

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 public's 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.