pursuit under high risk conditions for an incident involving a **property crime - misdemeanor**?*

Responses of “yes” by Age Group

		Aiken County	Omaha
≤ 30		49%	26%
31 - 40	22%		24%
41 - 50	34%		24%
> 50		41%	18%
Total (Avg)		38%	21%

Responses of “yes” by Gender

		Aiken County	Omaha
Male		36%	26%
Female	42%		18%
Total (Avg)		38%	21%

Responses of “yes” by Socioeconomic Neighborhood

	Aiken	County Omaha
Upper Class	35 %	24 %
Middle Class	41 %	20 %
Lower Class	38 %	20 %
Total (Avg)	38 %	21 %

Approval of a police pursuit under high risk conditions for incidents involving a property crime - misdemeanor was given by 38% of Aiken County compared to 21% of Omaha respondents. There were many major differences between approval ratings from the two geographic areas, with the higher ratings mainly coming from Aiken County. In the breakdown by age, Aiken County residents age 30 and under and over age 50 each gave a 23% higher rating than those groups from Omaha. In the gender and socioeconomic neighborhood breakdowns, Aiken County female respondents gave a 24% higher rating and Aiken County middle class neighborhood residents gave a 21% higher rating than their Omaha counterparts. Also similar to the previous question and response was evidence of a larger range of approval ratings within Aiken County than within Omaha. For instance, in the age categories, approval fell from 49% from those 30 and under to 22% from those age 31 to 40 before increasing back to 41% from residents over age 50. In Omaha, however, the greatest difference between the lowest and highest approval ratings in all of the age, gender, and socioeconomic neighborhood breakdowns was only 8%.

*Would you approve of a police pursuit under high risk conditions for an incident involving a **property crime - felony**?*

Responses of “yes” by Age Group

		Aiken	
		<u>County</u>	<u>Omaha</u>
≤ 30		68 %	44 %
31 - 40	44 %		44 %
41 - 50	58 %		53 %
> 50		64 %	48 %
Total (Avg)		61 %	48 %

Responses of “yes” by Gender

		Aiken	
		<u>County</u>	<u>Omaha</u>
Male		60 %	54 %
Female	63 %		44 %
Total (Avg)		61 %	48 %

Responses of “yes” by Socioeconomic Neighborhood

		Aiken	
		<u>County</u>	<u>Omaha</u>
Upper Class		49 %	52 %
Middle Class		63 %	48 %
Lower Class		64 %	47 %
Total (Avg)		61 %	48 %

Approval of a police pursuit under high risk conditions for incidents involving a property crime - felony was given by 61 % of Aiken County and 48 % of Omaha respondents. In only one of the groupings by age, gender and socioeconomic neighborhood did Omaha residents give a higher approval rating than Aiken County residents: those from Omaha upper

class neighborhoods gave a 52% approval rating compared to 49% of those from Aiken County. The largest differences between the two areas came in the groupings of those age 30 and under -- with Aiken County residents giving 24% higher approval rating -- and female respondents -- with Aiken County residents giving a 19% higher approval rating. Within Aiken County, the breakdown by age had the greatest fluctuations in approval ratings, dropping 24% then rising 20% as the age group of the respondents increased. Also of note was the upper class neighborhood residents approval rating of 49% while middle and lower class ratings were, respectively, 14% and 15% higher. Within Omaha there were again fewer and less significant differences, the largest occurring between female (44%) and male (54%) respondents.

*Would you approve of a police pursuit under high risk conditions for an incident involving a **stolen vehicle**?*

Responses of "yes" by Age Group

		Aiken County	Omaha
≤ 30		66%	41%
31 - 40	48%		56%
41 - 50	58%		51%
> 50		67%	40%
Total (Avg)		62%	44%

Responses of "yes" by Gender

		Aiken County	Omaha
Male		64%	46%
Female	62%		43%

Total (Avg)	62%	44%
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Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	<u>County</u>	<u>Omaha</u>
Upper Class	49%	48%
Middle Class	68%	44%
Lower Class	58%	43%
Total (Avg)	62%	44%

Approval of a police pursuit under high risk conditions for incidents involving a stolen car was given by 62% of Aiken County compared to 44% of Omaha respondents. As might be expected from the contrast in overall ratings, there were also significant differences between the approval ratings when respondents were classified by age, gender and socioeconomic neighborhood. In five out of the nine groupings there was a difference of at least 18%, with Aiken County residents giving the higher approval rating in each instance. For example, Aiken County respondents age 30 and under and over age 50 gave 25% and 27% higher ratings (respectively) than those from Omaha. Likewise, Aiken County middle class neighborhood residents gave a 24% higher approval rating compared to those from Omaha. Within Aiken County, both the age and socioeconomic neighborhood breakdown witnessed constant drops and increases in approval ratings between each group of respondents. For instance, there was an 18% decrease in the approval rating when moving from residents age 30 and under to those age 31 to 40 and then an immediate increase of 10% when moving to those age 41 to 50. Within Omaha, only the age breakdown saw such changes as the approval rating went from 41% (respondents under age 30) to 56% (age 31 to

40) and back down to 40% (over age 50).

Would you approve of a police pursuit under high risk conditions for an incident involving a DUI?

Responses of "yes" by Age Group

		<u>Aiken</u> <u>CountyOmaha</u>	
≤ 30		77%	67%
31 - 40	68%		76%
41 - 50	81%		76%
> 50		80%	70%
Total (Avg)		77%	71%

Responses of "yes" by Gender

		<u>Aiken</u> <u>CountyOmaha</u>	
Male		77%	72%
Female	80%		70%
Total (Avg)		77%	71%

Responses of "yes" by Socioeconomic Neighborhood

		<u>Aiken</u> <u>CountyOmaha</u>	
Upper Class		76%	62%
Middle Class		78%	73%
Lower Class		81%	72%
Total (Avg)		77%	71%

Approval of a police pursuit under high risk conditions for incidents involving a DUI was given by 77% of Aiken County respondents compared to 71% of Omaha respondents. In

this scenario, Aiken County residents gave higher approval ratings than Omaha residents in every age, gender and socioeconomic neighborhood category except one: those from Omaha age 31 to 40 gave an approval rating that was 8% higher than their Aiken County counterparts. Continuing to look at the comparison between the two areas, the most significant difference was in the grouping of upper class neighborhood residents in which Aiken County's approval rating was 14% higher than that of Omaha. Within Aiken County the approval ratings were fairly steady except for the low of 68% given by the aforementioned respondents age 31 to 40. Within Omaha the approval ratings were more evenly distributed between the low of 62% (from upper class neighborhood residents) and the high of 76% (from both age groups 31 to 40 and 41 to 50).

*Would you approve of a police pursuit under high risk conditions for an incident involving a **violent felony - no reported death**?*

Responses of "yes" by Age Group

		Aiken <u>County</u> <u>Omaha</u>	
≤ 30		71 %	78 %
31 - 40	52 %		83 %
41 - 50	88 %		87 %
> 50		75 %	91 %
Total (Avg)		74 %	88 %

Responses of "yes" by Gender

		Aiken <u>County</u> <u>Omaha</u>	
Male		74 %	94 %
Female	76 %		84 %

Total (Avg)	74%	88%
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Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	<u>County</u>	<u>Omaha</u>
Upper Class	69%	97%
Middle Class	77%	91%
Lower Class	74%	81%
Total (Avg)	74%	88%

Approval of a police pursuit under high risk conditions for incidents involving a violent felony - no reported death was given by 74% of Aiken County and 88% of Omaha respondents. Despite the above ratings being only 14% apart, there were several instances of Omaha approval ratings being at least 20% higher than those from Aiken County when the residents were grouped by age, gender and socioeconomic neighborhood; these include the categories of male respondents (20% higher), upper class neighborhood residents (28% higher) and those age 31 to 40 (31% higher). In the breakdown of respondents by age, groupings within Aiken County experienced two large shifts: approval ratings fell 19% when moving from those age 30 and under to those age 31 to 40 before rising back 36% from residents age 41 to 50. Fluctuations in Omaha were relatively less, though there was a 16% drop in approval ratings between residents of upper class and lower class neighborhoods.

*Would you approve of a police pursuit under high risk conditions for an incident involving a **violent felony - reported death**?*

Responses of “yes” by Age Group

		Aiken <u>County</u>	Omaha
≤ 30		89%	92%
31 - 40	77%		98%
41 - 50	94%		96%
> 50		91%	98%
Total (Avg)		90%	96%

Responses of “yes” by Gender

		Aiken <u>County</u>	Omaha
Male		87%	99%
Female	93%		95%
Total (Avg)		90%	96%

Responses of “yes” by Socioeconomic Neighborhood

		Aiken <u>County</u>	Omaha
Upper Class		85%	100%
Middle Class		92%	99%
Lower Class		88%	94%
Total (Avg)		90%	96%

Approval of a police pursuit under high risk conditions for incidents involving a violent felony - reported death was given by 90% of Aiken County respondents and 96% of Omaha respondents. Though the approval rates of Omaha residents exceeded those of Aiken County residents in every category of age, gender and socioeconomic neighborhood, the

greatest fluctuation between groupings within Omaha was only 6%. Within Aiken County there were more noticeable shifts, as respondents age 31 to 40 gave a 12% lower approval rating than those age 30 and under. However, approval swung back up 17% from those in the next category of residents age 41 to 50. The major contrast between Aiken County and Omaha respondents came from those from upper class neighborhoods, with the former giving an 85% approval rating and the latter giving complete approval of 100%.

Would you approve of a police pursuit under high risk conditions for an incident involving a police officer being shot?

Responses of "yes" by Age Group

		Aiken County	Omaha
≤ 30		92%	93%
31 - 40	86%		100%
41 - 50	96%		96%
> 50		89%	98%
Total (Avg)		91%	97%

Responses of "yes" by Gender

		Aiken County	Omaha
Male		89%	99%
Female	93%		96%
Total (Avg)		91%	97%

Responses of “yes” by Socioeconomic Neighborhood

	Aiken	
	<u>County</u>	<u>Omaha</u>
Upper Class	88%	100%
Middle Class	92%	99%
Lower Class	90%	96%
Total (Avg)	91%	97%

Approval of a police pursuit under high risk conditions for incidents involving a police officer being shot was given by 91% of Aiken County and 97% of Omaha respondents. When the residents were broken down by age, gender and socioeconomic neighborhood, one comparison between Aiken County and Omaha stood out in each general category. In the age grouping of respondents age 31 to 40, those from Omaha gave a 14% higher approval rating than those from Aiken County. Similarly, Omaha male residents and those from upper class neighborhoods in Omaha gave 10% and 12% higher approval ratings (respectively) than their Aiken County counterparts. There were only relatively minor shifts in approval ratings between the breakdowns within each area. In Aiken County, the largest difference appeared as a 10% increase in the approval rating when moving from residents age 31 to 40 to those 41 to 50. In Omaha there was even less fluctuation, with the most noticeable shift being the rise in approval rating from those age 30 and under (93%) to those age 31 to 40 (100%).

Percent approving a jail sentence for a citizen fleeing and eluding the police:

Omaha Aiken County		Difference
49%	35%	14%

Percent approving a prison sentence for a citizen fleeing and eluding the police:

Omaha Aiken County		Difference
3%	8%	5%

Percent of respondents who think most suspects flee from the police because they have committed a serious crime:

Omaha Aiken County		Difference
8%	16%	8%

Percent of respondents who think most suspects flee from the police because they are scared:

Omaha Aiken County		Difference
25%	33%	8%

Percent of respondents who think most suspects flee from the police because they have something to hide:

Omaha Aiken County		Difference
69%	51%	18%

Percent of respondents who think most suspects flee from the police because they are impaired by drugs or alcohol:

Omaha Aiken County		Difference
57%	82%	25%

Suspects

Introduction

The section below shows attitudes towards police pursuit from the viewpoint of the suspects being chased. First, the personal characteristics of the fleeing suspects are given. Following this, there is information regarding more specific areas of the pursuits themselves, such as why the suspects ran from the police, the outcomes of the chases, if there was any use of force involved, and prior experiences of being pursued.

Those marked with ** appear misleading: the questions are framed as asking only those who answered "yes" to a previous question. However, responses from all 146 are recorded. For example, if a maximum of 82 suspects were beaten by police after arrest shouldn't the question asking if they reported the beating be confined to these 82? Otherwise, most will answer "no" because they weren't beaten in the first place. Compare this to the question on injuries; when asking for the type of injury suffered, it includes responses of "no injury" being received.

Average age of fleeing suspects:

	<u>Average</u>	<u>Std Dev</u>	<u>Std. Error</u>
Total	26.2	5.3	.44
Miami	26.6	5.5	.65
South Carolina	25.9	5.2	.91
Omaha	25.6	4.7	.77

The average age of fleeing suspects was 26.2 years (Std Dev. 5.3, Std Error .44). The ages ranged between 18 and 40. It is important to realize that the suspects were interviewed in/ adult jails and precluded any juveniles. In other words, these data was limited to suspects age 18 and older.

What was the gender of the fleeing suspects?

<u>Male</u>	<u>Female</u>	<u>Total</u>
137 (93.8%)	9 (6.2%)	146

Of all the fleeing suspects, 93.8% were male and 6.2% were female.

What was the ethnicity of the fleeing suspects?

<u>White</u>	<u>African-American</u>	<u>Hispanic</u>	<u>Total</u>
83 (56.8%)	53 (36.3%)	10 (6.8%)	146

Of all the fleeing suspects, 56.8% were white, 36.3% were African-American, and 6.8% were Hispanic

With whom did the fleeing suspects live?

<u>Lived Alone</u>	<u>Spouse</u>	<u>Roommate</u>	<u>Parents</u>	<u>Other</u>	<u>No Answer</u>
<u>Total</u>					
33 (22.6%)	20 (13.7%)	22 (15.1%)	42 (28.8%)	24 (16.4%)	5 (3.4%)
146					

When asked with whom they were living, 22.6% of the fleeing suspects said they lived alone. Over one-quarter (28.8%) lived with their parents, 15.1% with a roommate, and 13.7% with a spouse. Other, nonspecified living arrangements accounted for 16.4% of the suspects' responses, and the balance of 3.4% gave no reply.

Did the fleeing suspects initially run from the police because they thought they would be beaten by them?

<u>No</u>	<u>Yes</u>	<u>Total</u>
116 (79.5%)	30 (20.5%)	146

When asked if they initially ran from the police because they thought they would be beaten by them, 79.5% of the fleeing suspects answered "no," while 20.5% answered "yes."

Did the fleeing suspects initially run from the police to escape from a crime scene and to avoid arrest?

<u>No</u>	<u>Yes</u>	<u>Total</u>
107 (73.3%)	39 (26.7%)	146

When asked if they initially ran from the police to escape a crime scene and to avoid arrest, 73.3% of the fleeing suspects answered "no," while 26.7% answered "yes."

Did the fleeing suspects initially run from the police because they were in possession of illegal drugs?

<u>No</u>	<u>Yes</u>	<u>Total</u>
121 (82.9%)	25 (17.1%)	146

When asked if they initially ran from the police because they were in possession of illegal drugs, 82.9% of the fleeing suspects answered "no" compared to 17.1% who answered "yes."

Did the fleeing suspects initially run from the police because they were under the influence of alcohol or drugs?

<u>No</u>	<u>Yes</u>	<u>Total</u>
115 (78.8%)	31 (21.2%)	146

When asked if they initially ran from the police because they were under the influence of alcohol or drugs, 78.8% of the fleeing suspects answered "yes" compared to 21.2% who answered "no."

Did the fleeing suspects initially run from the police because they were scared or didn't want their parents or others to know about the incident?

<u>No</u>	<u>Yes</u>	<u>Total</u>
117 (80.1%)	29 (19.9%)	146

When asked if they initially ran from the police because they were scared or didn't want their parents or others to know about the incident, 80.1 % of the fleeing suspects said "no," while 19.9% said "yes."

Did the fleeing suspects initially run from the police because they were driving a stolen car?

<u>No</u>	<u>Yes</u>	<u>Total</u>
100 (68.5%)	46 (31.5%)	146

When asked if they initially ran from the police because they were driving a stolen car, 68.5% of the fleeing suspects answered "no," while 31.5% answered "yes."

Did the fleeing suspects initially run from the police because they were driving with a suspended or revoked license?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
105 (71.9%)	40 (27.4%)	1 (0.7%)	146

When asked if they initially ran from the police because they were driving with a suspended or revoked license, 71.9% of the fleeing suspects replied "no" compared to 27.4% who answered "yes." No answer was received from 0.7%.

Did the fleeing suspects initially run from the police because they were in possession of weapons?

<u>No</u>	<u>Yes</u>	<u>Total</u>
130 (89.0%)	16 (11.0%)	146

When asked if they initially ran from the police because they were in possession of weapons, 89.0% of the fleeing suspects replied "no" compared to 11.0% who answered "yes."

Did the fleeing suspects initially run from the police because they were driving the car without permission (but had not stolen the vehicle)?

<u>No</u>	<u>Yes</u>	<u>Total</u>
143 (97.9%)	3 (2.1%)	146

When asked if they initially ran from the police because they were driving the car without permission (but had not stolen it), 97.9% of the fleeing suspects answered "no," while 2.1% answered "yes."

Did the fleeing suspects initially run from the police because of some reason other than those specifically mentioned?

<u>No</u>	<u>Yes</u>	<u>Total</u>
127 (87.0%)	19 (13.0%)	146

When asked if they initially ran from the police because of some reason other than those specifically mentioned, 87.0% of the fleeing suspects said "no" compared to 13.0% who said "yes."

Were the fleeing suspects impaired by drugs or alcohol when chased by police?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
79 (54.1%)	56 (38.4%)	11 (7.5%)	146

When asked if they were impaired by drugs or alcohol when chased by police, 54.1% of the fleeing suspects answered "no," while 38.4% answered "yes." No answer was given by 7.5%.

Were the fleeing suspects willing to run at all costs from the police in pursuit?

<u>No</u>	<u>Yes</u>	<u>Total</u>
68 (46.6%)	78 (53.4%)	146

When asked if they were willing to run at all costs from the police in pursuit, 46.6% of the fleeing suspects responded "no," and 53.4% responded "yes."

Did the fleeing suspects think they would be caught by the police?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
93 (63.7%)	50 (34.2%)	3 (2.1%)	146

When asked if they thought they would be caught by the police, 63.7% of the fleeing suspects answered "no," and 34.2% answered "yes." No reply was given by 2.1%.

Did the fleeing suspects ever think about the punishment they might receive if they were caught?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
60 (41.1%)	85 (58.2%)	1 (0.7%)	146

When asked if they ever thought about the punishment they might receive if they were caught, 41.1% of the fleeing suspects answered "no," while 58.2% answered "yes." No answer was given by 0.7%.

*** What type of punishment did the fleeing suspects think they would receive if they were caught by the police?*

<u>Fine</u>	<u>Jail</u>	<u>Prison</u>	<u>Didn't Know</u>	<u>No Answer</u>	<u>Total</u>
3 (2.1%)	48 (32.9%)	9 (6.2%)	9 (6.2%)	77 (52.7%)	146

When asked what type of punishment they thought they would receive if caught by the police, 2.1% of the fleeing suspects said they would be fined, 32.9% percent said they would be sent to jail, and 6.2% said they would go to prison. Some (6.2%) didn't know what punishment they would receive, and the other 52.7% did not respond.

Were the fleeing suspects apprehended by the police?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
50 (34.2%)	94 (64.4%)	2 (1.4%)	146

When asked if they were apprehended by the police, 34.2% of the fleeing suspects answered "no," while 64.4% answered "yes." No response was given by the other 1.4%.

What did the fleeing suspects say was the outcome of the vehicle chase with the police?

<u>Suspect</u> <u>Terminated</u> <u>Total</u>	<u>Outran</u> <u>Police</u>	<u>Police</u> <u>Terminated</u>	<u>Crashed</u>	<u>Other</u>	<u>No Answer</u>
43 (29.5%) 146	36 (24.7%)	14 (9.6%)	43 (29.5%)	8 (5.5%)	2 (1.4%)

When asked for the outcome of being involved in a vehicle chase with the police, 29.5% of the fleeing suspects answered that they had terminated it, while 9.6% answered that the police had terminated it. Almost one-fourth (24.7%) said that they had outran the police, and 29.5% said the chase had ended with them crashing. Other responses were given by 5.5% of the fleeing suspects. No answer was received from the other 1.4%.

Did the fleeing suspects receive any injuries as a result of the police chase?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
62 (42.5%)	52 (35.6%)	32 (21.9%)	146

When asked if they received any injuries as a result of being involved in a police chase, 42.5% of the fleeing suspects answered "no," while 35.6% answered "yes." No response was given by 21.9%.

What type of injuries, resulting from the police chase, did the fleeing suspects receive ?

<u>Minor</u>	<u>Serious</u>	<u>Life Threatening</u>	<u>No Injury</u>	<u>Total</u>
38 (26.0%)	15 (10.3%)	-1 (0.7%)	92 (63.0%)	146

When asked what type of injuries they received from the chase, 26.0% of the fleeing suspects said "minor," 10.3% said "serious," and 0.7% said "life threatening." The rest (63.0%) answered that they had received no injury.

*** Was any treatment received by the fleeing suspects for injuries suffered from the police chase?*

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
87 (59.6%)	22 (15.1%)	37 (25.3%)	146

When asked if they received any treatment for injuries suffered due to the police chase, 59.6% of the fleeing suspects answered "no" compared to 15.1% who answered "yes." No answer was given by 25.3%.

*** Were the fleeing suspects beaten by the police after being caught?*

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
64 (43.8%)	54 (37.0%)	28 (19.2%)	146

When asked if they were beaten by the police after being caught, 43.8% of the fleeing suspects said "no" compared to 37.0% who said "yes." No response was given by the other 19.2%.

**** Did the fleeing suspects report being beaten up by police after they were caught?**

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
80 (54.8%)	13 (8.9%)	53 (36.3%)	146

When asked if they reported being beaten up by police after they were caught, 54.8% of the fleeing suspects said "no" compared to 8.9% who said "yes." No answer was received from 36.3%.

Would the fleeing suspects have run if they had known the police would chase them aggressively until they stopped or crashed?

<u>No</u>	<u>Yes</u>	<u>Total</u>
48 (32.9%)	98 (67.1%)	146

When asked if they would have run if they had known the police would chase them aggressively until they stopped or crashed, 32.9% of the fleeing suspects answered "no" compared to 67.1% who answered "yes."

Would the fleeing suspects ever have stopped on their own once the police started chasing them?

<u>No</u>	<u>Yes</u>	<u>Total</u>
61 (41.8%)	85 (58.2%)	146

When asked if they would ever have stopped on their own once the police started chasing them, 41.8% of the fleeing suspects said "no," while 58.2% said "yes."

If the police had turned off their lights and siren, when would the fleeing suspects have slowed down while driving on the freeway?

<u>Never</u>	<u>When They Felt Safe</u>	<u>Didn't Know</u>	<u>No Answer</u>	<u>Total</u>
26 (17.8%)	103 (70.5%)	9 (6.2%)	8 (5.5%)	146

When asked at what point they would have slowed down while driving on the freeway if the police had turned off their lights and siren, 17.8% of the fleeing suspects answered "never," 70.5% answered "when I felt safe," and 6.2% answered "I don't know." No response was given by the other 5.5%.

*** If the police had turned off their lights and siren, how many miles would the fleeing suspects have to drive to feel safe if they were on the freeway?*

<u>1 Mile</u>	<u>2 Miles</u>	<u>3 Miles</u>	<u>4 Miles</u>	<u>Don't Know</u>	<u>No Answer</u>
14 (9.6%)	61 (41.8%)	19 (13.0%)	25 (17.1%)	24 (16.4%)	3 (2.1%)
146					

When asked how many miles they would have to drive on the freeway to feel safe if the police had turned off their light and sirens, 9.6% of fleeing suspects answered "one mile," and 41.8% answered "two miles." Responses of "two miles" were given by 13.0% and responses of "four miles" were given by 17.1%. "I don't know" was the answer received from 16.4%, and 2.1% did not provide any answer.

If the police had turned off their lights and siren, when would the fleeing suspects have slowed down while driving on the highway?

<u>Never</u>	<u>When They Felt Safe</u>	<u>Don't Know</u>	<u>No Answer</u>	<u>Total</u>
27 (18.5%)	105 (71.9%)	7 (4.8%)	7 (4.8%)	146

When asked at what point they would have slowed down while driving on the highway if the police had turned off their lights and siren, 18.5% of the fleeing suspects answered "never," 71.9% answered "when I felt safe," and 4.8% answered "I don't know." No response was given by the other 4.8%.

*** If the police had turned off their lights and siren, how many miles would the fleeing suspects have to drive to feel safe if they were on the highway?*

<u>1 Mile</u>	<u>2 Miles</u>	<u>3 Miles</u>	<u>4 Miles</u>	<u>Don't Know</u>	<u>No Answer</u>
<u>Total</u> 16 (11.0%)	68 (46.6%)	13 (8.9%)	17 (11.6%)	27 (18.5%)	5 (3.4%)
146					

When asked how many miles they would have to drive on the highway to feel safe if the police had turned off their light and sirens, 11.0% of the fleeing suspects answered "one mile," and 46.6% answered "two miles." Responses of "two miles" were given by 8.9%, and responses of "four miles" were given by 11.6%. "I don't know" was the answer received from 18.5%, and 3.4% did not provide any answer.

If the police had turned off their lights and siren, when would the fleeing suspects have slowed down while driving in a town?

<u>Never</u>	<u>When They Felt Safe</u>	<u>Didn't Know</u>	<u>No Answer</u>	<u>Total</u>
23 (15.8%)	108 (74.0%)	14 (9.6%)	1 (0.7%)	146

When asked at what point they would have slowed down while driving in a town if the police had turned off their lights and siren, 15.8% of the fleeing suspects answered "never,"

74.0% answered "when I felt safe," and 9.6% answered "I don't know." No response was given by the other 0.7%.

*** If the police had turned off their lights and siren, how many blocks would the fleeing suspects have to drive to feel safe if they were in a town?*

<u>1 Block</u>	<u>2 Blocks</u>	<u>3 Blocks</u>	<u>4 Blocks</u>	<u>Don't Know</u>	<u>No Answer</u>
<u>Total</u>					
31 (21.2%)	49 (33.6%)	15 (10.3%)	19 (13.0%)	27 (18.5%)	5 (3.4%) 146

When asked how many blocks they would have to drive in a town to feel safe if the police had turned off their light and sirens, 21.2% of the fleeing suspects answered "one mile" and 33.6% answered "two blocks." Responses of "three blocks" were given by 10.3% and responses of "four blocks" were given by 13.0%. "I don't know" was the answer received from 18.5%, and 3.4% did not provide any answer.

Were the fleeing suspects concerned for their own safety while engaged in the chase with police?

<u>No</u>	<u>Yes</u>	<u>Total</u>
43 (29.5%)	103 (70.5%)	146

When asked if they were concerned with their own safety while engaged in the chase with police, 29.5% of the fleeing suspects responded "no" compared to 70.5% who responded "yes."

Were the fleeing suspects concerned with the safety of others while engaged in the chase with police?

<u>No</u>	<u>Yes</u>	<u>No Answer</u>
54 (37.0%)	91 (62.3%)	1 (0.7%)

When asked if they were concerned for the safety of others while engaged in the chase with police, 37.0% of the fleeing suspects answered "no," while 62.3% answered "yes." No reply was given by 0.7%.

Had the fleeing suspects ever been involved in a vehicle chase with the police prior to these incidents?

<u>No</u>	<u>Yes</u>	<u>Total</u>
97 (66.4%)	49 (33.6%)	146

When asked if they had ever been involved in a vehicle chase with the police prior to these incidents, 66.4% of the fleeing suspects answered "no," while 33.6% answered "yes."

*** Were the fleeing suspects impaired by drugs or alcohol in the previous instances of being involved in a vehicle chase with the police?*

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
29 (19.9%)	20 (13.7%)	97 (66.4%)	146

When asked if they were impaired by drugs or alcohol in the previous instances of being involved in a vehicle chase with the police, 19.9% of the fleeing suspects answered "no," while 13.7% answered "yes." No answer was given by 66.4%.

***** What did the fleeing suspects say was the outcome in the previous instances of being involved in a vehicle chase with the police?***

<u>Suspect</u>	<u>Outran</u>	<u>Police</u>	<u>Crashed</u>	<u>Other</u>	<u>No Answer</u>	
<u>Terminated</u>	<u>Police</u>	<u>Terminated</u>				
<u>Total</u>						
2 (1.4%)	28 (19.2%)	4 (2.7%)	13 (8.9%)	2 (1.4%)	97 (66.4%)	146

When asked for the outcome in the previous instances of being involved in a vehicle chase with the police, 1.4% of the fleeing suspects answered that they had terminated it, while 2.7% answered that the police had terminated it. Almost one-fifth (19.2%) said that they had outran the police, and 8.9% said the chase had ended with them crashing. Other responses were given by 1.4% of the fleeing suspects. No answer was received from the other 66.4%.

***** Were the fleeing suspects caught by the police after the vehicle chase in the previous instances?***

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
32 (21.9%)	19 (13.0%)	95 (65.1%)	146

When asked if they were caught by the police after the vehicle chase, 21.9% of the fleeing suspects said "no" compared to 13.0% who said "yes." No answer was given by the other 65.1%

***** Were the fleeing suspects beaten by the police after being caught in the previous instances of being involved in a vehicle chase with the them?***

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
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Did the fleeing suspects initially run from the police because they were driving a stolen car?

	<u>No</u>	<u>Yes</u>	<u>Total Offenders Answering</u>
Overall	100 (68.5%)	46 (31.5%)	146
Miami	39 (52.7%)	35 (47.3%)	74
Columbia	27 (79.4%)	7 (20.6%)	34
Omaha	34 (89.5%)	4 (10.5%)	38

When asked if they initially ran from the police because they were driving a stolen car, 68.5% of the fleeing suspects answered "no," while 31.5% answered "yes."

Were the fleeing suspects impaired by drugs or alcohol when chased by police?

	<u>No</u>	<u>Yes</u>	<u>Total Offenders Answering</u>
Overall	79 (58.5%)	56 (41.5%)	135
Miami	41 (61.2%)	26 (38.8%)	67
Columbia	16 (48.5%)	17 (51.5%)	33
Omaha	22 (62.9%)	13 (37.1%)	35

When asked if they were impaired by drugs or alcohol when chased by police, 58.5% of the fleeing suspects who answered said "no," while 41.5% answered "yes."

Approximately half of the suspects (51.5%) from Columbia were adversely affected by these substances during the pursuit. Only a little more than one-third of the suspects from either Miami or Omaha were similarly impaired.

Would the fleeing suspects have run if they had known the police would chase them aggressively until they stopped or crashed?

	<u>No</u>	<u>Yes</u>	<u>Total Offenders Answering</u>
Overall	48 (32.9%)	98 (67.1%)	146
Miami	19 (25.7%)	55 (74.3%)	74
Columbia	17 (50.0%)	17 (50.0%)	34
Omaha 12 (31.6%)	26 (68.4%)		38

Overall, 32.9% of the fleeing suspects answered "no" when asked if they would have run had they known the police would chase them aggressively until they stopped or crashed. The other 67.1% answered "yes."

When broken down by location, it was found that almost 75% of the fleeing suspects from Miami would have run even if they knew of the police officers' intentions. More than two-thirds (68.4%) of the Omaha suspects would also have run, but only half of those from Columbia would have made the same choice.

Was the offender involved in a pursuit eventually caught by police?

	<u>No</u>	<u>Yes</u>	<u>Total Offenders Answering</u>
Overall	50 (34.7%)	94 (65.2%)	144
Miami	25 (34.7%)	47 (65.2%)	72
Columbia	12 (35.3%)	22 (64.7%)	34
Omaha 13 (34.2%)	25 (65.8%)		38

When asked if they were apprehended by the police, 34.7% of all fleeing suspects who answered said "no," compared to 64.4% who said "yes."

26 (17.8%)	11 (7.5%)	109 (74.7%)	146
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When asked if they had been beaten by police after being caught, 17.8% of the fleeing suspects responded "no," and 7.5% answered "yes." No answer was received from 74.7%.

*** Did the fleeing suspects report being beaten up by the police in the previous instances of being involved in a vehicle chase with them?*

<u>No</u>	<u>Yes</u>	<u>No Answer</u>	<u>Total</u>
30 (20.5%)	4 (2.7%)	112 (76.0%)	146

When asked if they had reported being beaten up by the police in the previous instances of being involved in a vehicle chase with the them, 20.5% of the fleeing suspects answered "no" and 2.7% answered "yes." No response was given by 76.0%.

Of the fleeing suspects interviewed, what was the location where they had been chased by the police?

<u>Miami</u>	<u>Columbia</u>	<u>Omaha</u>	<u>Total</u>
74 (50.7%)	34 (23.3%)	38 (26.0%)	146

Of all the fleeing suspects interviewed, 50.7% of them had been pursued by police in Miami, 23.3% in Columbia, and 26.0% in Omaha.

The next set of data includes selected questions with the responses broken down by location.

What was the ethnicity of the fleeing suspects?

	<u>White</u>	<u>African-American</u>	<u>Hispanic</u>	<u>Total Offenders Answering</u>
Overall	83 (56.8%)	53 (36.3%)	10 (6.8%)	146
Miami	42 (56.8%)	22 (29.7%)	10 (13.5%)	74
Columbia	23 (67.6%)	11 (32.4%)		34
Omaha	18 (47.4%)	20 (52.6%)		38

Of all the fleeing suspects, 56.8% were white, 36.3% were African-American, and 6.8% were Hispanic.

The number of fleeing suspects who were white compared to African-American varied somewhat between locations. Suspects from Omaha were split nearly in half between these two ethnic groups. In Columbia, white suspects (67.6%) outnumbered African Americans (32.4%) by more than a two to one ratio. The difference between the two groups (56.8% compared to 29.7%) was almost as great in Miami, with the balance (13.5%) made up of Hispanic suspects (all of whom came from this one location).

Police in no one location exhibited much difference in catching offenders involved in a pursuit. Omaha police were slightly more successful at apprehending the suspects (65.8%) than the average, while Columbia police were slightly less successful (64.7%)

**** Were the fleeing suspects beaten by the police after being caught?**

	<u>No</u>	<u>Yes</u>	<u>Total Offenders Answering</u>
Overall	64 (54.2%)	54 (45.8%)	118
Miami	23 (45.1%)	28 (54.9%)	51
Columbia	21 (65.6%)	11 (34.4%)	32
Omaha	20 (57.1%)	15 (42.9%)	35

When asked if they were beaten by the police after being caught, 54.2% of the fleeing suspects who answered said "no" compared to 45.8% who said "yes."

Of the three locations, Miami suspects were the most likely (54.9%) to be beaten. Fewer suspects in Omaha (42.9%) and Columbia (34.4%) found themselves in the same situation.

If the police had turned off their lights and siren, when would the fleeing suspects have slowed down while driving on the freeway?

	<u>Never</u>	<u>When They Felt Safe</u>	<u>Didn't Know</u>	<u>Total Offenders Answering</u>
Overall	26 (18.8%)	103 (74.6%)	9 (6.5%)	146
Miami	13 (17.6%)	58 (78.4%)	3 (4.1%)	74
Columbia	11 (35.5%)	17 (54.8%)	3 (9.7%)	31

Omaha 2 (6.1%) 28 (84.8%) 3 (9.1%) 33

When asked at what point they would have slowed down while driving on the freeway if the police had turned off their lights and siren, 18.8% of the fleeing suspects said "never," 74.6% said "when I felt safe," and 6.5% said "I don't know."

More than one-third (35.5%) of suspects from Columbia would never have slowed down. This was more than double the number suspects from Miami (17.6%) and almost six times the number suspects from Omaha (6.1%) who felt the same. In comparison, only 54.8% of Columbia suspects would have slowed when they felt safe, while over three-fourths of those from either Miami (78.4%) or Omaha (84.8%) would have taken the same action.

If the police had turned off their lights and siren, when would the fleeing suspects have slowed down while driving on the highway?

	<u>Never</u>	<u>When They Felt Safe</u>	<u>Didn't Know</u>	<u>Total Offenders Answering</u>
Overall	27 (19.4%)	105 (75.5%)	7 (5.0%)	139
Miami	13 (17.6%)	59 (79.7%)	2 (2.7%)	74
Columbia	12 (37.5%)	17 (53.1%)	3 (9.4%)	32
Omaha 2 (6.1%)	29 (87.9%)		2 (6.1%)	33

When asked at what point they would have slowed down while driving on the highway if the police had turned off their lights and siren, 19.4% of the fleeing suspects who answered said "never," 75.5% answered "when I felt safe," and 5.0% answered "I don't know."

Responses from the suspects from the different locations were almost identical to those given when asked if they would have slowed down on a highway under the same conditions.

More than one-third (37.5%) of suspects from Columbia would never have slowed down. This was more than double the number suspects from Miami (17.6%) and over six times the number suspects from Omaha (6.1%) who felt the same. In comparison, only 53.1% of Columbia suspects would have slowed when they felt safe, while over three-fourths of those from either Miami (79.7%) or Omaha (87.9%) would have taken the same action.

Almost half (47.3%) of the suspects from Miami cited this as the basis for their actions. Suspects from the other two locations were much less likely to have done the same. Only one out of five (20.6%) of those from Columbia and one out of ten (10.5%) of those from Omaha said their driving a stolen vehicle was the reason why they ran from the police.

If the police had turned off their lights and siren, when would the fleeing suspects have slowed down while driving in a town?

	<u>Never</u>	<u>When They Felt Safe</u>	<u>Didn't Know</u>	<u>Total Offenders Answering</u>
Overall	23 (15.9%)	108 (74.5%)	14 (9.7%)	145
Miami	12 (16.2%)	60 (81.1%)	2 (2.7%)	74
Columbia	9 (27.3%)	19 (57.6%)	5 (15.2%)	33
Omaha	2 (5.3%)	29 (76.3%)	7 (18.4%)	38

When asked at what point they would have slowed down while driving in a town if the police had turned off their lights and siren, 15.9% of the fleeing suspects who answered said "never," 74.5% said "when I felt safe," and 9.7% said "I don't know."

Over one-fourth (27.3%) of the suspects from Columbia would never have slowed down in a town. This action was less likely to be taken by those from Miami (16.2%) or

Omaha (5.3%). Compared to those from Columbia, approximately 20% more suspects from each of these two locations would have slowed down when they felt safe. Between 14% and 19% of suspects from either Columbia or Omaha did not know how they would have responded in the given situation.

Would the fleeing suspects ever have stopped on their own once the police started chasing them?

	<u>No</u>	<u>Yes</u>	<u>Total Offenders Answering</u>
Overall	61 (41.8%)	85 (58.2%)	146
Miami	36 (48.6%)	38 (51.4%)	74
Columbia	16 (47.1%)	18 (52.9%)	34
Omaha	9 (23.7%)	29 (76.3%)	38

When asked if they would ever have stopped on their own once the police started chasing them, 41.8% of the fleeing suspects said "no," while 58.2% said "yes."

Suspects from Miami and Columbia gave similar responses; slightly under half of those from each location would never have voluntarily stopped after the police initiated the pursuit. In comparison, three out of four (76.3%) of Omaha suspects would have ended the chase themselves at some point.

Chapter IX

Summary and Conclusions

The information presented in this chapter is a summary of the major findings generated by the data collected for this project. First, we will review the major findings of the National Survey of police agencies, then we will turn to the findings from the analysis of the pursuits conducted by the agencies. Third, we will review the concerns, attitudes and opinions expressed by the law enforcement personnel and civilians who were interviewed.

The National Survey on Pursuit

The purpose of the survey was to collect pursuit and use-of-force information from police agencies throughout the country. Nearly all the responding agencies (91%) had written policies governing pursuits, although many were implemented in the 1970s. Almost one-half (48%) of the agencies reported having modified their pursuit policy within the past two years. Most of those (87%) noted that the modification had made the policy more restrictive than the earlier version. In reference to the collection of data on pursuit, municipal and larger agencies were more likely routinely to collect such information than the county or smaller agencies. The agencies that collect such data apparently do so voluntarily since only 11% of our respondents reported that their data collection programs for pursuits are state mandated.

Although only 135 (31%) of the agencies maintain police pursuit statistics or data systematically, 308 (71%) could offer estimates of the numbers of pursuits their officers had engaged in during 1993, the last full year before the survey. The estimates offered ranged from zero (N=34) to 870 pursuits with large agencies obviously experiencing greater numbers of

incidents than smaller ones. When pursuit incidents per officer were examined, however, it was the smaller and municipal agencies that experienced the highest rates of pursuing. Despite this fact, the rate of pursuit related accidents increased substantially with agency size.

In reference to training, many departments acknowledged taking only limited steps to train their officers. For example, although 60% of the agencies provide entry level pursuit driving training at the academy, the average time devoted to these skills was estimated at less than 14 hours. Once in service, the amount of additional training offered averaged only slightly more than three additional hours per year.

Beyond training for such situations, our responding agencies reported important differences in their follow-up evaluations once an actual pursuit incident had occurred. While most (89%) routinely conducted some follow-up, for many that amounted to nothing more than an informal supervisory review (33%) or a report addressing the incident by the pursuing officer (47%).

Questions involving disciplinary actions revealed that slightly more than 12% of the agencies reported having to discipline officers at least once during 1993 for pursuit related actions. The disciplinary action ranged from simple counseling with an oral reprimand to the termination of two officers. However, the average disciplinary action was a reprimand (82% of all actions taken). In contrast, discipline for use-of-force violations included far more serious responses from the agencies.

During 1993, 25% (109) of our sample of departments experienced police pursuits which resulted in officers using force besides the pursuit itself to apprehend a suspect. In only a few of those incidents (24), however, were allegations filed that the use-of-force was excessive or

unreasonable. Another area of information requested concerned litigation. Nearly 16% of our sample of police agencies reported that during 1993, they had been involved in litigation resulting from pursuits.

There are several important trends that were revealed by the agencies' responses. First, it is critical for law enforcement agencies to create and maintain systems to collect information on pursuit driving. The inability of many agencies to respond to the questions is discouraging. Second, the fact that most agencies had policies was favorable but the quality and direction of those policies was questionable as many had been instituted as long as twenty years ago. Related to the number of policies, it was clearly established that many agencies had updated their policies and the majority of those had made them more restrictive than the previous ones. Third, the necessary training for pursuit needs rethinking. It is shameful for our law enforcement agencies to expect their officers to make proper and appropriate decisions with only minimal training. Fourth, the supervisory aspect of the policies must be reviewed and enforced. Fifth, the requirement for officers to justify their actions or have a supervisor evaluate the pursuit (after-action report) needs more attention. Sixth, when actions are found to be inappropriate, officers are not receiving serious disciplinary actions for problem pursuits and finally, the amount of litigation in the area of pursuit is a real and serious concern.

The Nature and Extent of Pursuit Driving

While the national survey provided a panoramic snapshot of trends, the in-depth analysis of the nature and extent of pursuit driving is limited to our case-study sites. It is interesting to see how our sites compared with the national trends. For example, in the area of policy, each of our two major sites, Metro-Dade and Omaha, went through substantial policy

changes during the period of study. Metro-Dade changed its policy and limited its officers' discretion. The department adopted a "violent-felony only" policy in late 1992. As the data reveal, pursuits in Metro-Dade went from 279 in 1992 to 51 in 1993 as a direct result of the change in policy. The Omaha Police Department also changed its policy but in the opposite direction. In 1993, the Omaha policy changed from restrictive to judgmental, permitting pursuits for offenses that had previously been prohibited. The results of this policy change are reflected by the 17 pursuits reported in 1993 and the 122 pursuits reported in 1994. These two policy changes should serve as important guides for administrators. These data reflect the dramatic impact of a change in policy. We will briefly review each site below.

Metro-Dade Police

Our analysis combined the pursuits conducted by Metro-Dade officers between the years 1990 and 1994. Although there were changes in the pursuit policy, we chose to combine the data from more than one thousand pursuits. Four hundred and forty-eight pursuits were initiated for traffic violations (45%), while 344 were initiated for felonies or suspected felonies (35%). A more specific analysis of felony situations for the most recent years revealed that 35% of the felony situations were armed robbery, 20% was vehicular assault, 11%, was aggravated assault, 11% were stolen vehicles, 9% was burglary, and the remainder involved robbery, rape, and other violent crimes. Seven hundred and eighty-four offenders (75%) were arrested, while 206 (20%) escaped. Four hundred and twenty-eight of the pursuits (41%) ended in an accident. Two hundred and thirteen of the pursuits resulted in personal injuries (20% of all pursuits).

The most frequent felonies were stolen vehicles (44%) and armed robbery (33%). The remainder was for discharge of weapons (11%) and drug purchases (11%).

Fourteen of the offenders (82%) were arrested, while 1 (6%) escaped. One or 6% of the pursuits were terminated by the police, and 1 (6%) resulted in a pursuit-related death. Eight of the pursuits (47%) ended in an accident. Two of the pursuits resulted in personal injuries (12% of all pursuits). Both of the injuries were to the suspect or a rider. Pursuit-related property damage occurred in four of the pursuits or 24%.

Conclusions

The data from our sites are important and must be considered in policy, supervisory and officer training considerations. Perhaps the most impressive finding from both Metro-Dade and Omaha is the strong effect of a change in policy. There is no doubt that a change such as the ones made by these two agencies will impact the nature and extent of pursuits and subsequent accidents, injuries and deaths. Unfortunately, most of the other information does not have such clear implications. As an example, the more police cars involved in a pursuit, the more likely it will result in a collision. However, the more police cars involved in a pursuit, the more likely an apprehension will be made. Therefore, in appropriate pursuits for violent felonies, it may be reasonable to increase slightly the risk of traffic accidents by raising the number of police vehicles involved as the likelihood of apprehension is improved. This finding does not endorse the uniform increase of police units involved in a pursuit but it does suggest that policy makers should rethink the use of police vehicles to parallel the pursuit or converge at designated locations **at reasonable speeds**, perhaps within the speed limit. One way to address the issue is to give the supervisor the ability to assign cars to the chase, in

addition to the primary and secondary units. Of course, this will require rules, regulations and training for the supervisor, as it is he or she who must recognize the need to raise risks to the public. A similar concern must be made for interjurisdictional pursuits. Anyway, an officer must not just provide support for other officers without assessing the situation and making sure that the pursuit is within his agency's policy. The data are clear that the more vehicles involved in the chase, the greater the likelihood of an accident. Many findings could be discussed in a similar way. Understanding thoroughly the impact of one variable on another is important. That is, univariate analyses, such as speed or type of vehicle being chased may mask the impact of other variables, such as traffic and road conditions, or the lack of training or supervision. Unfortunately, these analyses reveal the important variables but do not discuss why these variables are important. For example, whether or not suspects were apprehended in heavy traffic because they gave up or crashed is a question which we must address in future analyses of these data.

The wealth of information presented in this study can help guide training and policy decisions.

Attitudes and Opinions toward Pursuit - Police Officers

The approach taken in this chapter will provide some of the more interesting results and conclusions derived from the research data. The first series of results involve the percentage of officers, from all four departments, who would engage in a pursuit under low and high-risk conditions. The major finding is that the percentage of all officers willing to engage in a pursuit increases as the severity of the crime increases. **In other words, the need to**

Accidents

Four variables contributed significantly to the prediction of accidents: whether or not the pursuit was on an expressway, the number of police cars involved in the pursuit, whether or not the pursuit was conducted in a rural area, and the reason for initiating the pursuit.

Apprehension vs. Escape

Five variables contributed significantly to the prediction of escape/no escape. These include the number of police units involved in the chase, if the chase was conducted in a business district, whether the chase was conducted during the day, whether or not other police were involved in the chase, and whether the officer was Hispanic.

Personal Injury

Four variables contribute significantly to the prediction of personal injury. These include the number of police cars, the involvement of other police departments in the chase, the top speed during the pursuit, and the location of the chase in a residential area.

Omaha, Nebraska

Two-hundred and twenty-nine pursuits from Omaha were analyzed. One hundred and twelve pursuits were initiated for traffic violations (51%), while 89 were initiated for felonies or suspected felonies (40%). Eight (4%) were initiated for reckless driving or DUI's, 7 (35%) were initiated because of suspect vehicles, and 3 (1%) were initiated because the driver was known from some previous pursuit situations. A more specific analysis of felony situations revealed that many different felonies provoked the chases. The most frequent felonies were stolen vehicles (40%), shooting incidents (14%), and hit and run situations (11%). The rest

are scattered among 17 other felonies. One hundred and eighteen offenders (52%) were arrested, while 59 (26%) escaped. Thirty-one of the pursuits resulted in personal injuries (14% of all pursuits). Twenty-five of the pursuits resulted in injuries to the suspect or a rider, four resulted in injuries to an officer, and bystanders were injured in two of the pursuits. Pursuit-related property damage occurred in 91 (40%) pursuits.

Pursuits initiated for reckless driving or DUIs were the most likely to end in an arrest (75%), while pursuits initiated because of suspected vehicles resulted in the smallest proportion of arrests (43%). The pursuits least likely to end in an accident were pursuits initiated because of suspect vehicles (14%). Voluntary terminations by the police were most likely in pursuits initiated for suspect vehicles (29%), and least likely in chases initiated for felonies (16%). There were no variables that predicted accidents or injuries significantly.

Apprehension vs. Escape

Five variables contributed significantly to the prediction of escape. These include supervisor helping, the number of police cars involved in the chase, the top speed of the chase, whether or not the chase was conducted in a residential area, and the traffic flow.

Aiken County, South Carolina

The analysis of the pursuit data collected from the Aiken County Sheriff's Office is limited to those conducted during 1993 and 1994. As there were only 17 pursuits reported, our analysis will be limited. Five pursuits were initiated for traffic violations (36%), while six were initiated for felonies or suspected felonies (43%). One (7%) was initiated for reckless driving or DUI's, and 2 (14%) were initiated because of suspect vehicles. A more specific analysis of felony situations revealed that several different felonies prompted these chases.

immediately apprehend the suspect of a serious crime is the most important concern for law enforcement personnel.

The law violation believed to be the most innocuous or least serious is a traffic violation. In situations where an officer has observed a **traffic violation**, 43 % of them would engage in a pursuit under low-risk conditions and 10% would engage under high-risk conditions, yielding a difference of 33 %. The largest difference was found in Aiken County, where 77% of respondents would engage in a pursuit under low-risk conditions and only 4% would do so under high-risk conditions. In Mesa, 0% of the respondents would engage in a pursuit under high risk, and a relatively low percentage, 14%, would do so under low-risk conditions. In regard to years of experience, less than five years or 5 years or more, Mesa showed the greatest fluctuation. Officers in Mesa with more than five-years experience were more than twice as likely to engage in a pursuit under low-risk conditions compared to their less-experienced counterparts. Similarly, 9% would chase under high-risk conditions compared to none of the less-experienced officers.

The percentage of officers who would engage in a pursuit for incidents involving a **property crime - misdemeanor** was 42% under low-risk conditions and 17% under high-risk conditions, creating a difference of 25%. The greatest difference was once again found in Aiken County, where 56% would engage in a pursuit under low-risk conditions and 10% pursuit under high-risk conditions. The lowest percentage of officers willing to engage in a pursuit was found in Mesa, 16% under low-risk conditions and 7% under high-risk conditions. The other two departments, Omaha and Metro-Dade, yielded comparable results. In Metro-Dade, 47% of officers would engage in a pursuit under low-risk conditions and 23% would do

so under high-risk conditions, creating a difference of 24%. In Omaha, 41% would engage in a pursuit under low-risk conditions and 16% would do so under high-risk conditions, a difference of 25%. The more experienced officers in both Omaha and Aiken were more likely to engage in a pursuit under high-risk conditions than their less-experienced counterparts.

For incidents involving a **property crime - felony**, 64% of officers would engage in pursuit under low-risk conditions and 34% of the total officers would do so under high-risk conditions, creating a difference of 30%. In Aiken County, 90% of the officers would engage in a pursuit under low-risk conditions, which was 26% higher than the average. Officers in Mesa responded that only 9% would engage in a pursuit under high-risk conditions, whereas 42% would do so under low-risk conditions. In regard to years of experience, the more experienced officers in Omaha would engage in a pursuit more often under high-risk conditions, while in Mesa, the newer officers were more likely to do so under high-risk conditions.

The percentage of officers who responded that they would engage in a pursuit for incidents involving a **stolen vehicle** was 65% under low-risk conditions and 37% under high-risk conditions, yielding a difference of 28%. The highest percentage (93%), who would engage in a pursuit under low risk conditions was found in Aiken County. In Mesa, only 13% of the officers would engage in a pursuit under high-risk conditions, compared to 43% who would do so under low-risk conditions. In Mesa and Omaha, the more experienced officers were 17% and 15% less likely to engage in a pursuit under low-risk conditions than the less-experienced officers.

For incidents involving a **DUI**, 70% of the total officers would engage in a pursuit under low-risk conditions and 43% would do so under high-risk conditions, creating a difference of 27%. In Aiken County, 95% of the officers responded that they would engage in a pursuit under low-risk conditions, which was 25% above the total average. In Mesa, only 17% were willing to engage in a pursuit under high-risk conditions, which was 26% below the total average. The more experienced officers from Aiken County were more than 10% likely to engage in a pursuit under high risk conditions. In Omaha, the less experienced officers were 16% more likely to engage in a pursuit under low-risk conditions.

The percentages of officers willing to engage in a pursuit for incidents of **violent felony - no death** was 87% under low risk conditions and 80% under high risk conditions, creating a difference of 7%. In regard to incidents of violent felony - no death, all of the departments produced similar results and the differences were not as significant. In Aiken County, 100% of the officers would engage in a pursuit under low-risk conditions. The effect of the years of experience also was less pronounced. The greatest difference was found in Mesa, whereby the more experienced officers were 13% less likely to engage in a pursuit under high-risk conditions.

For incidents involving a **violent felony - with death**, 96% of the total officers would engage in a pursuit under low risk conditions and 95% would do so under low risk conditions, a difference of 1%. All of the departments produced similar results. In Aiken County, 100% of respondents would engage in a pursuit under both high and low-risk conditions. With regard to the years of experience, the differences among the new and more experienced officers were relatively small. The majority of the officers, both new and veteran, would

engage in a pursuit in incidents involving a violent felony - with death under low and high-risk conditions.

For incidents involving a **police officer shot**, 96% of total officers would engage in a pursuit under low risk and 95% under high risk conditions, yielding a difference of 1%. The differences among the departments was relatively small, with the responses ranging between 94% and 100% for both low and high-risk conditions. The years of experience did not have a significant effect on the percentage of officers willing to engage in a pursuit when a police officer had been shot.

The fluctuations between and among agencies and type of law violation reveal important distinctions. While it is clear that the type of law violation justifies the risk of pursuit for many officers, there are important differences. The most obvious finding is the willingness to pursue when a fellow officer has been shot. Certainly, pursuits for violent felons has the most support among officers. The property misdemeanor appears slightly less serious to officers than a traffic violation. The person suspected of a DUI is very likely to be pursued. As we discussed earlier, this type of pursuit raises a variety of public safety issues.

Sanctions

Today, in many jurisdictions, fleeing and eluding a police officer is a minor offense which is often dropped or plea bargained away. Officers report strong opinions concerning the sanction one should receive when caught and prosecuted for fleeing and eluding. Incarceration was approved of by 90% of all officers and 40% of all officers recommended 6-9 months as the length of time in jail and 53% recommended 1 year in prison. After incarceration, the majority of the officers (80%) responded that a fine would be an appropriate punishment.

Many of the officers (44%) responded that the fine should be between \$101 and \$500. In Mesa, 55% of the officers responded that the fine should exceed \$1000.

Reasons Cited for Fleeing

Most officers (95%) reported that suspects flee because they have something to hide. More than one-half (56%) believe that a suspect flees because he has committed a serious offense, and 39% report that they are just scared and want to escape. Thirty-five percent of all officers responded that most suspects (76%-100%) would flee if it were known by the public that their department did not have a pursuit policy. Thirty-seven percent of all officers responded that impairment by drugs or alcohol was responsible for less than 25% of the situations where a suspect flees.

Use of Force

Thirty-three percent of all officers responded that between 26%-50% of all pursuits result in the use of force. Fifty-eight percent of all officers responded that between 1%-25% of pursuits result in the use of excessive force. Aiken County demonstrated the greatest variation, 7% responded none and 74% responded between 1%-25% of pursuits result in excessive force. The majority of all officers, 52%, agreed with the statement that most pursuits are conducted by young male officers. The use of force at the end of a pursuit is a very serious concern which was addressed earlier.

Feelings and Opinions of Officers

Responses from questions about feelings during a pursuit demonstrated that 84% of officers felt excited, 75% felt stimulated, 76% felt nervous and 37% felt angry. Ninety-six percent of all officers reported that catching the suspect was their primary concern during a

pursuit. Eighty-five percent of all officers reported that their department had a very restrictive pursuit policy and 77% of all officers responded that they understood their department's policy.

Officers reported that they were likely to engage in a pursuit for all violations more serious than a traffic violation except a misdemeanor offense. Officers were most likely to engage in a pursuit in incidents where a police officer had been shot. The most important risk factors were traffic conditions and weather.

Forty-five percent of all officers described the police officer most likely to engage in a pursuit as aggressive and 37% describe him as doing his job and dedicated. Thirty-eight percent of all officers used the description of quality or experienced to describe the police officer who was most likely to voluntarily terminate a pursuit and 34% considered one who would terminate careful or cautious. When describing the police officer most likely to use excessive force, 31% of all officers characterized him as aggressive and 20% described him as hot-headed.

Involvement of Officers in Pursuits

Twenty-six percent of all officers responded that they had been involved as the primary driver in a pursuit within the previous 12 months. Seventy-three percent of all officers had been involved in at least one pursuit over the previous 12 months and 40% reported that a pursuit resulted in an accident. Fifty-five percent of all officers felt physically threatened by the suspect in the pursuit. Fifty-one percent of all officers had to use force to apprehend the suspect after a pursuit.

These major findings are critical in the development of policies and training. The final chapter of this report introduces the policy and training implications derived from this research. The following section presents the major findings generated from the supervisors of the departments.

Supervisors

Traffic violations: Thirty-one percent of total supervisors would approve of a pursuit under low-risk conditions and 7% would do so under high risk, creating a difference of 24%.

Property crime - misdemeanor: Thirty-eight percent of total supervisors would approve of a pursuit under low-risk conditions and 13% would do so under high-risk conditions, a difference of 25%. The percentage of approval for a pursuit over property crimes - misdemeanors was slightly higher than for traffic violations.

Property crime - felony: Fifty-nine percent of total supervisors would approve of a pursuit under low-risk conditions and 27% would do so under high-risk conditions, a difference of 32%.

Stolen vehicle: Fifty-nine percent of total supervisors would approve of a pursuit under low risk and 23% would do so under high-risk conditions, a difference of 36%. The rate of approval of a pursuit was similar between incidents of stolen vehicles and property crime - felony.

DUI: Seventy-one percent of total supervisors would approve of a pursuit under low risk and 38% would do so under high-risk conditions, a difference of 33%.

Violent felony - no death: Ninety-one percent of total supervisors would approve of a pursuit under low-risk conditions and 77% would approve under high-risk conditions, a

difference of 14%. There is a significant increase in the rate of approval for a pursuit involving incidents of a violent felony compared to the previous crimes.

Violent felony - with death: Ninety-eight percent of supervisors would approve of a pursuit under low risk and 94% under high-risk conditions, a difference of 4%.

Violent felony - police officer shot: Ninety-seven percent of supervisors would approve of a pursuit under low-risk conditions and 96% under high-risk conditions, a difference of only 1%.

The percentage of supervisors who expressed approval for a pursuit appeared to increase as the level of severity of the crime increased, paralleling the shift found among officers' responses. Ninety-one percent of supervisors responded that they had been involved in a pursuit during the previous 12 months. Fifty-seven percent of the pursuits resulted in no accidents and 43% resulted in an accident. Sixteen percent of the pursuits resulted in injuries and none resulted in a death as a result of the pursuit. Forty-one percent of the supervisors felt physically threatened by a suspect in a pursuit. Fifty-two percent of the pursuits resulted in the supervisor having to use force to apprehend the suspect in a pursuit.

Recruits

The following section addresses the findings generated from the recruits who were questioned at two points in time, before and after their training. The percentage of recruits who reported that they would engage in a pursuit under low risk and high-risk conditions for the following incidents:

Traffic Violation: Under low-risk conditions, all of the recruits, except for those in the SC Academy were more likely to engage in a pursuit when they were first questioned. In

the SC Academy, 78% responded that they would engage in a pursuit at Time 1 and that increased to 83% by Time 2. Under high-risk conditions the percentage of recruits who would engage in a pursuit fell in all four groups. Once again, SC Academy recruits demonstrated the highest percentage willing to engage in a pursuit for a traffic violation.

Property Crime - Misdemeanor: The percentage of recruits willing to engage in a pursuit under low-risk conditions fell in all four groups. The recruits from SC Academy and SC Highway Patrol showed the smallest difference, while there was a 41% difference found among the recruits from St. Petersburg. Under high-risk conditions smaller differences were noted. The recruits from SC Academy were again more willing to engage in a pursuit at both stages of questioning.

Property Crime - Felony: Under low-risk conditions there was a greater variation found among the responses. SC Academy recruits were the only ones who were more willing to engage in a pursuit after the training course, a difference of 14%. There was less variation found under high-risk conditions after the training courses. Again, the recruits from SC Academy were more likely to engage in a pursuit both prior to and after the training course.

Stolen Vehicle: Prior to the training course, between 77% and 94% of recruits from each location was willing to engage in a pursuit under low-risk conditions. SC Academy recruits were most likely to engage in a pursuit and no difference was found before or after the training course. St. Petersburg recruits were the least likely to engage in a pursuit, 77% were willing to do so before the training and 59% were willing to do so after the training course. Similar results were found under high-risk conditions, as the SC Academy recruits were the most likely to engage in a pursuit and St. Petersburg recruits were the least likely to do so.

DUI: Under low-risk conditions, between 81% and 100% of recruits from each location would engage in a pursuit before the training course. All of the recruits from Metro-Dade would engage in a pursuit before the training, which decreased to 73% after the course. The recruits from SC Academy showed the smallest variation, 98% would engage in a pursuit before the training, and 93% would do so after the course. Under high-risk conditions a greater variation was found, between 57% and 96% of recruits from each location said they would engage in a pursuit. SC Academy recruits were the only recruits more likely to engage in a pursuit after the training course. Recruits from St. Petersburg showed the greatest difference; 57% would engage in a pursuit before the training and 10% would do so after.

Violent Felony - No death: Between 87% and 100% of the recruits from each location would engage in a pursuit under low-risk conditions before the training course. All of the recruits from Metro-Dade would engage in a pursuit before the training, which decreased to 79% after. Recruits from SC Academy were more likely to engage in a pursuit after the training course. There was less variation found under high-risk conditions. Again, recruits from SC Academy were more likely to engage in a pursuit after the training course.

Violent Felony - With Death: Before the training, between 95% and 100% of recruits from each location were willing to engage in a pursuit under low-risk conditions. Only small differences were noted among each group after the training course, but recruits from St. Petersburg, SC Academy, and SC Highway Patrol were more likely to engage in a pursuit after the training course. Similar results were found under high-risk conditions.

Police Officer Shot: The majority of recruits were willing to engage in a pursuit under both low and high-risk conditions before and after the training course. Recruits from St.

Petersburg and SC Academy were more likely to engage in a pursuit after the training course under both low and high-risk conditions.

Similar to the results obtained from the officers and the supervisors, the percentage of recruits who were willing to engage in a pursuit increased as the severity of the crime increased. Apparently, the training courses are effective in altering the opinions of the recruits. The information from the recruits gives each academy administrator some basis to assess its training goals and objectives to determine if they are being achieved.

Public Opinion

Results from the public opinion section were generated from Omaha and Aiken County. The total responses to the rating of honesty and ethical standards of law enforcement officers indicated that 55% of residents in Aiken County and 74% of Omaha residents provided a rating of "high." In both Aiken County and Omaha, the residents of the upper socioeconomic neighborhoods were more likely to answer with a rating of "high." There was a noticeable difference among the male and female residents in Aiken County, 67% of the males gave a rating of "high" and 47% of the female residents answered with an approval rating of "high." Although there was not much fluctuation in regard to age found in Omaha, the percentage of residents answering with a rating of "high" in Aiken County increased as the age also increased.

In regard to the presence of *police brutality* in their community, 29% of Aiken County respondents reported "yes" and 67% of Omaha residents reported "yes," a difference of 38%. The greatest difference was found when the respondents were broken down by age. In Omaha,

78% of the respondents over 50 years of age answered "yes" to the question of police brutality, compared to 30% of those under 30 years of age.

A relatively small number of respondents reported that they knew anyone who had been physically mistreated or abused by the police; 8% in Aiken County and 9% in Omaha. There was a significant increase among the respondents from the lower socioeconomic neighborhoods who answered with a "yes" in both areas, 13% in Aiken County and 11% in Omaha. In addition, 13% of the male residents in Omaha answered "yes" compared to only 6% of the female residents.

The total responses from residents in Aiken County and Omaha was compiled in regard to the rate of approval of a police pursuit under low-risk conditions for the following incidents:

Traffic violation: In Aiken County 68% of respondents answered "yes" compared to 47% of Omaha residents. A noticeable difference was found in Aiken County in regard to socioeconomic neighborhoods; 72% of those from the lower-class category responded "yes," while 42% of those from the upper-class category answered "yes." Under high-risk conditions, 30% of Aiken County residents and 13% of Omaha respondents gave approval of a pursuit for a traffic violation.

Property crime - misdemeanor: Sixty-six percent of Aiken County respondents reported approval, while 50% of the Omaha respondents demonstrated approval. The most visible difference was found in Aiken County when broken down into age and socioeconomic categories. Seventy percent of Aiken respondents between 41-50 reported approval, compared to 52% of those between 31-40 years of age. In addition, 70% of those from the middle class category in Aiken responded "yes" compared to 59% of those from the

upper class category. Under high-risk conditions, 38% of Aiken County respondents and 21% of Omaha respondents gave approval of a pursuit for incidents involving property crimes - misdemeanors. Aiken County female respondents gave a 24% higher rating and Aiken County middle class neighborhood residents gave a 21% higher rating than their Omaha counterparts.

Property crime - felony: Approval of a police pursuit for incidents involving a property crime - felony was given by 84% of Aiken County respondents and 83% of Omaha respondents. There were relatively few fluctuations except in Omaha where the upper class residents gave an approval rating of 90% compared to 77% of the upper class residents in Aiken County. Under high-risk conditions, 61% of Aiken County respondents and 48% of Omaha respondents gave approval of a pursuit in incidents involving property crime - felony. In only one of the groupings did Omaha respondents give a higher approval rating than Aiken County respondents: respondents from Omaha upper class neighborhoods gave a 52% approval rating compared to 49% of those from Aiken County.

Stolen vehicle: Eighty-three percent of Aiken County respondents and 84% of Omaha respondents gave approval of a police pursuit under low-risk conditions for incidents involving a stolen vehicle. In Aiken County, 88% of lower class respondents gave approval compared to 71% of those from the upper class category. Another significant difference was found when broken down by age. In Aiken County, 92% of those between 41-50 years gave approval compared to 79% of those under 30 years of age. Omaha demonstrated opposite results, 93% of those under 30 years gave approval compared to 81% of those between 31-40 years. Under high-risk conditions, 62% of Aiken County respondents and 44% of Omaha

respondents gave approval of a pursuit for incidents involving a stolen vehicle. Respondents from Aiken County gave consistently higher approval ratings across all categories.

DUI: Approval of a pursuit under low-risk conditions for incidents involving a DUI was given by 88% of Aiken County respondents and 93% of Omaha respondents. Relatively few differences were found when broken down by age, gender and socioeconomic categories. Under high-risk conditions, 77% of Aiken County residents and 71% of Omaha residents gave approval for incidents involving a DUI. The most significant difference was in the grouping of upper class neighborhood residents in which Aiken County's approval rating was 14% higher than that of Omaha.

Violent felony - no death: Ninety-one percent of Aiken County respondents and 97% of Omaha respondents gave approval of a pursuit under low-risk conditions for incidents involving a violent felony - no death. Under high-risk conditions, 74% of Aiken County respondents and 88% of Omaha respondents gave approval for incidents involving a violent felony - no death. Omaha respondents consistently gave higher rates of approval across all categories. Ninety-seven percent of Omaha respondents from upper class neighborhoods gave approval compared to 69% of those from the upper class category in Aiken County. In addition, 94% of male respondents from Omaha gave approval compared to 74% of males from Aiken County.

Violent felony - with death: Approval of a police pursuit under low-risk conditions for incidents involving a violent felony - with death was given by 99% of Aiken County respondents and 100% of Omaha respondents. Relatively few differences were found among age, gender, and socioeconomic categories. Under high-risk conditions, 90% of Aiken

County respondents and 96% of Omaha respondents gave approval for a pursuit involving incidents of violent felony - with death. The major contrast between Aiken County and Omaha respondents came from those from upper class neighborhoods, with the former giving an 85% approval rating and the latter giving a total approval of 100%.

Police officer shot: Ninety-eight percent of Aiken County respondents and 99% of Omaha respondents approved of a pursuit under low-risk conditions in incidents involving a police officer being shot. Rates of approval were very consistent across all age, gender and socioeconomic categories. Under high-risk conditions, 91% of Aiken County respondents and 97% of Omaha respondents gave approval of a pursuit for incidents involving a police officer being shot. Omaha male residents and those from upper class neighborhoods in Omaha respectively gave 10% and 12% higher approval ratings than their Aiken County counterparts.

The responses from the public provide a snap-shot of public opinion toward pursuit driving and the importance of apprehending suspects. There is little doubt that the public sentiment is for police to apprehend those suspected of violating the law. In fact, there is obvious support for pursuit driving by many of the members of the public. As common sense would suggest, the approval of pursuit increases with the seriousness of the offense and as risk to the public increases, approval of pursuit decreases. Unfortunately, little is known about the relative risks the public is willing to allow for the apprehension of law violators and it is that tolerance which must be determined by future research efforts.

Suspects

One of the unique features of this study was the information received from those who run from the police. The average age of fleeing suspects in this study was 26.2 years and ranged from 18 to 40. The ethnicity of the fleeing suspects was found to be the following: 56.8% were white, 36.3% were African-American, and 6.8% were Hispanic. Of the total of fleeing suspects, 93.8% were male and 6.2% were female.

When asked if they initially ran from the police because they thought they would be beaten by them, 79.5% answered "no." When the fleeing suspects were asked if they would have run if they had known the police would chase them aggressively until they stopped or crashed, 67.1% answered "yes." The majority of suspects, 73.3%, answered "no" when asked if they initially ran from the police to escape a crime scene and to avoid arrest. When asked if they were beaten by the police after being caught, 43.8% of the suspects answered "no," 37% answered "yes" and 19.2% gave no answer. Over half of the fleeing suspects, 64.4%, were apprehended by the police.

Suspects denied that they were running from the police because they were driving the car without permission. Almost all (97.9%) answered "no." Similarly, when asked if they initially ran from the police because they were in possession of illegal drugs, 82.9% answered "no" and 54.1% answered "no" when asked if they were impaired by drugs or alcohol when chased by the police. When asked if they initially ran from the police because they were in possession of weapons, 89% answered "no". When asked if they initially ran from the police because they were under the influence of drugs or alcohol, 78.8% answered "yes."

When asked at what point the suspects would have slowed down while driving on the freeway if the police had turned off their lights and sirens, 70.5% answered "when I felt safe",

and similar results were found when the suspect was driving on the highway. While driving in town, 74% of the suspects answered that they would slow down "when they felt safe" after the police turned off their lights and sirens and 33.6% reported that they would drive an additional 2 blocks to feel safe.

The majority of fleeing suspects, 63%, received no injuries as a result of the police chase. When asked if the suspect received any treatment for injuries suffered from the police chase, 59.6% answered "no." When asked about the outcome of the vehicle chase with the police, 29.5% answered that they had terminated the chase, compared to 9.6% who answered that the police terminated the chase. Almost one-third (29.5%) answered that the chase ended in a crash and 24.7% answered that they had outrun the police.

When asked what type of punishment they thought they would receive if caught by the police, 2.1% thought they would be fined, 32.9% thought they would go to jail and 6.2% thought they would go to prison. When asked if they ever thought about the punishment they might receive if they were caught, 41.1% answered "no" and 58.2% answered "yes."

Over half of the suspects, 53.4%, responded that they were willing to run at all costs from the police in a pursuit but 62.3% stated that they were concerned with the safety of others. When asked if they were concerned with their own safety while engaged in the chase, 70.5% responded "yes." When asked if they thought they would be caught by the police, 63.7% answered "no".

These data from suspects can begin to build our information base about those who run and why they run from the police. Obviously, one of the major challenges for law enforcement officials is to apprehend suspects but protect the safety of the public. It is

informative that many of the suspects will slow down as soon as they are safe. The question remains, for what offense and under what conditions should police raise the level of risk to the public for the possible or probable apprehension of the suspect. The number and type of accidents and injuries must be factored into this equation and considered in subsequent policy decisions.

Chapter X

Policy Implications

Researchers and practitioners have collected an impressive quantity of good quality and very important data on pursuit. Clearly, many police administrators have taken this information seriously and have reduced the number of pursuits in their agencies by making their policies more restrictive than they had been in the past. The data presented in the earlier chapters of this study contributes additionally to this accumulation of information and can help the policy maker and trainer in his or her efforts to improve the application of pursuit tactics. The purpose of this final chapter is to discuss the policy implications of the information accumulated on pursuit driving and to suggest model policy elements based on what we have learned.

The basic dilemma of pursuit can be reduced to a balance between the enforcement of laws and public safety. If the only concern of law enforcement were to apprehend law violators, then all pursuits would be appropriate. Any negative consequence such as an accident, injury or death would be an unfortunate, but an acceptable outcome. If the primary concern of law enforcement were public safety, then the need immediately to apprehend a suspect would be a minor consideration. In other words, the morality of pursuit and the mission of police must be considered in the equation of whether the benefit of pursuit is worth its cost.

Other concerns involve the dynamics of pursuit. Three actors are part of an interactive triangle of pursuit. These include the fleeing suspect, the police and the public (innocent bystanders). Two of the three actors involved in a pursuit have interactive effects on each other. The reality of the situation is that the suspect is in charge but the police can influence the process

and outcome of a pursuit. Obviously, a mature and responsible individual will not flee from the police. However, if he does and if an officer chases a suspect, it is likely that the suspect will increase his speed and recklessness to escape. If the police terminate a chase, the suspect is likely to slow once he feels safe. Similarly, when a suspect flees from the police, there is a natural instinct for an officer to go after and apprehend the suspect. We have learned that most suspects are fleeing the police to avoid apprehension because they are frightened and do not want to face the consequences of the minor charges that could be brought against them. Our data reveal that most of these suspects will reduce their speed and dangerous driving if the police permit them to feel safe. Further, our data show, many suspects flee because they are afraid, or are just making an irresponsible decision, not because they have committed a serious crime. There is, however, a predisposition by the police to think that a person is running to avoid apprehension for some serious crime he has just committed and our data reveal that many police officers follow these instincts. Thus, in the mind of the officer, there is a serious need to go after the suspect and apprehend him. The risks become secondary to the need to apprehend the suspect immediately. The result is similar to a drag race where the offender is racing away to escape and the police officer is racing in an attempt to catch him. This continues until one party stops voluntarily or crashes.

A justification for this chasing is that many officers believe that if they do not chase suspects, they will always flee the police and create a hazardous situation on the roads. This deterrence argument sounds convincing but is pure speculation. In fact, results from our research indicate that those who flee do so regardless of the police response. The data indicate that most law violators who run have not committed offenses for which a full custodial arrest would be

customary. The serious offenders comprise the minority of those who flee from the police but unfortunately, it is impossible to distinguish them from the immature or irresponsible suspect who does not stop because he is frightened. There is a major discrepancy between what the suspect is thinking and doing, and what the police officer is thinking and doing. It is this discrepancy that policy makers and trainers must consider and address.

Making Appropriate Decisions Morally

The third component of the interactive triangle, the public, is merely an individual who may be in the wrong place at the wrong time. He has no decision to make and is truly the innocent bystander.

Pursuit decisions must be based on what is known and not what is thought or believed. Therefore, driving and tactical decisions must be made on information that is real, not imagined. That is, just because there is a chance that a fleeing suspect may be a violent criminal and there is a real and immediate need to apprehend him, an officer cannot assume that every eluder is a member of that group. In fact, the empirically correct and appropriate assumption is that an eluder is someone who is not a fleeing violent felon but one who is scared, irresponsible and afraid to face the consequences of his problems or actions. Officers should operate on that assumption and reduce the risk to the public and attempt to apprehend the individual later, unless other information is known. For example, if the police establish a sobriety checkpoint and an approaching vehicle makes a U-turn and avoids the roadblock, police cannot automatically assume that the driver is DUI or has just committed a violent felony and chase the person aggressively. There could be many reasons why the individual did not want to stop other than he is DUI or is afraid of being arrested for a violent crime. The police have no basis or probable

cause to raise risks unreasonably to public safety to chase him. There are alternatives to the chase. If the police are serious about stopping all vehicles, they can establish a staggered, two-way checkpoint or install alternatives to pursuit such as video cameras, road spikes, or other technological advancements. To allow the suspect to escape is a far better moral decision than the use of potentially deadly force by pursuing. A pursuit has a high probability of affecting an innocent bystander as well as the suspect.

In Power and Restraint: The Moral Dimension of Police Work, Cohen and Feldberg help to clarify this idea by identifying the social contract as the fundamental basis for police moral standards (1991:39), and the foundation of the police obligation as to "protect and serve." The Supreme Court in Tennessee v Garner provided a moral measuring rod when it noted, "It is not better that all felony suspects die than that they escape" (Tennessee v Garner, 1985:11). If this principle were transferred to pursuit decisions, dangerous chases for non-dangerous fleeing suspects would clearly be morally unacceptable. While no one would seriously consider taking a firearm away from the police its use must be restricted. Similarly, no one should take pursuit away from the police, but its use must also be restricted

Balancing the Goals of Public Safety and Law Enforcement

Both the goals of law enforcement and public safety are important. Police have a duty to enforce the law, and one aspect of that duty is to arrest known violators. In the infrequent situation when the suspected law violator decides not to stop, eludes apprehension and initiates a chase, the officer must do everything possible to stop the violator. Unfortunately, short of a deadly force application such as ramming, or establishing a roadblock, a police officer has only a few options (e.g., spikes, spike belts and other technological tools) other than chasing the suspect

and hoping he will pull over before he crashes.

There is a legal basis for the continued pursuit of law violators as long as the police officer does not drive recklessly (for a complete discussion, see Alpert, 1988). The theme among these cases is that the police should not be responsible for the outcome of the reckless behavior of the pursued and that the police should not be the insurer of this highly irresponsible person. In one of the earliest and most cited cases, The Kentucky Court of Appeals (then Kentucky's highest court), heard Chambers v Ideal Pure Milk Co. (1952: 590-591) when a traffic violator was pursued, drove recklessly and was involved in an accident with an innocent third party. The court ruled that even if a police officer causes a violator to increase his level of recklessness, the officer should not be responsible for the other's actions.

Charged as they (the police) were with the obligation to enforce the law, the traffic laws included, they would have been derelict in their duty had they not pursued him. The police were performing their duty when Shearer, in gross violation of his duty to obey the speed laws, crashed into the milk wagon. To argue that the officers' pursuit caused Shearer to speed may be factually true, but it does not follow that the officers are liable at law for the results of Shearer's negligent speed. Police can not be made insurers of the conduct of the culprits they chase.

In another interesting case, West Virginia v Fidelity Gas and Casualty Co. of New York (1967: 90-91) noted:

We are not prepared to hold an officer liable for damages inflicted by the driver of a stolen vehicle whom he was lawfully attempting to apprehend for the fortuitous reason only that the criminal drove through an urban area. To do so would open the door for every desperado to seek sanctuary in the congested confines of our municipalities, serene in the knowledge that an officer would not likely give chase for fear of being liable for the pursued's recklessness. Such now is not the law nor should it be the law.

Both the Chambers and West Virginia cases were used as precedents in one of the most cited decisions from a state court, Thornton v Shore (1983). This case, from the Kansas Supreme Court, has become essential for municipal defense attorneys as it uses as its rule, only the actual driving of the officer as a measuring rod and it relies upon deterrence theory that suggests that all violators will flee if they are not chased. Here, the trial court issued a summary judgment for a Kansas University Police Department officer who was sued pursuant to a chase that resulted in the death of two law-abiding motorists. The plaintiffs in this law suit argued that the police

officer should have terminated the pursuit based on the extreme reckless behavior of the individual being pursued and should have recognized the foreseeability of an accident and likelihood of injury. The defendant police officer argued that he was immune from liability pursuant to the state law permitting him to disregard certain traffic laws but not to disregard the duty to drive with due regard for the safety of all persons. The trial court ruled that the officer's driving was reasonable and granted summary judgment. On appeal, the Kansas Supreme Court affirmed the summary judgment for the officer.

Justice Herd's dissent in Thornton provides a modern and likely scenario for the 1990's (1983:668):

...Even with the [emergency] warnings, however, the driver must operate the [police] vehicle with due regard for the safety of all persons. The majority holds whenever a high speed chase results in a collision between the person pursued and a third party, the pursuing officer has, as a matter of law, met the 'due regard' standard...by merely turning on his warning signals...There are numerous scenarios where an accident is caused by one not a party to a collision. It is a question of causation.

Interestingly, these cases acknowledge that the police officer may cause a violator to increase his level of recklessness and the risk to the officer, law violator and motoring public but for the sake of law enforcement, some danger or risk is necessary. Another contemporary interpretation of the balance between the enforcement of laws and public safety has been offered in a 1992 Florida Supreme Court case, Brown v City of Pinnellas Park, 1992: 12-14):

Solely because a man ran a red light, suddenly the innocent citizens of Pinnellas County were subjected to a threatening stream of publicly-owned vehicles hurtling pell-mell, at breakneck speed, down a busy roadway in one of Florida's most densely populated urban areas. ... In the balance, the desire to bring Deady [suspect] to justice for running a red light is far less important than the lives of the Brown sisters. ... Experience and foresight support the conclusion that Deady engaged in such reckless conduct primarily because he was being chased by police, and that this misconduct would have ceased had the police discontinued the pursuit.

In other words, when the risks of pursuit driving become so great that an accident or injury becomes likely, then reducing the risks is more important and the officer should terminate the pursuit rather than attempt to apprehend the violator immediately. Interestingly, this opinion links the cause of the accident to the police conduct and provides front-end advice to police administrators and risk managers: terminate a pursuit when the risk outweighs the need to immediately apprehend a suspect. Hopefully, the future will bring to law enforcement the technology necessary to end the dangerous pursuit environment and enable the safe apprehension of the driver of a fleeing vehicle. Currently, law enforcement is limited to its decision to chase or not to chase. The only tactic that is being used to track a pursued car without the dangers of a pursuit on the surface streets is a helicopter or fixed-wing airplane. While this option is costly, it provides an excellent opportunity to observe unobtrusively and track a vehicle while directing ground units to apprehend the driver when he stops. Results from our research indicate that a suspect who does not know he is being pursued will drive reasonably. Similarly, findings from our research demonstrate that suspects who have been pursued and drive dangerously will slow down after the police terminate their pursuit (show of authority or force). It is believed that helicopters on patrol, which can be deployed immediately, can be a very important tool in the observation and apprehension of law violators, without creating the risk of dangerous driving to the public. Obviously, this strategy must be evaluated for effectiveness and efficiency. Meanwhile, other technologies can assist law enforcement in the apprehension of those who elude the police.

Technology and Pursuit Driving

Until technological tools are improved and the police can slow or stop a vehicle safely, pursuit driving will be a necessary part of police work. Fortunately, the technology to slow or stop a vehicle is improving and has already produced some workable products and prototypes. The most common product that has been available for several years is the spike belt, which is a strip (or other shape) of spikes that when run over, slowly deflates the tires, forcing a vehicle to slow dramatically and under control. Other devices that could be developed to bring a vehicle to a stop include nets and barricades. Another technology that is emerging provides police with the ability to shut down a car's electrical system remotely. In the future, some military technology that is being declassified and transferred to law enforcement use and may be helpful in the development of other tools to disable a vehicle safely (National Law Enforcement and Corrections Technology Center, 1995).

Until the use of helicopters or advanced technological devices are common, police will continue to make critical pursuit decisions. All law enforcement agencies must develop complete plans for the management of pursuit driving.

Planning for Pursuit

All pursuits involve risk. Fortunately, there are specific ways to decrease and control the omnipresent risk. Improving knowledge and preparation can achieve this goal and the following elements are necessary parts of a pursuit management plan:

1. A clear and understandable policy delineating departmental requirements within the context of state laws and the police mission;
2. Specific training to the policy, using examples of risk assessment;
3. A detached supervisor, trained in risk assessment, who takes control over the pursuit, who

assumes its supervision and who will terminate it when it becomes too risky; and

4. Accountability, by requiring officers to complete pursuit critiques and having the forms reviewed individually to decide if the pursuit driving was within policy, and collectively to provide information to trainers and policy makers. Additionally, officers must receive feedback on the appropriateness of their pursuit driving.

The results from the present research demonstrate that the offense committed by the suspect is the major factor determining whether or not the police should engage in or continue a chase. The second most important factor is the risk to the public, which is determined by traffic, area and weather. In other words, the law enforcement personnel and the members of the public interviewed in the present study were concerned most about the offense committed by the suspect when supporting or defending a pursuit. When the type of offense is removed from the equation, the level of traffic became the most important consideration. Therefore, policy considerations should focus first on the type of offense and second on risks to the public, especially traffic patterns and congestion. Balancing these variables leads us to conclude that the most appropriate policy should limit chases to violent felons. In areas where this is not acceptable, the balance of the need to apprehend the suspect immediately and risk to the public must be determined by specific rules. Our research forced respondents to create high and low-risk situations. A policy should formulate pre-existing categories and standards so the officer does not have to make that distinction during the heat of the chase. For example, criminal activities could be given a ranking and risk factors could be scored to create a category of high or low. From these scales, a chase matrix could be created which would give officers specific direction. This would provide local options for police agencies that want to pursue for crimes less serious than violent felonies. Of course, this matrix would provide rules for the beginning

stages of a pursuit. Even a pursuit for a violent felony may become too risky to continue or must be terminated by the police. The risk factors such as traffic congestion, road conditions and likelihood of a successful apprehension enter the equation in all pursuits. Another conclusion which might be reached in a chase for a violent felon is the need for a use of deadly force to apprehend the suspect. Considerations concerning the use of deadly force depend on an agency's deadly force policy, location, preparation and training. These are issues that go beyond the restriction or matrix of beginning a pursuit and must be addressed in other sections of a policy.

The following is a model of a policy elements that should be reviewed by law enforcement officials for consideration and modification to local needs. It is a restrictive policy that emphasizes public safety over the need to immediately apprehend law violators and permits pursuits only for violent felonies. It is consistent with the data collected during this project and incorporates many concerns and safeguards suggested by police officers, members of the public and suspects who have eluded the police.

POLICE DEPARTMENT PURSUIT POLICY ELEMENTS

I. Mission Statement

It is the primary mission of the ... Police Department to save lives while enforcing the law. In addition, it is the responsibility of the ... Police Department to guide its officers in the safe and reasonable performance of their duties. To accomplish these goals, the following policy of The department is provided to control and regulate the manner in which emergency vehicle operations are undertaken and performed. When engaged in emergency vehicle operations, in the performance of official duties, drivers of authorized emergency vehicles are granted exemptions from certain traffic laws by statute. These exemptions are provided to help save lives NOT to place them at risk.

II. Definitions

- A. Pursuit - A multi-stage process by which a police officer initiates a vehicular stop and a driver resists the order to stop and increases speed or takes evasive action and/or refuses to stop the vehicle. Once the driver refuses to obey the police officer's order, the pursuit policy and procedures will attach.
- B. Termination of Pursuit - A pursuit shall terminate when the primary officer turns off the emergency equipment, resumes routine vehicle operation and informs dispatch. The pursuit also ends when the suspect vehicle stops.
- C. Violent Felonies - Felonies in which a perpetrator uses aggressive physical force. A violent felony includes the following offenses:
 - 1. Homicide; in any degree
 - 2. Kidnaping
 - 3. Assault in the first or second degree
 - 4. Robbery in the first degree
 - 5. Forcible rape
 - 6. Forcible sodomy
 - 7. Arson in the first degree
- D. Divided Highway - Any highway which has been separated into two or more roadways by:
 - 1. Physical barrier, or
 - 2. Clearly indicated dividing section so constructed as to impede vehicular traffic
- E. Channeling - A progressively narrowing passageway to direct vehicular traffic into a desired lane location on the roadway.
- F. Compelling Path - The use of a channeling technique with a modified roadblock located at its narrowed end. The compelling path differs from a

termination roadblock in that the driver or any vehicle traveling the path has an exit option at the narrowed end.

III. Pursuit Considerations:

A. Pursuit is justified only:

1. When an officer knows or has reasonable grounds to believe that the fleeing suspect has committed or attempted to commit a violent felony.
2. When there is reasonable expectation of a successful apprehension of the suspect.

B. Other factors to be considered:

1. The initial decision to engage in a pursuit shall lie primarily with the officer who has initiated the vehicular stop, after considering the elements of the policy.
2. These elements shall include, but are not limited to the crime for which the suspect is wanted (the need to apprehend immediately) and the risk to the community created by the pursuit (traffic, area of pursuit, environmental factors, and weather conditions).
3. The officer must continually consider the risks created by the pursuit as those risks change during a pursuit.
4. The element of personal challenge to the officer must never enter into a decision to continue a pursuit.
5. Terminating a pursuit shall be considered a decision made in the interest of community safety. Many times the termination of a pursuit is the safest and most appropriate action to take.
6. The officer's decision to continue a pursuit may be overridden by a supervisor at any time.

C. Standards applied to the evaluation of a pursuit, as well as the decision to continue a pursuit shall include the following:

1. If the pursuit were to result in injury or death, would a reasonable person understand why the pursuit occurred or was necessary?
2. Is the need to immediately apprehend the suspect more important than the risk created by the pursuit?
3. Do the dangers created by the pursuit exceed the danger posed by allowing the perpetrator to escape?

IV. Procedures and Tactics

A. When an officer engages in pursuit:

1. No more than two emergency vehicles are to be in pursuit without

- specific permission from a supervisor.
2. Emergency vehicles shall be driven in a safe manner and with due regard for the safety of all motorists.
3. Emergency vehicles are permitted to violate traffic regulations when necessary - to save lives not to place them at an unnecessary risk.
4. The vehicles shall be known as a primary unit, which will be the unit closest to the fleeing vehicle and the secondary unit, which will remain at a safe distance behind the primary unit but close enough to provide support and communicate with dispatch.
5. Consideration will be given to the reckless driving of the suspect.
6. If the suspect is not going to terminate voluntarily, the officer and supervisor will have to be able to justify a continued pursuit.

V. Responsibilities of Primary Unit

NO OFFICER SHALL ENGAGE IN PURSUIT IF HE OR SHE HAS NOT PASSED A PURSUIT DRIVING COURSE APPROVED BY THE DEPARTMENT.

- A. The driver of the primary unit shall notify dispatch with in pursuit and shall provide at least the following critical information to dispatch:
 1. Unit identification
 2. Violent felony for which the suspect is being pursued
 3. Suspect vehicle description, including license number
 4. Location, direction, speed of both vehicles
 5. Description of occupant(s) and if suspect is known to officer
 6. Any other important information about the suspect vehicle or environment (i.e., suspect is traveling without lights, almost hit a vehicle or fixed object, lost sight of vehicle).
- B. Based on the known information, the supervisor shall make the decision to either take further appropriate action or terminate the pursuit.
- C. No officer will pass another vehicle in pursuit without permission from a supervisor.
- D. No officer will intentionally make vehicle-to-vehicle contact without permission from the shift supervisor. This action must conform to the Departmental policy on use of deadly force. (see Departmental Policy on Deadly Force) .
- E. No officer will pursue a suspect the wrong way on any roadway.
- F. No roadblocks will be established without specific directions from a supervisor. This action must conform to the Policy on use of deadly force.
- G. Only fully marked police automobiles with all emergency equipment

activated will be used as pursuit vehicles.

- H. A motorcycle unit may become involved in a pursuit for a very brief time and will relinquish primary unit responsibility to a marked vehicle as soon as possible and must disengage from the pursuit.
- I. No unmarked vehicle shall be permitted to become involved in a pursuit.
- J. If a supervisor communicates with the driver of a pursuit vehicle, the driver shall acknowledge the communication.

VI. Supervisor's Responsibilities

- A. The shift supervisor shall have control over the activities of the pursuit.
- B. Once notified that a unit has become involved in a pursuit, the shift supervisor shall acknowledge his presence immediately, monitor the pursuit activities and provide the driver of the primary unit with appropriate direction.
- C. The shift supervisor shall request critical information that is necessary to evaluate the continuation of the pursuit.
- D. The shift supervisor has the authority to terminate any pursuit.
- E. Options for the shift supervisor to keep in mind are, but not limited to the following:
 - 1. In cases involving wrong-way drivers; parallel pursuits may be used.
 - 2. Notification of the next jurisdiction is encouraged.
 - 3. Channeling techniques may be used.
 - 4. Creating a compelling path.
- F. Post-pursuit chain of command notifications are required.

VII. Dispatch Responsibilities

- A. Dispatch shall coordinate critical information, both timely and accurately. If any of the information which should be provided by the primary vehicle is not provided, dispatch must inform the supervisor.

VIII. Termination of The Pursuit

- A. Factors influencing the termination of a pursuit:
 - 1. The driver of the primary unit and the shift supervisor shall continually evaluate the risks and likelihood of a successful apprehension of the suspect.
 - 2. The conditions of the pursuit become too risky for the safe continuation of the pursuit, i.e., it is futile to continue..
 - 3. A supervisor orders it terminated.
 - 4. If information is communicated that indicates the pursuit is out of policy (such as the crime was not a violent felony).

5. When normal communication is broken.
6. When visual contact is lost or the direction of travel cannot be determined.
7. When air support has made visual confirmation of the suspect vehicle.
8. When the suspect is known and he could be apprehended later.

IX. Interjurisdictional Pursuit

- A. The primary unit, before leaving his jurisdiction, shall update critical information to the dispatcher.
- B. The primary police vehicle shall remain as the primary vehicle in other jurisdictions.
- C. Upon receiving notification that the pursuit is entering another agency's jurisdiction, the dispatcher shall forward all critical information to that agency.
- D. When a pursuit enters this jurisdiction:
 1. Dispatcher shall update the critical information to the shift supervisor.
 2. The shift supervisor shall determine if the pursuit is in policy.
 3. The shift supervisor shall provide the appropriate direction to units.

X. Air Support

- A. Once contact is made with air support and air support has suspect vehicle in sight, ground pursuit shall terminate and officer shall turn off all emergency equipment and return to speed limit.

XI. Apprehension of Suspect(s)

- A. After a vehicular pursuit has ended and the suspects are being apprehended, it is preferable that the driver of the primary unit NOT arrest or take into custody of the driver of the vehicle.
- B. If possible, an officer from a back-up unit or the non-driving officer in the primary unit shall physically take the suspect(s) into custody.

XII. Care and Consideration of Victims

- A. Any bystanders (or family member) who are involved must be informed about the pursuit and offered reasonable assistance.

XIII. Pursuit Summary Report

- A. A pursuit summary report shall be filed by the primary officer and the

supervisor.

XIV. Evaluation and Critique

- A. An evaluation and critique of the pursuit shall be conducted by the appropriate division commander and bureau commander. Results of this evaluation shall be distributed to all personnel involved. These results will be used to evaluate the current pursuit activities.

XV. Discipline

- A. Any officer who is found to have violated policy will receive discipline according to the progressive discipline policy of the Department...

Training

Any agency that permits an officer to engage in a pursuit must require its officers and supervisors to be trained and certified in pursuit driving. A critical component to any pursuit management program is training. Officers and supervisors must know what is expected of each other. An excellent policy is useless if officers are not trained in its language and meaning. Training includes an emergency vehicle operations course (EVOC), pursuit decision-making training and policy analysis. The EVOC is a customary aspect of basic training but may be the only driving-related training available. This defensive driving must be supplemented with decision-making training and a thorough analysis of the departmental policy. There is also a need for officers and supervisors to understand how a policy is to be applied. In other words, beyond EVOC, training must incorporate at least the following four components:

1. Familiarity with policy issues (step-by-step and why);
2. When and how to apply driving and pursuit skills;
3. A "what-if" session at which officers and supervisors can ask questions and anticipate possibilities which they might confront; and
4. A test to demonstrate competence.

First, the policy must be explained, line-by-line, issue-by-issue to all officers,

supervisors, dispatchers and anyone else who may become involved in a pursuit situation. This educational process introduces each actor to his or her role and provides the opportunity for each to become familiar with the others' duties and expectations. For example, it is important that officers recognize and understand the role and responsibilities of the supervisors and dispatchers. In training sessions, reasons for the policy, including legislative actions and court decisions, are explained and pre-conceived notions, attitudes and natural reactions must be addressed. Similarly, concerns held by the public and actions taken by suspects need to be discussed.

Second, the examples of policy decision making are provided. Through video or other media presentations, personnel are exposed to the application of the policy elements. Questions which arise from these sessions are addressed in the "what-if" training.

Third, the "what-if" session creates a dialogue among the personnel. Here, each individual can ask, "what if ... " and expect an explanation for behavior from each level of personnel. That is, officers, supervisors, dispatchers and command staff all need to be thinking and responding comparably to similar situations. Fourth, personnel must understand the importance of completing the required forms properly and the assessment of the information for training needs and policy modifications. Fifth, officers must be made aware of the disciplinary actions that will follow a violation. Finally, officers must demonstrate an understanding of the issues covered in the policy and training. Beyond the scope of the officers' involvement in pursuit, is legislative assistance. Officers should be briefed on considered and pending legislation as well as court mandates.

Suggested Legislative Assistance

Restrictive pursuit policies will be relatively powerless if sanctions for fleeing and

eluding are minimal or ineffective. Our data show that officers and the public support harsh sentences. Of course, providing a harsh sentence might encourage some suspects to continue a flight if they fear the sanction more than they believe that they will be caught. The most comprehensive reform effort is Senate Bill S-923, The National Police Pursuit Policy Act of 1995, introduced by Senator Dorgan in June 1995. This Bill requires agencies to develop and implement policies, and report pursuit activities, among other things. It is based, in part, on the direction taken by the State of Utah which has passed a law which couples a harsh and mandatory sentence for fleeing and eluding with the rebuttable presumption that the driver of a car is its owner. The Utah law, "Failure to Respond to Officers' Signal to Stop" (U.C.A. 41-6-13.5, 13.7 and 14) also includes a provision that a vehicle that has been involved in a pursuit can be seized. Based on the Utah model, the following recommends could be incorporated into a proposed legislative package that might reduce the need to pursue to the degree done today and would increase the penalty and likelihood of imposing a penalty on those who flee.

1. Make the crime of "Fleeing and Alluding" a serious felony with a punishment more serious than most offenses for which pursuits are involved, including a high dollar fine and/or mandatory jail time. This MUST be linked with;
2. Create rebuttable presumption that the owner of a motor vehicle was the operator of the motor vehicle at the time of the pursuit; and
3. Include in legislation that a vehicle can be seized (criminally or civilly) after conviction of "fleeing and alluding."

A Concluding Comment

This study should be considered as one more step in the accumulation of knowledge about pursuit driving. Hopefully, technology will be developed so the whole concern about pursuit will be moot. If an officer could disable a vehicle remotely, without risking accident or

injury, all the energy and expense of pursuit issues, as they are known today, could be directed toward crime prevention and other law enforcement activities. Until that time, however, we must continue to address pursuit issues, including weighing its benefits and risks.

Appendix 1: Tables

Appendix 2: Questionnaires

Officers
Supervisors
Suspects
Public Opinion
Recruits

PURSUIT AND USE OF FORCE QUESTIONNAIRE POLICE OFFICERS

The University of South Carolina has been chosen by the National Institute of Justice to study the issues surrounding pursuit driving. The goals of the study are to assess police officers' opinions regarding pursuits. You have been selected to participate in the study and your opinions will be combined with those of other officers from around the country. Please note, that we are not asking for your name or any other identifying characteristics. Your answers will be kept strictly confidential.

Participation in the study is VOLUNTARY and no one will know if you completed a questionnaire or not. However, to reflect national opinions accurately, it is important that you answer all questions honestly. If you have any difficulties with any question, please ask the administrator for clarification.

If you are willing to participate, please sign below. When you turn in your questionnaire, please tear off the cover sheet so your name WILL NOT appear with your answers.

I am willing to participate in this study

SECTION I: GENERAL PURSUIT OPINIONS

In this section of the questionnaire, we are interested in your general opinions concerning pursuit.

It is important to recognize that we are interested in your personal opinions regardless of any pursuit policy your department may have.

Various offenses with different levels of severity are listed below. While on patrol you signal a vehicle to stop for one of these offenses. You have been signaling the suspect to stop for two blocks but he keeps increasing speed. The risk factors associated with the chase (traffic conditions, weather, roads, etc.) can be **low or high**. Please check which, if any, of the offenses would justify your continuing to pursue the suspect for both low and high risk factors.

	RISK FACTORS			
	LOW		HIGH	
	PURSUE		PURSUE	
	YES	NO	YES	NO
Traffic Violation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violent Felony - Reported Death ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DUI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violent Felony - No Reported Death.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Property Crime - Misdemeanor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police Officer Shot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stolen Vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Property Crime - Felony	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(other than stolen vehicle)				

Now we would like your opinion of appropriate punishment for someone who refused to stop his or her vehicle after ordered to do so. Please indicate which of the following you would recommend:

Fine: No ☐ Yes ☐

If Yes, what amount? \$ _____

Incarceration: No ☐ Yes ☐

If Yes, would you recommend

Jail or **Prison**

Months __ Years __

In general, do you think most suspects who flee:

have committed a serious offense.....Yes ☐ No ☐

have something to hide.....Yes ☐ No ☐

are just scared and want to escape.....Yes ☐ No ☐

If your department had a no pursuit policy that

was known by the public, in your opinion, what

percent of the suspects would flee from you after

being ordered to stop? _ _ _ %

What percent of the suspects who run from you are

driving impaired by drugs or alcohol? _ _ _ %

What percent of arrests after a pursuit result

in the use of force? _ _ _ %

What percent of arrests after a pursuit result

in excessive force? _ _ _ %

Research shows that the majority of pursuits are conducted by young male officers. Do you

agree?

YES ☐ NO ☐ UNSURE ☐

Please explain.

Why do you think most suspects run from you and begin a pursuit?

What three words or phrases would you use to describe the police officer most likely to engage in a pursuit?

What three words or phrases would you use to describe the police officer most likely to voluntarily terminate a pursuit?

What three words or phrases would you use to describe the police officer most likely to use excessive force after a pursuit?

SECTION II: PURSUIT CHARACTERISTICS

In this section of the questionnaire, we are going to ask you to agree or disagree with a number of statements. The first questions deal with your feelings during a pursuit. Other officers have told us that they experience a full range of emotions during a pursuit. Please circle the number that reflects your feelings while chasing a suspect.

For these questions, please use the following legend:

Strongly Agree.....SA

Agree A

Undecided..... U

Disagree..... D

Strongly Disagree.... SD

During a pursuit I feel:

SA A U D SD

Irritated.....[] [] [] [] []

Angry.....[] [] [] [] []

Stimulated.....[] [] [] [] []

Excited.....[] [] [] [] []

Nervous.....[] [] [] [] []

During a pursuit, I am
also concerned about:

SA A U D SD

Catching the Suspect.....[] [] [] [] []

Fear of an Accident.....[] [] [] [] []

Fear of an Injury.....[] [] [] [] []

Public Safety.....[] [] [] [] []

Teaching the Suspect a Lesson.....[] [] [] [] []

Now we would like to ask you your opinions concerning your department's policies and procedures toward pursuit. Again, please use the following legend:

Strongly Agree.....SA
Agree A
Undecided..... U
Disagree..... D
Strongly Disagree.... SD

SA A U D SD

I understand my department's
pursuit policy.....[] [] [] [] []

My department has a discretionary
pursuit policy.....[] [] [] [] []

My department has a very restrictive
pursuit policy.[] [] [] [] []

My department has a pursuit policy
that permits total discretion.....[] [] [] [] []

My department's pursuit policy
restricts too much discretion
to pursue traffic offenders.....[] [] [] [] []

My department's pursuit policy
restricts too much my discretion
to pursue property offenders.....[] [] [] [] []

My department's pursuit policy
restricts too much my discretion
to pursue violent offenders.....[] [] [] [] []

Finally, in this section, we are interested in your opinions regarding general characteristics of pursuit and use of force.

Strongly Agree.....SA
Agree A
Undecided..... U
Disagree..... D
Strongly Disagree.... SD

SA A U D SD

I have been trained adequately
in pursuit.....[] [] [] [] []

I have been trained adequately
in use of force.....[] [] [] [] []

If this department had a very
restrictive no-pursuit policy,
most suspects would flee from me.....[] [] [] [] []

If this department had a completely
discretionary pursuit policy, very few
suspects would attempt to flee from me.....[] [] [] [] []

Pursuits are important as a
deterrent to crime.....[] [] [] [] []

Pursuits are generally worth the
risks to me and to the public.....[] [] [] [] []

During a pursuit, I generally find
myself focusing only on apprehending
the offender.....[] [] [] [] []

During a pursuit, I evaluate the risks
and balance them against the need to
immediately apprehend the offender.....[] [] [] [] []

Evaluating the risks of pursuit and balancing
them against the need to immediately apprehend
the offender is not practical during the
heat of a pursuit.....[] [] [] [] []

If a pursuit suspect crashes and is injured,

he deserves what he gets.....[] [] [] [] []

SECTION III: GENERAL INFORMATION

Have you been involved in a pursuit as a primary driver during the past 12 months

YES [] NO []

If, no, please skip to the demographic information. If yes, please answer the following:

As a primary driver, in how many pursuits have you been involved? _ _ _

How many have resulted in accidents? _ _ _

How many have resulted in injuries? _ _ _

How many have resulted in death? _ _ _

How many have resulted in your feeling physically threatened by the suspect? _ _ _

How many have resulted in your using force to apprehend the suspect? _ _ _

During the past 12 months, have you been involved in a pursuit and NOT reported it to communication? _ _ _

During the past 12 months, how many pursuits have you terminated voluntarily because you felt it was too risky? _ _ _

During the past 12 months, how many pursuits have been terminated by supervisors because they were too risky? _ _ _

During the past 12 months, how many pursuits could have resulted in the use of excessive force but did not? _ _ _

Finally, please answer some demographic questions.

Year of Birth:

Ethnicity: African-American Hispanic Anglo/White Other

Date of Hire on police department:

Gender: M F

Rank:

Years at Rank:

Supervisors

SECTION I: GENERAL PURSUIT OPINIONS

ID _ _ _ _

In this section of the questionnaire, we are interested in your general opinions concerning pursuit.

It is important to recognize that we are interested in your personal opinions regardless of any pursuit policy your department may have.

Various offenses with different levels of severity are listed below. You are supervising an officer who has been signaling for two blocks a vehicle suspected of one of the violations but the suspect keeps increasing speed. The risk factors associated with the chase (traffic conditions, weather, roads, etc.) can be **low or high**. Please check which, if any, of the offenses would justify your officer continuing to pursue the suspect for both low and high

risk factors.

	RISK FACTORS	
	LOW	HIGH
	PURSUE	PURSUE
	YES NO	YES NO
Traffic Violation	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Violent Felony - Reported Death	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
DUI	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Violent Felony - No Reported Death	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Property Crime - Misdemeanor	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Police Officer Shot	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Stolen Vehicle	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Property Crime - Felony (other than stolen vehicle)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Now we would like your opinion of appropriate punishment for someone who refused to stop his or her vehicle after ordered to do so. Please indicate which of the following you would recommend:

Fine: No ☐ Yes ☐

If Yes, what amount? \$ _____

Incarceration: No ☐ Yes ☐

If Yes, would you recommend

_____ **Jail** or **Prison**

Months ____ Years ____

In general, do you think most suspects who flee:

have committed a serious offense.....Yes ☐ No ☐

have something to hide.....Yes ☐ No ☐

are just scared and want to escape.....Yes ☐ No ☐

If your department had a no pursuit policy that was known by the public, in your opinion, what

percent of the suspects would flee from you after

being ordered to stop? ____ %

What percent of the suspects who run from you are driving impaired by drugs or alcohol? ____ %

What percent of arrests after a pursuit result in the use of force? ____ %

What percent of arrests after a pursuit result in excessive force? ____ %

Research shows that the majority of pursuits are conducted by young male officers. Do you agree?

YES ☐ NO ☐ UNSURE ☐

Please explain.

Why do you think most suspects run from you and begin a pursuit?

What three words or phrases would you use to describe the police officer most likely to engage in a pursuit?

What three words or phrases would you use to describe the police officer most likely to voluntarily terminate a pursuit?

What three words or phrases would you use to describe the police officer most likely to use excessive force after a pursuit?

SECTION II: PURSUIT CHARACTERISTICS

In this section of the questionnaire, we are going to ask you to agree or disagree with a number of statements. The first questions deal with your feelings during a pursuit. Other officers have told us that they experience a full range of emotions during a pursuit. Please circle the number that reflects your feelings while chasing a suspect.

For these questions, please use the following legend:

Strongly AgreeSA
Agree A
Undecided U
Disagree D
Strongly Disagree ... SD

During a pursuit I feel:

	SA	A	U	D	SD
Irritated.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angry.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stimulated.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excited.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

During a pursuit, I am
also concerned about:

	SA	A	U	D	SD
Catching the Suspect.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fear of an Accident.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fear of an Injury.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Safety.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching the Suspect a Lesson.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Now we would like to ask you your opinions concerning your department's policies and procedures toward pursuit. Again, please use the following legend:

Strongly AgreeSA
Agree A
Undecided U
Disagree D
Strongly Disagree ... SD

SA A U D SD

I understand my department's
pursuit policy.....[] [] [] [] []

My department has a discretionary
pursuit policy.....[] [] [] [] []

My department has a very restrictive
pursuit policy.[] [] [] [] []

My department has a pursuit policy
that permits total discretion.....[] [] [] [] []

My department's pursuit policy
restricts too much discretion
to pursue traffic offenders.....[] [] [] [] []

My department's pursuit policy
restricts too much my discretion
to pursue property offenders.....[] [] [] [] []

My department's pursuit policy
restricts too much my discretion
to pursue violent offenders.....[] [] [] [] []

Finally, in this section, we are interested in your opinions regarding general characteristics of pursuit and use of force.

Strongly AgreeSA
Agree A
Undecided U
Disagree D
Strongly Disagree ... SD

SA A U D SD

My officers have been trained
adequately in pursuit.....[] [] [] [] []

I have been trained adequately
in pursuit.....[] [] [] [] []

I have been trained adequately
in use of force.....[] [] [] [] []

If this department had a very
restrictive no-pursuit policy,
most suspects would flee from me.....[] [] [] [] []

If this department had a completely
discretionary pursuit policy, very few
suspects would attempt to flee from me.....[] [] [] [] []

Pursuits are important as a
deterrent to crime.....[] [] [] [] []

Pursuits are generally worth the
risks to me and to the public.....[] [] [] [] []

During a pursuit, I generally find
myself focusing only on apprehending
the offender.....[] [] [] [] []

During a pursuit, I evaluate the risks
and balance them against the need to
immediately apprehend the offender.....[] [] [] [] []

Evaluating the risks of pursuit and balancing
them against the need to immediately apprehend
the offender is not practical during the

heat of a pursuit.....[] [] [] [] []

If a pursuit suspect crashes and is injured,
he deserves what he gets.....[] [] [] [] []

SECTION III: GENERAL INFORMATION

Have you been involved in a pursuit as a
primary driver during the past 12 months..... YES [] NO []

If, no, please skip to the demographic information.

If yes, please answer the following:

As a primary driver, in how many
pursuits have you been involved? _ _ _

How many have resulted in accidents? _ _ _

How many have resulted in injuries? _ _ _

How many have resulted in death? _ _ _

How many have resulted in your feeling
physically threatened by the suspect? _ _ _

How many have resulted in your
using force to apprehend the suspect? _ _ _

During the past 12 months, have you
been involved in a pursuit and NOT
reported it to communication? _ _ _

During the past 12 months, how many
pursuits have you terminated voluntarily
because you felt it was too risky? _ _ _

During the past 12 months, how many
pursuits have been terminated by
supervisors because they were too risky? _ _ _

During the past 12 months, how many
pursuits could have resulted in the
use of excessive force but did not? _ _ _

Finally, please answer some demographic questions.

Year of Birth:

Ethnicity: African-American Hispanic Anglo/White Other

Date of Hire on police department:

Gender: M F

Rank:

Years at Rank:

Suspects

PURSUIT AND USE OF FORCE QUESTIONNAIRE SUSPECT SURVEY

We are conducting a study of pursuit driving and police use of force. There are many unresolved issues concerning police pursuits, and we want to get YOUR opinions.

THIS INTERVIEW IS CONFIDENTIAL. We are not asking for your name, and you will never be identified as answering these questions.

1. In the last year, have you been chased in a vehicle by the police when you were driving?

_____ YES _____ NO (If NO, end interview)

If YES: What happened? (circle one)

- a. You terminated it.
- b. You outran the police.
- c. The police terminated it.
- d. You crashed.
- e. Other

2. Were you caught by the police? YES _____ NO _____

If caught did the police beat you up? YES _____ NO _____

Did you report being beaten up? YES _____ NO _____

Did you receive any injuries? YES _____ NO _____

If yes, how severe? Minor Serious Life Threatening

Did you receive medical treatment? YES _____ NO _____

Were you impaired by drugs or alcohol? YES _____ NO _____

3. Initially, why did you run from the police? (check as many as apply)

- _____ a. Scared/didn't want parents or others to know.
- _____ b. Running from crime scene/to avoid arrest.
- _____ c. Drivers license suspended/revoked.
- _____ d. Stolen car.
- _____ e. Possession of drugs.
- _____ f. Possession of weapons.
- _____ g. Afraid of being beaten by the police.
- _____ h. Driving car without permission (but not stolen.
- _____ i. Under the influence of alcohol or drugs.

_____ j. Other_____

4. Once the police started chasing you, would you ever have stopped on your own?

YES _____ NO _____

5. If the police had turned off their lights and siren, when would you have slowed down?

In Town: NEVER WHEN I FELT SAFE I DON'T KNOW

On a Highway: NEVER WHEN I FELT SAFE I DON'T KNOW

On a Freeway: NEVER WHEN I FELT SAFE I DON'T KNOW

6. How many blocks (or miles) would you have to drive to feel safe?

In Town: BLOCKS 1 2 3 4 Don't Know

On a Highway: MILES 1 2 3 4 Don't Know

On a Freeway: MILES 1 2 3 4 Don't Know

7. Would you have run from the police if you had known the police would chase you aggressively until you stopped or crashed?

YES _____ NO _____

8. Were you willing to run at all costs?

YES _____ NO _____

9. Were you concerned for your safety?

YES _____ NO _____

10. Were you concerned about the safety of others?

YES _____ NO _____

11. Did you think you would get caught?

YES _____ NO _____

12. Did you ever think about the punishment you might get if you were caught?

YES _____ NO _____

If YES: What did you think the punishment would be if you got caught?

13. Have you ever been in a vehicle chase with the police before this incident?

YES _____ NO _____

If YES: What happened? (circle one)

- a. You terminated it.
- b. You outran the police.
- c. The police terminated it.
- d. You crashed.
- e. Other _____

Were you caught by the police? YES _____ NO _____

If caught did the police beat you up? YES _____ NO _____

Did you report being beaten up? YES _____ NO _____

Were you impaired by drugs or alcohol? YES _____ NO _____

14. Year of Birth _____

15. Ethnicity: African-Am. Hispanic Anglo Other

16. Gender: (circle one) Male Female

17. With whom do you live? (circle one)

Self Wife Roommate Parents Other

Public Opinion

1994

1995

1996

PURSUIT AND EXCESSIVE FORCE QUESTIONNAIRE
PUBLIC OPINION SURVEY - TELEPHONE

Hello, my name is _____. I'm working with the University of South Carolina and we are involved in a study of police pursuits and the use of force. There are many unresolved issues concerning pursuit and the use of force and we would like **your** opinions.

The research we are conducting is part of a federal project being conducted here, in Columbia and other cities. As such, we are not asking for your name and you will never be identified as answering these questions. Your answers will be kept strictly confidential. You have been selected only because your telephone number was selected randomly.

May we ask you a few questions?

FIRST, WE HAVE SOME GENERAL QUESTIONS CONCERNING LAW ENFORCEMENT OFFICERS.

A. On a scale including, Very High, High, Average, Low and Very Low, how would you rate the honesty and ethical standards of law enforcement officers?

VH H A L VL

B. How much respect do you have for law enforcement officers in your area - a great deal, some or hardly any?

VH H A L VL

C. In some places in the country there have been charges of police brutality. Do you think there is any police brutality in Aiken?

YES NO NO OPINION

D. Do you know anyone who has been physically mistreated or abused by the police?

YES NO

E. Would you approve of a law enforcement officer striking a citizen who ...

- | | | |
|--|---|---|
| 1. was attacking the policeman with his fists? | Y | N |
| 2. was attempting to escape from custody? | Y | N |
| 3. Had said vulgar and obscene things to the policeman | Y | N |
| 4. was being questioned in a murder case? | Y | N |

SECOND, WE HAVE SOME QUESTIONS ABOUT PURSUIT DRIVING:

Various offenses with different levels of severity will be read to you. While on patrol an officer signals a vehicle to stop for one of these offenses. The suspect does not stop for two blocks and he keeps increasing speed. The risk factors associated with the chase (traffic conditions, weather, roads, etc.) are **low**. Please check which, if any, of the offenses would justify your continuing to pursue the suspect.

	pursue	not pursue
Traffic Violation	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Violent Felony - reported death	<input type="checkbox"/> -1	<input type="checkbox"/> -2
DUI	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Violent Felony - no reported death	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Property Crime - misdemeanor	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Police Officer Shot	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Stolen Vehicle	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Property Crime - Felony (other than stolen vehicle)	<input type="checkbox"/> -1	<input type="checkbox"/> -2

Now please assume that the risk factors associated with the chase are **high**. Which offense or offenses would justify a continued pursuit?

	pursue	not pursue
Traffic Violation	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Violent Felony - reported death	<input type="checkbox"/> -1	<input type="checkbox"/> -2
DUI	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Violent Felony - no reported death	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Property Crime - misdemeanor	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Police Officer Shot	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Stolen Vehicle	<input type="checkbox"/> -1	<input type="checkbox"/> -2
Property Crime - Felony (other than stolen vehicle)	<input type="checkbox"/> -1	<input type="checkbox"/> -2

A. What is an appropriate punishment for someone who refused to stop his or her vehicle after ordered to do so. What punishment would you like to see for fleeing and eluding a law enforcement officer?

Would you like to see a fine, jail or prison sentence. Please indicate the amount:

Fine: \$ *Jail:* Months *Prison:* Years.

NOW WE HAVE SOME QUESTIONS CONCERNING POLICE PURSUIT POLICIES AND YOUR OPINIONS ABOUT THOSE WHO RUN FROM THE POLICE AND THE OFFICERS WHO CHASE THEM.

A. What percent of the suspects would flee from the police if they knew police would not chase them?

____%

B. What percent of persons who flee from the police should be beaten?

---%

C. Why do you think most suspects run and begin a pursuit?
(do you think they have just committed a serious crime, they are scared or they have something to hide?)

Serious Crime Scared Something to Hide

d. Do you think many suspects who run are driving impaired by drugs or alcohol?

YES NO

FINALLY, WE ARE ASKING YOU TO IDENTIFY THE NUMBER THAT BEST REPRESENTS YOUR AGREEMENT OR DISAGREEMENT WITH THE FOLLOWING STATEMENTS:

A. Generally, I have confidence in the police in my area.

Strongly Agree Strongly Disagree
5 4 3 2 1

B. A police department should leave the decision to pursue up to each officer.

Strongly Agree Strongly Disagree
5 4 3 2 1

C. A police department should have a very restrictive pursuit policy.

Strongly Agree				Strongly Disagree
5	4	3	2	1

D. A police department should have a pursuit policy that always leaves the decision to a suspect up to the officer.

Strongly Agree				Strongly Disagree
5	4	3	2	1

E. A police department should have a pursuit policy that leaves the decision to pursue traffic offenders up to the officer.

Strongly Agree				Strongly Disagree
5	4	3	2	1

F. A police department should have a pursuit policy that leaves the decision to pursue property offenders up to the officer.

Strongly Agree				Strongly Disagree
5	4	3	2	1

G. A police department should have a pursuit policy that leaves the decision to pursue violent offenders up to the officer.

Strongly Agree				Strongly Disagree
5	4	3	2	1

H. If a police department had a very restrictive no-pursuit policy, most suspects would flee from the police.

Strongly Agree				Strongly Disagree
5	4	3	2	1

I. Pursuits are important as a deterrent to crime

Strongly Agree				Strongly Disagree
5	4	3	2	1

J. Pursuits are generally worth the risks to the public.

Strongly Agree				Strongly Disagree
5	4	3	2	1

PLEASE ANSWER SOME QUESTIONS ABOUT YOUR OWN BACKGROUND.

Year of Birth:

Ethnicity: African-American Hispanic Anglo Other

Gender: Male Female

What kind of neighborhood do you live in?

Upper middle working-class projects

How long have you lived in this neighborhood? _____ Years

With whom do you live?

SELF SPOUSE ROOMMATE PARENTS OTHER

When was the most recent contact with the police?

What happened?

(Positive or negative)

Do you have any family or friends who have been beaten-up by the police?

YES NO

FINALLY, WE HAVE SOME QUESTIONS SPECIFICALLY ABOUT THE AIKEN COUNTY SHERIFF'S OFFICE.

1. Based on your experience, and what you have heard, how would you rate the Aiken County Sheriff's Office Deputies in accomplishing their part of the criminal justice mission?

Excellent Good Fair Poor Not Sure

2. How would you rate the honesty and ethical standards of the Aiken County Sheriff's Office?

Very High High Average Low Very Low No Opinion

3. How would you rate the Aiken County Sheriff's Office on the following?

A. Solving Crime

Excellent Good Fair Poor Not Sure

B. Preventing Crime

Excellent Good Fair Poor Not Sure

C. Responding Quickly to calls for help and Assistance?

Excellent Good Fair Poor Not Sure

D. Being Helpful and Friendly?

Excellent Good Fair Poor Not Sure

E. Treating People Fairly?

Excellent Good Fair Poor Not Sure

F. Not Using Excessive Force?

Excellent Good Fair Poor Not Sure

G. Professional Appearance?

Excellent Good Fair Poor Not Sure

4. Generally, how much respect do you have for the Deputies in Aiken County?

Great Deal Some Hardly Any None Don't Know

5. Should the Sheriff's Office rank calls for service and respond according to the seriousness of the situation?

YES NO

THAT COMPLETES OUR SURVEY, THANK YOU VERY MUCH FOR YOU TIME.

Recruits

PURSUIT AND USE OF FORCE QUESTIONNAIRE
POLICE RECRUIT 1

The University of South Carolina has been chosen by the National Institute of Justice to study the issues surrounding pursuit driving. The goals of the study are to assess police officers' opinions regarding pursuits. You have been selected to participate in the study and your opinions will be combined with those of other officers from around the country. Please note, that we are not asking for your name or any other identifying characteristics. Your answers will be kept strictly confidential.

To reflect national opinions accurately, it is important that you answer all questions. If you have any difficulties with any question, please ask the administrator for clarification.

SECTION I: GENERAL PURSUIT OPINIONS

In this section of the questionnaire, we are interested in your general opinions concerning pursuit.

It is important to recognize that we are interested in your personal opinions regardless of any pursuit policy your department may have.

Various offenses with different levels of severity are listed below. While on patrol you signal a vehicle to stop for one of these offenses. You have been signaling the suspect to stop for two blocks but he keeps increasing speed. The risk factors associated with the chase (traffic conditions, weather, roads, etc.) can be **low or high**. Please check which, if any, of the offenses would justify your continuing to pursue the suspect for both low and high risk factors.

	RISK FACTORS			
	LOW		HIGH	
	PURSUE		PURSUE	
	YES	NO	YES	NO
Traffic Violation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violent Felony - Reported Death ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DUI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violent Felony - No Reported Death.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Property Crime - Misdemeanor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police Officer Shot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stolen Vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Property Crime - Felony	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(other than stolen vehicle)				

Now we would like your opinion of appropriate punishment for someone who refused to stop his or her vehicle after ordered to do so. Please indicate which of the following you would recommend:

Fine: No [] Yes []
 If Yes, what amount? \$ ____

Incarceration: No [] Yes []
 If Yes, would you recommend
 Jail or **Prison**
 Months __ Years __

In general, do you think most suspects who flee:

have committed a serious offense.....Yes [] No []

have something to hide.....Yes [] No []

are just scared and want to escape.....Yes [] No []

If your department had a no pursuit policy that

was known by the public, in your opinion, what

percent of the suspects would flee from you after

being ordered to stop? __ __ %

What percent of the suspects who run are

driving impaired by drugs or alcohol? __ __ %

What percent of arrests after a pursuit result

in the use of force? __ __ %

What percent of arrests after a pursuit result

PROPERTY OF

National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

in excessive force? _ _ _ %

Research shows that the majority of pursuits
are conducted by young male officers. Do you agree?

YES ☐ NO ☐ UNSURE ☐

please explain.

Why do you think most suspects run from you and begin a pursuit?

What three words or phrases would you use to describe the police officer most likely to engage
in a pursuit?

What three words or phrases would you use to describe the police officer most likely to
voluntarily terminate a pursuit?

What three words or phrases would you use to describe the police officer most likely to use
excessive force after a pursuit?



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