VEHICLE THEFT AND RECOVERY IN TEXAS CITIES ALONG THE UNITED STATES - MEXICAN BORDER

BY

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Chapter 1 Introduction

The phenomena of vehicle theft in the U.S. - Mexican border region first came to my attention in the Summer of 1989, while studying for my undergraduate degree at the University of Texas. During a discussion of the informal relationships between local elites in U.S. and Mexican border cities, the topic of auto theft arose. Milton Jamail, the instructor of the course and a noted researcher in U.S. - Mexican border affairs, expressed the opinion that stolen vehicle recovery was highest in those cities with strong cross-border relationships among its law enforcement agencies. Other than the work of Michael V. Miller, another noted borderland researcher, little research has been conducted regarding vehicle theft in the U.S. - Mexican Border Region.

In fact, automobile theft in general has been the subject of little scholarly research in the past ten years. The primary focus of recent crime related research has been upon robbery, burglary and vandalism. For example at least ten recent works have been produced regarding various facets of crime perpetrated in victims' homes. Therefore, in light of the closer relationship between the United States and the Republic of Mexico resulting from the North American Free Trade

Agreement, the continued increase in automobile thefts in the U.S. southern border region and low recovery rates research in this area is desperately needed.

Statement of the Problem

Since 1991, the overall frequency of vehicle theft in the United States has declined. From 1994 to 1995, the two most recent years for which data are available, incidences of vehicle theft in the U.S. declined by 3.8% from 1,530,287 in 1994 to 1,472,732 in 1995 (Statistical Abstract of the United States 1995). Texas recorded a larger decrease in overall incidences of the crime declining by 5.3% during the same period from 110,772 occurrences in 1994 to 104,939 in 1995 (Texas Department of Public Safety, 1995). However, theft data alone do not fully illustrate the problem of vehicle theft in Texas. A more significant issue arises when the rate of stolen vehicles which are later recovered is analyzed. For the U.S. as a whole, the stolen vehicle recovery rate is approximately 62 % (Harlow, 1988). However, in Texas cities along the U.S.- Mexican Border the percentage of stolen vehicle recoveries varies remarkably from a high of more than 50% in El Paso to a low of 7% in Del Rio (Texas Department of Public Safety UCR Data, 1995-1996).

Michael Miller (1987) maintains that there is very little incentive for cities to dedicate substantial financial resources to stolen vehicle recovery because the political and financial returns are minimal. The overwhelming majority of stolen vehicle losses are covered by insurance. With the exception of the payment of a small insurance deductible and the temporary deprivation of personal transportation, the victim suffers no major injury. Claim losses are then added to the annual insurance premium increases borne by all Texans.

Statement of the Research Purpose

The purpose of this research is to explain the wide disparity in stolen vehicle recovery rates among Texas cities in counties bordering the Republic of Mexico. While the focus is on law enforcement efforts at stolen vehicle recovery, externalities such as access to Mexico and city size are explored. This research aims to provide border area law enforcement agencies with new information to aid them in developing techniques to increase stolen vehicle recovery rates.

Chapter Summaries

This paper is divided into 6 chapters. Chapter 2 reviews the available literature on vehicle theft assessing the perpetrators, their motives, and methods of operation. An additional section is provided to give insight into the factors affecting stolen vehicle recovery rates. Chapter 3 gives a perspective on the legal and historical setting of vehicle theft in the United States with a particular emphasis on the phenomenon of vehicle theft in South Texas along the international boundary with Mexico. The chapter concludes by introducing the conceptual framework and stating the three formal hypotheses. Chapter 4, the methodology chapter, begins with a refinement of the conceptual framework. The variables are defined; the research methodology explained and defended; the data sources identified; and the statistical techniques described. Chapter 5 reports the results of the three analyses employed in this project. Findings are reported in tabular form and discussed in a detailed narrative. Chapter 6 provides a summary of the findings, draws conclusions, assesses the limitations of the research, and offers opportunities for future study on the subject.

Chapter 2 A Review of the Literature

The most recent Uniform Crime Reporting (UCR) data reveal that the incidences of vehicle theft in the United States peaked at 1,661,700 in 1991 and declined slowly in subsequent years. (Beekman, 1993: 17). From 1984 to 1991, the frequency of vehicle thefts increased by 61 percent (Beekman, 1993: 17). Nevertheless, there has been very little scholarly attention to the crime of vehicle theft in the U.S., especially considering the economic cost of vehicle crime upon the community. (Harris and Clarke, 1991: 228). Motor vehicle thefts currently account for approximately 12 percent of all property crimes (Harris and Clarke, 1991: 228).

Early work by researchers such as Irwin Berg (1943) and Leonard Savitz (1959) described auto theft as a youthful pastime committed for temporary recreational use (Miller, M., 1987: 12). More recent works by Mansfield et.al. (1974) and Harris and Clarke (1991) have focused on "car chopping" (dismantling and sale of parts) as a motive for vehicle theft. Michael Miller (1987) directed his research toward understanding the phenomena of theft and removal of vehicles from the U.S. to Mexico along the border between the two nations.

The purpose of this chapter is to review the literature pertaining to vehicle theft and recovery in the United States since 1940 with particular emphasis on cities located in the U.S. - Mexican border zone. The chapter will profile the perpetrators, examine their motives, their methods of operation, and the factors affecting stolen vehicle recovery rates.

The Perpetrators of Vehicle Theft

The literature identifies several characteristics of the perpetrators of vehicle theft: sex, race, age, economic status, family background, intelligence, and gang membership. Each of these traits will be examined separately.

It is quite clear from the literature that males are more likely to be involved in vehicle crime than females (Higgins and Albrecht 1981: 37). Savitz (1959: 133) found that males outnumbered females by a ratio of 40:1 in arrests for vehicle theft in 1956. Further, of those in prison for vehicle theft, males outnumbered females by a ratio of 120:1 (Savitz 1959: 133). In fact, since historical data have long revealed that females are seldom the instigators of vehicle crime, many researchers fail to explore the issue of an offender's gender. They instead begin with the assumption that the vehicle theft offender is male (Berg 1943, Nye et. al. 1958).

Initially, the literature seems less conclusive regarding race as a factor in vehicle theft. Berg (1943: 394) found that African Americans were less likely to steal automobiles than whites. He supposed that African American youth tinkering with cars would attract the attention of police and, therefore, reduce their opportunity to steal cars. Or, alternatively, that automobile owners might take extra precautions such as locking their cars more frequently when in or near a predominately African American neighborhood (Berg, 1943: 394). Browning (1954) found that in Los Angeles, auto thieves tended to be white. McGrath (1967) reached a similar conclusion from his work in Newark, New Jersey. Schepses (1961: 37) agreed, finding that of those boys serving sentences in New York State's youth correction facility between 1952 and 1954, most were white, about one-third African American and the rest "Puerto Ricans." Savitz (1959: 134) found in 1956 that while African Americans committed a disproportionate number of auto thefts, a majority were committed by whites.

Later studies concluded that African Americans were the primary perpetrators of vehicle theft. Schwartz and Puntil (n.d.) reported that African Americans were more likely to be involved in joy riding and stripping than whites, but that the differences were quite small. Wolfgang, et. al. (1972: 68-70) found that African Americans had nearly twice the arrest rate for auto theft as whites. Reppetto (1976: 170) confirmed this conclusion. McCaghy et. al. (1977), in their

study of youth offenders in Toledo, Ohio found that African Americans were overrepresented among those arrested for auto theft. Research based on official data generally shows that African Americans are over-represented in delinquent conduct (Higgins and Albrecht 1981: 32).

To reconcile these apparently conflicting results regarding the racial background of the typical auto thief, it is necessary to consider the chronology of the existing research. The earliest research available was Irwin Berg's 1943 "Comparative Study of Car Thieves." Most of the research until 1967 concluded that vehicle theft was dominated by whites (Berg, 1943; Wattenburg and Balistrieri, 1952; Browning, 1954; Savitz, 1959; Schepses, 1961; and McGrath, 1967). Later works, identified the typical vehicle thief as a minority or African American (Schwartz and Putil, n.d.; Wolfgang et. al., 1972; Repetto, 1976; McCaghy, 1977; and Higgins and Albrecht, 1981). Thus, the collective literature of vehicle theft demonstrates a trend of early domination of car theft by whites overtaken by minorities, particularly African Americans, by the 1970s.

Age of the typical vehicle thief seems to vary with the relative scarcity or universality of vehicle use. Berg (1943: 394) found in his study, limited to the

^{&#}x27;Higgins and Albrecht 1981 doubt that whites dominated vehicle crime into the 1960's. They argue that most early research was the result of unreliable self-report studies. They contend that most studies based upon official data showed African Americans to be over-represented among vehicle thieves as early as the 1950's.

period from 1940 to 1942, that the typical vehicle thief was under age 23. Savitz (1959: 137) confirmed these findings, identifying the typical vehicle thief as a youth over age 14. Gould, who examined data over a period of years since 1933, concluded that adults tended to dominate vehicle theft when vehicles were scarce in the early 1930s and again during the World War II era. Vehicle crimes during eras of scarcity were attributed to older, experienced professionals. However, as vehicles became more widely available during the late 1930s and again in the postwar era, theft became a crime dominated by youths (Gould 1969: 56). By the 1970s nearly all research pertaining to auto theft concluded that the crime was committed primarily by young people (Reppetto 1976; Higgins and Albrecht 1981).

There is a presumption that property crime such as vehicle theft is typically perpetrated by economically disadvantaged members of society. Recent literature pertaining to vehicle theft supports this notion (Higgins and Albrecht 1981: 32, Reppetto 1976: 170, Schwartz and Puntil: n.d., and Nye et. al. 1958). In fact, two-thirds of all juvenile auto thieves live in low income areas (Higgins and Albrecht 1981: 31). Early vehicle theft research revealed a contrary conclusion that vehicle theft was once dominated by middle and upper - middle income persons (Savitz 1959: 137 and Schepses 1961: 58). Schepses (1961: 60) concluded that middle class boys had more exposure to automobiles within their family than children

growing up in a low income environment. Thus, more affluent boys are more conscious of vehicles and probably learn to drive at a much earlier age than other boys (Schepses 1961: 60). To resolve this conflict, the available literature examined as a whole seems to indicate that as vehicle use in the United States moved from scarcity in the late 1940s to become more universal in the late 1960s, auto theft changed from being a pastime of the economically advantaged to become dominated by persons of lower economic status.

Although no recent work has been done relating family background and vehicle theft propensity, both Savitz (1959) and Schepses (1961) completed research in this area. Schepses (1961: 62) found that of those convicted of vehicle theft, persons who were from two parent households were less prone to recidivism. Savitz (1959: 134) reported that most auto thieves were unmarried. This phenomenon would not be unexpected as most data identify the typical perpetrator as a juvenile.

Both Savitz and Schepses indicated that the absence of, or poor relationship with, the offender's father was related to the commission of vehicle theft (Savitz 1959: 137 and Schepses 1961: 59). Schepses (1959: 59) further concluded that vehicle thieves tend to come from homes with dominant mothers, contending that youth from such households were "expressing their masculinity" through vehicle

theft. Future research in this area is desperately needed to verify and update the family background profile for the typical automobile thief.

Likewise, little recent research has been done pertaining to the intelligence of the typical vehicle thief. Berg (1943: 392) concluded that car theft is done by people of at least normal intelligence. Savitz (1959: 143) found that although most car thieves had Intelligence Quotients (IQ) below normal (100), they nevertheless scored significantly higher than his experimental control group. Schepses (1961: 62) reported that juvenile auto thieves were "brighter" than other delinquents. Further, he concluded that the more intelligent of those youths incarcerated for vehicle theft were most likely to "stay out of trouble" when released from detention (Schepses 1961: 62). Whether these conclusions regarding the intelligence of vehicle thieves may be applied to current conditions is unclear. However, given the proliferation of vehicle security devices today (Beekman 1993: 18) and the continued high incidence of vehicle theft (Beekman 1993: 17), it is likely that vehicle thieves are at least of normal intelligence. Further research in this area is necessary to validate the earlier findings.

Gang and theft ring membership has been identified in the literature as a major factor in vehicle theft, primarily in the cities along the U.S. - Mexican border (Miller, M. 1987: 13). Higgins and Albrecht (1981: 35) reported that 35 percent of those who reported stealing cars were gang members. Despite the

prominence of bi-national vehicle theft, very little is known about these border area car theft rings. The limited information currently available is derived from the small number of informants captured north of the border or the few informants that law enforcement have within these organized gangs (Miller, M. 1987: 18). The large city of El Paso is dominated by numerous car-theft rings; the largest, which specializes in the theft of one or two high - demand units, uses sophisticated techniques such as two-way radios and scout cars (Miller, M. 1987: 20).

Conversely, in the smaller cities of Laredo, McAllen and Brownsville, there are fewer car theft rings. Theft rings in these cities employ youths for cross-border theft as they usually are willing to work for lower pay than adults and are less likely to be prosecuted if apprehended (Miller, M. 1987: 20).

It is now possible to draw conclusions on several characteristics of the typical automobile thief. Throughout the history of car theft, the crime has been dominated by males (Higgins and Albrecht 1981: 37, Savitz 1959: 133, 137). The racial background of perpetrators has changed over time. Vehicle crime was dominated by whites through the 1950s. However, by the early 1970s, it had become a crime committed primarily by minorities, particularly African Americans. Since African Americans make up only a small percentage of the population in cities along the U.S. - Mexican border, it is presumed that this racial group does not commit a significant percentage of vehicle crimes in these cities.

Vehicle crime has been dominated by adults in the past during periods of vehicle scarcity, however, it has typically been a crime of youth (Gould 1969: 56). Early literature (Savitz 1959 and Schepses 1961) found that vehicle thieves were from higher income families. Later research (Higgins and Albrecht 1981, Repetto 1976) revealed a trend toward economically - disadvantaged individuals. Savitz (1959) and Schepses (1961) reported that the absence of, or poor relationship with, the father was a contributing factor in a youth's propensity to steal cars. The typical automobile thief is probably more intelligent than most youth offenders; however, such thieves may have lower intelligence than the general population (Schepses 1961: 62). A large proportion of vehicle thieves are gang or theft ring members (Higgins and Albrecht 1981: 35), particularly in the U.S. - Mexican border region (Miller, M. 1987: 13).

Motives of Vehicle Thieves

Understanding the phenomena of vehicle theft requires a grasp of the motives behind the crime. Until the very recent introduction of sophisticated electronic security devices, vehicle theft has been a relatively easy crime for even the low-skilled individual (Gould 1969: 58). The ease of theft and limited monitoring of outbound vehicles has made car theft of particular concern in the U.S.- Mexican border region (Miller, M. 1987: 19). The literature reveals several

key motives for vehicle theft including: chopping, selling vehicles as a whole unit, using the vehicle in other crimes, and joyriding. Each of these motivations will be examined separately.

Car chopping, the dismantling of stolen vehicles to be sold in the used parts market, is a key theft motivation in the United States. Berg (1943: 392) found that cars were often stolen for this purpose. Mansfield (1974) reported that the chopping motive was particularly significant among professional thieves. Older cars were typically stolen to remove sheet metal parts and ornamental equipment. while the theft of newer cars was related to removal of expensive audio equipment (Harris and Clarke 1991: 229). Harris and Clarke (1991: 231), in their research examining the effects of federal parts marking legislation concluded, however, that the car chopping motive was overemphasized. They revealed that Federal vehicle theft data fail to distinguish between vehicles recovered intact and vehicles recovered with parts removed. Michael Miller, in his research of vehicle theft in the U.S. - Mexican border zone, likewise downplayed the importance of car chopping. He reported that the although Juarez, the large Mexican city south of El Paso. Texas, "is known to contain scores of chop shops 4most units are left intact" (Miller, M. 1987: 20). While car chopping seems to be an important motive for vehicle theft, the literature concludes that it is not the most significant reason vehicles are stolen in the United States.

The theft of vehicles to be sold intact is also an important motive for vehicle theft in the U.S. Savitz (1959: 138) was one of the first researchers to note the importance of this facet of vehicle larceny. Mansfield and his colleagues came to similar conclusions in their 1974 research. Such thefts are uncommon in regions distant from international boundaries, as computerized vehicle titles makes disposal of stolen vehicles quite difficult domestically. However, theft of vehicles for sale as a whole unit is particularly prevalent in the U.S. Mexican border zone (Miller, M. 1987) and among traffickers of illicit narcotics (Beekman 1993: 19 and Craig 1980: 353). As mentioned previously, most vehicles stolen from cities along the U.S. - Mexican border are sold intact to Mexican nationals (Miller, M. 1987: 19). Targets for theft are often chosen based upon a shopping - list order" (Ibid.). Narcotics traffickers are particularly notorious for purchasing vehicles which are "stolen to order" (Beekman 1993: 19). Intact sale of stolen vehicles is thus predominately a phenomena unique to U.S. cites along the frontier with Mexico and not a leading motive for vehicle larceny in regions removed from the border.

Vehicles are often stolen for use in other crimes, particularly in the U.S. Mexican border zone. One of the reasons is quite obvious, as a stolen vehicle
makes identification of the driver difficult unless he is apprehended (Savitz 1959:
138). A less obvious purpose is related to property forfeiture laws in both the
United States and Mexico. U.S. statutes allow law enforcement agencies to

confiscate vehicles suspected of being used in narcotics trafficking. Mexican law proscribes all imported vehicles less than four years old, requiring officials to confiscate such vehicles as contraband. Drug traffickers have a particular affinity for fast and durable U.S. vehicles to navigate the difficult border terrain. Of those drug traffickers arrested, many are apprehended driving vehicles with altered or missing Vehicle Identification Numbers (Craig 1980: 353). Utilizing stolen vehicles, drug-traffickers avoid the risk of confiscation of their own property.

Stolen vehicles are used in a number of criminal activities on both sides of the U.S. - Mexican border. Like narcotics traffickers, merchandise smugglers prefer to drive more powerful and durable U.S. models of cars and trucks to run contraband to the interior (Miller, M. 1987: 21). A small number of stolen are used in the commission of other crimes in Mexico (Ibid.). "Some cars and trucks stolen in Laredo and the Lower Rio Grande Valley are used to transport drugs and undocumented workers to San Antonio and Houston" (Miller, M. 1987: 19). Craig (1978: 120) and Michael Miller (1987: 21) discovered that stolen U.S. vehicles were often used as a means of exchange for narcotics and as bribes to Mexican police to "look the other way," as crime is committed. Stolen vehicles are thus frequently involved in other criminal activities in the U.S. - Mexican border region.

Joyriding, the temporary theft and later abandonment of vehicles for pleasure, was identified by the literature as the most common motive for vehicle theft in the United States since the 1940s (Berg 1943; 392, Savitz 1959;132;²) Schepses 1961: 62, Mansfield et. al. 1974: 464, and Harris and Clarke 1991: 231). Savitz (1959: 133) demonstrated that most vehicles were stolen for joyriding by noting that the recovery rate for stolen vehicles was 92% at the time of his research. Most stolen cars are recovered intact (Savitz 1959: 138). Gould (1969: 56) concluded that while early vehicle theft was driven by economic gain, most today is simply joyriding. Michael Miller (1987: 22) noted that joyriding was an exception in the U.S. - Mexican border area, however, because there are a relatively low number of locally-stolen abandoned units recovered in border cities. He concluded that joyriding is "relatively minor along the border" (Miller 1987: 22). Thus, with the exception of the unique circumstances of the U.S. Mexican frontier, the available literature labels joyriding as the leading motive for vehicle theft in the United States.

² Savitz notes that legislators became aware of this phenomena quite early. Some states responded with a law against operating a car without the consent of the owner, which carried a lesser penalty than vehicle larceny. The law thus, focused on the perpetrators intent of not permanently depriving the owner of his car.

Methods of Operation

Previous research has identified three principal methods of operation for vehicle thieves: stealing vacant vehicles from public areas, owner perpetrated insurance fraud, and carjacking. Motor vehicle theft is seldom a violent crime (Gould 1969: 51). Most are stolen from public areas such as parking garages, shopping mall parking lots or directly from the street when the owner is not present (Miller, M. 1987: 17 and Wolf Harlow 1988: 3). In most areas of the United States, thefts occur mainly at night. However, in cities along the U.S. Mexican Border, thefts typically take place during the day as favorite target areas are unsecured shopping mall parking lots (Miller, M. 1987:17). Thieves gain entry to vehicles by using slender strips of metal to disengage the lock from between the panels of the door. Once inside the ignition may be activated by breaking open the steering column.

In a minority, but significant number of vehicle theft cases, the owner is the initiator of vehicle theft (Miller, M. 1987: 17). Owners who are unable to meet their financial obligations or needing cash either deliver their vehicles to car thieves or place them in previously determined locations for removal and disposal. Often the owner will pay the perpetrator for his services and receive the insurance settlement. However, in cases of especially desirable vehicles, the owner is paid twice: once by the perpetrator and again by the insurer.

A final method of car theft has received a great amount of attention in the media recently due to its especially violent nature. Carjacking, the armed theft of a vehicle from the driver, makes up a small but significant number of vehicle thefts annually (State Legislatures 1993: 9). In 1988, only 3% of vehicle thefts or vehicle theft attempts involved violence (Wolf - Harlow 1988). By 1992, vehicle thefts involving violence had fallen to less than 1% of the total incidences of carjacking (Beekman 1993: 17). Cars stolen in this manner are frequently recovered, suggesting that joyriding is the primary motive. However, recent increases in the use of sophisticated security devices have also contributed to incidences of carjacking. Newer sport and luxury models are equipped with ignition lockout devices that require the manufacturer's original keys (Beekman 1993: 18). Thus, some typically nonviolent car thieves have resorted to carjacking in order to gain access to certain models (Beekman 1993: 18).

Factors Affecting Stolen Vehicle Recovery Rates

Factors affecting the recovery of stolen vehicles are all but ignored in most vehicle theft research. Low incidences of stolen vehicle recovery are predominately a localized phenomena of the U.S. - Mexican border region.

Throughout the U.S. interior, vehicle theft is overwhelmingly related to joyriding with very high recovery rates. Thus, most research focuses on the characteristics of

the perpetrator (Higgins and Albrecht 1981, Schepses 1961). Other researchers sought methods of preventing vehicle theft (Harris and Clarke 1991, Reppetto 1976). Mansfield et. al. (1974) and Miller (1986) focused on prediction. Michael Miller (1987), and to a lesser degree, Leonard Savitz (1959) make efforts to reveal factors related to stolen vehicle recovery. Savitz (1959: 134) and Miller (1987) both address the issue of city size and vehicle theft and recovery. Miller (1987) alone examines the effects that accessibility to Mexico and unilateral police activities have upon stolen vehicle recovery rates. Several researchers concur with Michael Miller's conclusion that cross-border police relationships are vital in conducting governmental business in border regions, particularly in stolen vehicle recovery. Both Hall (1988) and Miller (1987) examine the effects of police corruption and legal system differences upon recovery rates, noting that both are factors in reducing the effectiveness of law enforcement in recovering stolen vehicles. Finally, Miller (1986 and 1987) and Harris and Clarke (1991) reveal the effect of the proximity to international boundaries upon stolen vehicle recovery.

One would expect that cities with larger populations would have generally higher crime rates than smaller cities. Savitz (1959: 134) found this to be true for the crime of vehicle theft. Although Michael Miller agreed with Savitz' general conclusion, his research of vehicle theft in the U.S. - Mexican border had contrary results. He instead found that "theft rate ½ has little relationship to city size on the

Texas Border; rather, rates sharply increase with southeast movement from El Paso to Brownsville" (Miller, M. 1987: 14). His research revealed that the smaller cities of McAllen and Laredo had much lower recovery rates than the larger city of El Paso (Ibid.). El Paso's low incidence of crossborder theft (demonstrated by its relatively high recovery rate) was attributed to the higher incidence of theft for joyriding that other researchers have noted as the leading motive for auto thieves in large cities. Further research in this area is desperately needed to follow up on these findings.

Miller (1987: 19) noted that accessibility to Mexican twin cities from border towns in the United States is an important factor in the recovery rate of vehicles stolen from those cities. Of the cities with the lowest recovery rates, "all but McAllen (Texas) are located right at the boundary" (Miller 1987: 19). Thieves are thus able to steal units within these cities and drive them into Mexico with little time or effort expended (Miller 1987: 19). "Thefts from the U.S. are quickly completed with cross-border flight; as outbound flows at international bridges, as a rule go unmonitored by American authorities" (Miller 1987: 19). Local elite contention that any move to increase inspections of outbound traffic would severely impede vital international commerce, has blocked efforts to improve surveillance of traffic leaving the United States.

U.S. law enforcement agencies have had little success in combating vehicle theft. Surprisingly, localities rarely commit sufficient resources. For example, Laredo and McAllen dedicate only one police officer each to their vehicle theft divisions (Miller, M. 1987: 22). The Texas Department of Public Safety "complements their efforts with several investigators deployed in stations across the border region" (Miller, M 1987: 22). Local police have conducted periodic sting operations and stakeouts of theft target areas such as shopping malls with no change in vehicle theft rates (Miller, M. 1987; 22-23). In Brownsville and San Diego, vehicle screening was attempted at border checkpoints producing no increase in apprehensions for vehicle theft (Miller, M. 1987; 23-24). Federal officials have had limited success recovering stolen vehicles by implementing brief visual inspections of high volume theft models "searching for signs of altered or missing Vehicle Identification Numbers. Suspicions vehicles are referred to secondary inspection stations (Miller, M. 1987: 23-24). However, despite their efforts, the stolen vehicle recovery rate for Border cities has changed little in recent years. In response, perhaps due to frustration, some law enforcement officials admit to crossing the border into Mexico and "stealing" vehicles back (Miller, M. 1987; 25).

Once vehicles are removed from the United States into Mexico, there are two main avenues of facilitating recovery once a stolen vehicle is located: formal

recovery by treaty and informal methods. Recovery by treaty is the least preferred method as it involves a lengthy legal process. First, the U. S. Consulate must "submit a petition and vehicle documents to the Mexican Federal Court for review1/4 sometimes taking months to complete" (Miller, M. 1987: 25). Formal recovery is thus employed only when the vehicle is "held in contention" or in the possession of a police agency far from the border where no informal arrangement or relationships might exist (Miller 1987: 25). Typically, stolen vehicles are recovered from Mexico using informal methods.

"Informal relations are the lifeblood of the border" (Jamail 1980: 8). Binational communities rely on informal agreements for fire protection, law enforcement, education and healthcare (Sloan and West 1976: 465). Informal law enforcement cooperation may include assistance in fugitive searches, passing information regarding organized crime, and in the recovery of smuggled or stolen property. In El Paso and Juarez, for example, local, state and Federal government cooperation has increased in response to cross-border crime (D'Antonio 1965: 218-19). "Many issues are dealt with in an extra-legal fashion to avoid the time consuming processes of international bureaucracy" (Jamail 1980: 8). Cross-border relationships are vital in the process of recovering vehicles stolen in the United States and smuggled into Mexico. Informal cross-border contacts between U.S. and Mexican law enforcement agencies are the primary means used in facilitating

stolen vehicle recovery in the border zone (Miller, M. 1987: 25; Price 1973: 178). "Informal recovery depends on a working relationship between American and Mexican law enforcement agencies." All local police departments along the Texas - Mexican border, with the exception of McAllen, have designated a special officer to act as a liaison with Mexican agencies with respect to cross-border vehicle thefts (Miller, M. 1987: 26; Reidinger, P 1992: 68-69). McAllen, incidentally, has an unusually low rate of stolen vehicle recoveries (Miller 1987: 31).

The differences between the U.S. and Mexican legal systems, both in written law and daily practice, are a challenge to those involved in stolen vehicle recovery. "To protect the national automobile industry in Mexico, the import of vehicles manufactured in the last four years is prohibited" (Miller, M. 1987; 20). Older vehicles are allowed to be brought into the 20 kilometer border zone under permit after paying a 15 percent duty. Thus, stolen vehicles smuggled into Mexico not meeting these requirements are considered contraband subject to seizure rather than viewed as stolen property (Miller, M. 1987; 20). "Many Mexican officials at all agency levels follow the custom of using confiscated U.S. cars and trucks for police and personal use, despite prohibition of the practice by the 1982 U.S. - Mexico Convention specific to stolen vehicles" (Miller, M. 1987; 26).

Nondisclosure of vehicle recovery by Mexican officials is particularly common

when the vehicle is from the interior of Texas. Local U.S. police departments are less concerned with vehicles stolen from other jurisdictions and, thus, less likely to exert much influence for their recovery (Miller, M. 1987: 25). Likewise, Mexican police seldom have strong interest in the prosecution of vehicle thieves" (Miller, M. 1987: 20).

An additional problem facing U.S. law enforcement agencies attempting to recover stolen vehicles in Mexico is the country's comparatively lax documentation of vehicle ownership. Vehicle identification numbers (VIN's), are not required in Mexico. "Registration records are not computerized." "Necessary papers are reportedly easy to obtain through a bogus-document market flourishing throughout the nation." (Miller, M. 1987: 20). Nevertheless, Mexican police rarely conduct visual inspections of vehicle identification markings usually relying solely on presentation of potentially fraudulent documents.

Police corruption is also an obstacle to recovering stolen vehicles from Mexico. "American police cannot count on much help from their Mexican counterparts." Many Mexican authorities have a "vested interest" in the perpetration of auto theft, with some involved in the actual commission of the crime (Miller, M. 1987: 18). Often, stolen vehicles gain admission to Mexico with the payment of a bribe to Mexican customs officials (Miller, M. 1987: 19). Stolen vehicles used in the narcotics trade are often offered as bribes to Mexican police in

return for their cooperation or protection (Miller, M. 1987: 21). Bribes are frequently demanded by police to gain their assistance in returning stolen vehicles to their U.S. owners (Hall 1988: 175). In such an environment, stolen vehicle recovery is seldom easy unless the victim is willing to pay to have the vehicle returned.

A final factor affecting stolen vehicle recovery rates is the proximity of a city to an international border (Harris and Clarke 1991: 231). International borders "provide a sanctuary" for criminals and stolen property in the other nation (Miller, M. 1986: 3). Fugitives from justice in the United States have often fled to Mexican border cities (Samora 1973:27). Police are constrained by jurisdictional boundaries, limiting their ability to pursue suspects and properly conduct criminal investigations.

Over the past decade, a large market for "illicitly obtained vehicles" has developed in northern Mexico. The U.S. is the primary source of vehicles for this market (Miller, M. 1987: 17). "Estimates of southbound thefts presently range from 90 percent of the total thefts in Brownsville to 80 percent in El Paso" (Miller, M. 1987: 18). While the vehicle theft rates have remained stable throughout most of the U.S. over the past ten years, rates have increased considerably in Texas and most border communities (Miller, M. 1987: 15). The most troubling issue regarding vehicle theft in border cities is that relatively few vehicles stolen there

are later recovered and returned to their owners (Miller, M. 1987: 15). In economic terms, "although border cities accounted for less than 5 percent of Texas vehicle thefts, unrecovered value of units stolen from these cities was about 12 percent of the state total" (Miller 1987: 15). Vehicle losses account for a majority of economic value lost to property crime in border communities while they constitute only a fraction of total losses in Houston, Dallas, and San Antonio (Miller 1987: 15). Despite low recovery rates of stolen vehicles from U.S. Cities along the Mexican Border and a high demand for U.S. manufactured vehicles in Northern Mexico, there seems little initiative on either side to stem the flow.

Conclusion

This chapter has reviewed the literature pertaining to stolen vehicle theft and recovery in the United States since 1940 with a focus on the cities of the U.S. Mexican Border zone. The literature identified the perpetrators, examined their motives, their methods of operation, and the factors affecting stolen vehicle recovery rates. Several conclusions may be drawn.

The typical perpetrator of vehicle theft today is an African American male under the age of 23, from a lower income family. He may be smarter than most criminals but is probably not as intelligent as the general population. Auto thieves,

often from single-parent, urban environments, are commonly involved in gang activity.

The literature identified several motives for auto theft including: car chopping, selling intact, using in other crimes, and joyriding. By far, the most common motive for vehicle theft in U.S. cities is joyriding. However, in cities along the U.S. - Mexican border, theft of vehicles to be sold intact in Mexico was identified as the overwhelming motive.

The methods of operation of vehicle thieves is generally common throughout the nation. Most are stolen from parking lots, city streets, or parking garages at night. Border area thefts, however, are most common during the day while their owners are shopping. A significant minority of thefts involve their owners, who make their vehicles available to thieves in order to collect insurance settlements. Recent media attention to the violence of carjacking has become a concern to vehicle owners; however, incidences of this type of car theft are extremely rare.

Stolen vehicle recovery rates in the U.S. are affected by several factors including: city size, accessibility to Mexico, police efforts, international relationships and cooperation between of law enforcement agencies, Mexican police corruption and proximity to international borders. The literature reveals an inverse relationship between city size and recovery rates throughout most of the

nation, except in cities along the Mexican Border. Accessibility to Mexico and cooperation between U.S. and Mexican law enforcement both affect stolen vehicle recovery rates. Police corruption in Mexico makes recovery of stolen vehicles there difficult; however, corruption is not a quantity that may be measured statistically. It is clear that areas in close proximity to the Mexican border do have lower stolen vehicle recovery rates.

This chapter has defined the two separate dynamics present regarding vehicle theft and recovery in the United States today. Vehicles stolen in most cities are stolen by youth for short-term transportation, which the literature identifies as joyriding. In border cities, most vehicle theft is committed to later sell the vehicle in Mexico. Regionally, law enforcement planners must realize these differing motives and plan differing strategies to combat these apparently similar, but essentially different types of vehicle crime. The next chapter will provide an overview of the historical and legal setting specific to vehicle theft and recovery the South Texas Border Region. The remainder of this paper will focus exclusively upon this border-specific phenomenon..

Chapter 3 Vehicle Theft and Recovery Historical/Legal Setting

Introduction

The previous chapter reviewed the literature on vehicle theft in the United States. With exception of the research of Michael Miller, there has been little research on vehicle theft in the southern borderlands of the United States. The purpose of this chapter is to focus upon the aspects of vehicle theft and recovery that are unique to the border environment. First, the chapter will examine the relevant historical context surrounding the Texas - Mexico border region. Then, focus will turn to framing the problems faced by border law enforcement agencies in their efforts to recover stolen vehicles along the vast expanse of the Texas - Mexico border region. Finally, the chapter will conclude by refining the research purpose and building the conceptual framework of this research project.

History of the Texas Border Region with Mexico

The international boundary between the Texas and Mexico was established by treaty after Texas Independence in 1836. It was confirmed as the Rio Grande River by the United States and Mexico with the establishment of the International Boundary Commission in the last quarter of the 19th Century. The Texas section of the border extends 1,561 miles from the Gulf of Mexico to the Organ

Mountains West of El Paso. Trade, which thrived in the region when it was under the exclusive control of the Mexican government, soon became regulated and taxed as the two nations installed customs houses on their respective sides of the boundary. A flourishing blackmarket resulted to meet demand for goods which were legal and/or inexpensive in one nation and proscribed and/or heavily taxed in the other nation. Fugitives from law enforcement have long sought refuge from prosecution on the opposite side of the Rio Grande River. By the middle of the 20th Century, due largely to an increasing income disparity between the two nations, the market grew for consumer goods stolen in the United States and sold at deep discounts in Mexico (Miller 1987: 12).

Legal Setting

Vehicles provide an extremely attractive target for cross-border thieves.

They are easily stolen from parking lots, city streets, and even the driveways of people's homes. Because false alarms are frequent, alarm systems seldom deter thieves. For vehicles stolen near the Mexican Border, it is only a short drive, until the vehicles pass undetected into Mexico. Detection of stolen vehicles is poor because there are no consistent monitoring mechanisms of outbound international traffic crossing the international bridges. It would seem a simple task to strategically place law enforcement personnel at all International crossing points in

a "border screen." U.S. police could be armed with a list of stolen vehicles, foiling their removal from the country. However, due to the close proximity and easy access to Mexico, vehicles are typically removed from the country within minutes of it being stolen and long before their owners report the theft to the police.

Further, local elites have historically resisted increased monitoring of border checkpoints because it impedes the traffic of goods moving in both directions across the congested border bridges. Border economies rely heavily on commerce to sustain municipal coffers.

International law prevents law enforcement agencies from pursuing investigations across international boundaries. U.S. law enforcement's efforts at recovering stolen vehicles are further stymied by the fact that there is little incentive for Mexican law enforcement officials to apprehend and return stolen vehicles to their U.S. owners. Despite an international accord requiring Mexican officials to actively pursue the return of vehicles suspected as being stolen in the United States, the treaty is often ignored. Pay for Mexican law enforcement officials is quite low in comparison to their American counterparts. Additionally, vehicles for use in their daily activities are always in short supply. Therefore, Mexican law enforcement agencies rely heavily upon confiscated vehicles to provide transportation for their officers (Miller, 1987: 26). U.S. law enforcement

agencies do have limited success at recovering stolen vehicles from Mexico. The following two sections outline the two most commonly used methods.

Formal Recovery (Recovery by Treaty)

Legally, there is only one method available for local law enforcement agencies to recover stolen automobiles, recovery by treaty. This formal method is the least preferred method of stolen vehicle recovery. The process was devised in the 1930s to provide a legal means that the two national governments might use to recover stolen vehicles. However, the process is long and quite cumbersome. First, it must be established that a particular unit is being held by Mexican law enforcement authorities. Then the U.S. Consulate must submit a petition and vehicle documents to the Mexican Federal court for review. The process often takes several months despite recent efforts to streamline the process. This method is seldom used by border law enforcement unless the vehicle is being held by law enforcement agencies removed from the border area. The preferred method of recovery is through informal channels as described below (Miller 1987: 26).

Informal Recovery

The method of stolen vehicle recovery preferred by U.S. local law enforcement throughout most of the border region is an informal agreement with

local Mexican law enforcement agencies. This process involves cooperation and reciprocity by law enforcement agencies on both sides of the border. Most large Texas cities in the border region have designated an officer as liaison to work with local Mexican law enforcement. This person, working through informal relationships formed with officials in Mexican law enforcement agencies, acts as a broker to secure the return of stolen vehicles. In return, the U.S. liaison might provide favors, gifts, or assistance in obtaining border crossing documents. Since most vehicles are recovered by Mexican state judicial police, whose tenure is often short in the border region due to frequent transfers, building relationships is a difficult and ongoing challenge. Nevertheless, most vehicles recovered in Mexico are retrieved as a result of these informal processes (Miller 1987: 27).

The Conceptual Framework

At this point, it is necessary to begin forming the conceptual framework of this research. The literature revealed three major factors that affect stolen vehicle recovery rates in the United States. This research intends to test three hypotheses formulated from the previous research.

The first hypothesis tests for a relationship between the existence of cross-border law enforcement relationships and the stolen vehicle recovery potential.

Jamail (1980), Miller (1987), and Sloan and West (1976) all suggest that informal

cross-border relationships are integral to governing in the border environment. To test these relationships, the number of weekly contacts is used to measure these cross-border relationships. Stated formally:

H₁: There is a positive relationship between the number of weekly contacts made between local law enforcement agencies and their Mexican counterparts and the stolen vehicle recovery rate.

Frid icer

The second hypothesis tests for a relationship between a city's access to Mexico and law enforcement's success in recovering stolen vehicles. Previous research revealed that most vehicles stolen from cities in the U.S. interior are for the purpose of joy-riding and are later recovered. Miller (1987) maintains that most vehicles stolen in the border region are not recovered, due to easy access to the Republic of Mexico and its black market for stolen vehicles. To test this relationship between stolen vehicle recovery rate and access to Mexico, access to Mexico is measured in miles from the city to the U.S. - Mexican border. Restated:

H₂: There is a positive relationship between a city's distance from an access point to Mexico and the city's stolen vehicle recovery rate.

The third hypothesis tests for a relationship between a city's size and law enforcement's success at recovering stolen vehicles. Savitz (1959) noted that larger cities tended to have lower stolen vehicle recovery rates than smaller cities. Miller (1987) found no such relationship. In this research, the relationship between a city's size, determined by its population, and its stolen vehicle recovery rate is tested. Specifically:

H₃: There is a negative relationship between a city's population and the stolen vehicle recovery rate in Texas border cities. $S_{2^{-1/2}}$

Conclusion

This chapter has provided background information regarding the history and legal setting faced by law enforcement charged with recovering stolen vehicles in the Texas - Mexican borderlands. By exploring these issues, three key concepts and their possible relationship to the phenomena of stolen vehicle recovery in the region were identified. Finally, the conceptual framework was developed and the formal hypotheses introduced. The next chapter lays out the methodologies employed to gather data and test for correlation of the previously mentioned factors.

Chapter 4 Methodology

The previous chapter examined the historical and legal setting of the Texas-Mexican Border region relative to vehicle theft and recovery. It concluded with the statements of the hypotheses which expressed the relationship between the dependent measure: stolen vehicle recovery potential and three independent measures: cross-border relationships, city access to Mexico, and city size. The purpose of this chapter is to discuss the methodology used to test the hypotheses. Topics include: the operationalization of the hypotheses, the population and sampling method, the variables, research methodologies, data sources, data sets and statistics used.

The Population and Sample

The population in social research is the complete set of subjects about which a researcher is interested in learning something. The sample is an observed subset of the population (Newbold 1991: 9). In this research, the population is all vehicle theft divisions of all of the incorporated cities and towns of the counties of Texas bordering the Republic of Mexico. The sample selected represents the 26 cities reporting Uniform Crime Data to the Texas Department of Public Safety for

the 12 month period from January 1, 1995 to December 31, 1995, the most recent period in which a full data set is available.

Operationalization of the Hypotheses

Four variables were selected to operationalize the concepts: stolen vehicle recovery potential, cross-border relationships, city access to Mexico, and city size. Each variable will be explained separately and summarized in Table 4.1.

The dependent measure stolen vehicle recovery potential is operationalized by the variable stolen vehicle recovery rate. The value was calculated by dividing the total number of locally stolen vehicles that were recovered during the reporting period by the total number of vehicles stolen during the reporting period for each locality. The result was a ratio from 0 to 1.0.

The first independent measure, cross-border relationships, is operationalized through the variable "weekly cross-border contacts." This variable was formulated by calculating the total number incidences of weekly contacts made between U.S. law enforcement agencies and their counterparts in Mexico.

The second independent measure, access to Mexico, is operationalized by the variable "distance from Mexico." This variable was formulated by calculating

the distance between a city's downtown area and the nearest outbound border - crossing point.

The final independent measure, city size, is operationalized by the variable "population." This variable was simply the estimated population of each city in the sample on January 1, 1996.

Table 4.1

Operationalization of the Hypotheses

Variable	Hypothesis	Data Source	Variable Definition	Mean
Dependent:	_			
Stolen Vehicle		Texas DPS	Value Range From	0.4
Recovery Rate		UCR Report	0 to 1	
	N/A	1996		
Independent:	-			
1. Weekly		Telephone	Actual Value	2.08
Contacts	+	Interview	Range from 0 - 13	1
2. Access to		Map Data	Mileage Value	
Mexico	+	2 Sources	Range from 0 - 86	13.05
3. Population		Texas State Data	Actual Value	
*	_	Center 1996	Range from 1,712 - 583,431	51,151

Two research methodologies were utilized in this project, Survey Research and Analysis of Existing. The following sections describe how these methodologies were employed to test the three formal hypotheses.

Survey Research

The methodology employed to collect data for the independent variable, "weekly contacts," was survey research. Babbie (1975: 276) notes that one of the advantages of survey research is that it allows for large samples or sampling populations that are widely dispersed. This methodology is particularly applicable to the population in this research in that the subjects are scattered over a distance of more than 1,500 miles. In addition, the expense of employing direct observation of the sample would have been lengthy and prohibitively expensive. Therefore, survey research was the most appropriate data collection method available for this facet of the project.

The survey consisted of a single question with five possible responses to identify the type and frequency of contacts between U.S. and Mexican law enforcement agencies on the subject of stolen vehicle recovery (Appendix I). The first attempt at data collection, distribution of the survey instrument by facsimile from February 10 - 14 1997, achieved a 0 percent response rate. To increase the response rate, the survey was re-administered by telephone from February 24 - 28, 1997. Subjects were screened by requesting to speak to the person in charge of vehicle theft in their department. Twenty-three of twenty-six departments participated for a response rate of 88.5%. Only a frequency table is listed below to protect the identity of the respondents (Table 4.2).

The main advantage to using telephone surveys is their tendency to increase response rates as the presence of the interviewer encourages participation (Babbie 1975: 268-269). A "good" response rate for a mailed survey would be between 60 and 70% (Babbie 1975: 265). The average rate for telephone surveys is typically 80-85%. Thus, the response rate of 88.5% for the second attempt at gathering data exceeded expectations. An additional advantage of the telephone survey was that the methodology allowed for the screening of the participant to assure that the target of the survey was the person actually responding to the question. Finally, it allowed the researcher to gather other information volunteered by the subject after responding to the survey instrument (Babbie 1975: 275).

There are several weaknesses to survey research. First, standardized questionnaires often make it difficult to "tap what is most appropriate to most respondents." (Babbie: 276-277). Second, the researcher cannot "get the feel for the total life situation of the subject in contrast with a participant observer." (Babbie 1975: 277). Finally, due to the rigidity of a survey, when a new unexpected variable is encountered, the instrument cannot be modified (Babbie 1975: 277).

Table 4.2
Frequency Table of Weekly Contacts Between U.S. and Mexican Law Enforcement Agencies

# Contacts	Frequency	% of Total
0	13	48.1
1	2	7.4
2	2	7.4
3	2	7.4
4	1	3.7
5	1	3.7
6	1	3.7
11	1	3.7
12		3.7
Missing	3	11.1
Total	27	100.0

These issues were overcome by a flexible survey instrument. The survey, although specifying five possible responses, left open the possibility for the subject to offer a response which was not one of the five choices. The undefined "Other type of contact" reduced the rigidity of the instrument allowing the respondent to offer some insight that would otherwise only be possible to ascertain through the much more time consuming and expensive methodology, direct observation.

Analysis of Existing Statistics

The research methodology utilized to collect data on the remaining variables: stolen vehicle recovery rate, population, and distance from Mexico was analysis of existing statistics.

Data for the three variables were taken from three separate sources. Data to calculate the stolen vehicle recovery rate were taken directly from the Texas Department of Public Safety's Uniform Crime Reporting Data (UCR for the year 1995) (Table 4.3). The mean stolen vehicle recovery rate was .40 or 40%. The population data utilized was collected from The Texas State Data Center's "Texas State Population Estimates" (Texas A&M, 1995) based upon their projection of population on January 1, 1996 (Table 4.4). The population of cities in the sample varied widely from 1,712 persons in La Villa to 583,431 persons in El Paso. The

mean population was 51,151. Finally, the variable distance which operationalizes the concept of access to Mexico was collected by measuring the distance from each city's center to the nearest border crossing into Mexico, (Table 4.5) utilizing two map sources: The Roads of Texas (Shearer Publishing: 1995) and Streets USA mapping software (American Business Information, Incorporated: 1996). Distance from the Mexican Border likewise varied widely with Alpine more than 86 miles from the border and 8 cities immediately adjacent to the frontier. The mean distance was just more than 13 miles.

Table 4.3 Recovery Rate for Locally Stolen Vehicles

City	1995		
·	Vehicles	Vehicles	Recovery
	Stolen	Recovered	Rate
Alpine	3	3	1,000
Alamo	32	15	0.469
Anthony	19	3	0.158
Brownsville	534	140	0.262
Del Rio	96	9	0.094
Donna	82	49	0,598
Eagle Pass	76	22	0,289
Ed Couch	3	0	0.000
Edinburg	145	24	0.166
El Paso	3882	2028	0.522
Elsa	22	8	0.364
Harlingen	304	99	0.326
Hidalgo	30	13	0,433
Horizon City	6	1	0.167
La Joya	2	1	0.500
La Villa	1	0	0,000
Laredo	886	360	0.406
Marfa	2	2	1.000
Mc Allen	867	294	0.339
Mercedes	44	17	0.386
Mission	179	26	0.145
Pharr	284	78	0.275
Roma	24	10	0.417
San Juan	67	37	0.552
Socorro	42	17	0.405
Weslaco	263	115	0.437

Source: Texas Department of Public Safety UCR Data 1995

Table 4.4

Population of Texas Border Cities: January 1, 1996

City	Population
Alpine	5993
Alamo	10935
Anthony	3612
Brownsville	10870
Del Rio	34361
Donna	13495
Eagle Pass	24806
Ed Couch	3653
Edinburg	35773
El Paso	583431
Elsa	5608
Harlingen	53864
Hidalgo	5056
Horizon City	2475
La Joya	3871
La Villa	1712
Laredo	162122
Marfa	2496
Mc Allen	100589
Mercedes	15174
Mission	38101
Phart	39848
Rio Grande City	131524
Roma	10930
San Juan	24327
Socorro	28636
Weslaco	27812

Source: Texas State Data Center 1995

Distance Between Cities and the Mexican Border

City	Distance (In Miles)
Alpine	86.0
Alamo	14,0
Anthony	27.0
Brownsville	0.0
Del Rio	0.0
Donna	13.0
Eagle Pass	0.0
Ed Couch	14.0
Edinburg	16.0
El Paso	0.0
Elsa	16.0
Harlingen	12.0
Hidalgo	0.0
Horizon City	11.0
La Joya	6.0
La Villa	16.0
Laredo	0.0
Marfa	60,0
Mc Alien	8.0
Mercedes	7.0
Mission	12.0
Pharr	10.0
Roma	0,0
San Juan	12.0
Socorro	0.0
Weslaco	9.0

Table 4.5

Sources: The Roads of Texas (Shearer Publishing: 1995) and

Streets USA (American Business Information, Incorporated: 1996)

There are two major advantages to using this methodology. First, there is a large quantity of inexpensive and readily available government data that may be accessed quickly (Babbie 1975: 286). Second, the methodology is unobtrusive, having no impact upon the subjects being measured (Babbie 1975: 287). It was crucial to this research for the remaining data to be inexpensive, easily accessible, and unobtrusive, as data collection for the first variable, "contacts," was expensive, time consuming and obtrusive.

The disadvantages to using analysis of existing statistics are questions of validity, reliability, and comparability. Validity is a problem when utilizing analysis of existing statistics due to the fact that the variables represented by the data available for analysis may not exactly correspond to the variables that you wish to study (Babbie 1975: 286).

Validity was only a small factor with the population variable, a bit more significant with the variable distance, and very significant regarding stolen vehicle recovery rate. First, the population data utilized reflected the population of each city as of January 1, 1996. Stolen vehicle recovery rate data represented the entire year 1995. This issue should have little or no effect on the results of this research, however, as relative difference in population was most crucial. Further, there has

been no notable difference in the population growth rates of border cities relative to each other in the recent past.

Second, questions of validity were more important regarding the variable distance as the map sources utilized were intended to only approximate actual distances. Validity was improved by utilizing two map sources and averaging differences between results.

Finally, validity was most at risk by utilizing stolen vehicle recovery rate as a measure of how many vehicles were stolen and removed to Mexico. The border dynamic assumes that vehicles not recovered were removed to Mexico. An alternative, but unlikely alternative explanation might be that stolen vehicles are disguised with new paint and Identification Numbers and utilized locally or transported to other locations within the United States. Information from Chapter 2 of this paper, provides evidence to the contrary of this alternative explanation.

Issues questioning reliability and comparability arise when utilizing two or more sets of data from differing sources. It is possible under such circumstances that the individual units of analysis define and measure the variables somewhat differently (Babbie, 1975; 286). No important issues arose in this research that would question the reliability or comparability of the data. First, there are no independent alternative sources of population and stolen vehicle recovery data.

Second, the reconciliation of the two map data sources in calculating the variable distance and the fact that the data were rounded to the nearest mile, lessen the importance of a more precise measure. Ideally, as Babbie (1975: 286) notes, it is preferred to use two sets of data from the same source. However, in the absence of this possibility the methods utilized should produce reliable results.

Statistics Utilized

The primary statistical technique utilized in this research was Pearson's bivariate correlation coefficient. Bi-variate correlation demonstrates relationships
between two variables that may not be obvious from a cursory examination of the
data. In this research, the stolen vehicle recovery rate was separately correlated
with city size, distance from Mexico, and weekly contact between U.S. and
Mexican law enforcement agencies.

Conclusion

This section introduced the research methods and data analysis employed in this research. The strengths and weaknesses of each were noted. The next section of this paper reports the results of the data analysis.

Chapter 5

Findings

The previous chapter of this paper explained the research design and procedures followed through data collection and analysis. The purpose of this chapter is to report the results of the three separate data analyses in order to test the formal hypotheses stated in Chapter 3.

Correlation Analysis: Stolen Vehicle Recovery Rate - Contacts

In the first hypothesis, a positive relationship between cross-border law enforcement communications and stolen vehicle recovery rate was expected. The results of correlation analysis did not support the hypothesis. In fact, the Pearson's Correlation Coefficient was negative (-) 0.3627, a moderately strong negative indicator of correlation.

The negative relationship demonstrated by the results of data analysis does not necessarily indicate the relationship between the two variables is negative. It is possible that there was a problem of operational validity with the survey methodology. Incorrect data may have been reported for at least two reasons. First, throughout the survey, it was noted that many of the respondents reporting low or zero numbers of contacts seemed embarrassed, even though they were assured that

their identity would be protected. Therefore, it is conceivable that other subjects may have over-reported their contacts with Mexican law enforcement. Perhaps, there was shame or fear that the public may interpret reports of no contacts as demonstrating law enforcement's poor effort in recovering stolen vehicles. Second, since a survey represents only a "snap - shot in time," it is possible that the respondent was biased toward a recent week or unusually busy week rather than what is typical.

Correlation Analysis: Stolen Vehicle Recovery Rate - Access to Mexico

The second hypothesis tested the relationship between a city's access to Mexico and its stolen vehicle recovery rate. As anticipated, a positive relationship was revealed by the data. The value of the Pearson's Correlation Coefficient was + 0.7191, a very strong indicator of correlation.

Correlation Analysis: Stolen Vehicle Recovery Rate - City Size

The third hypothesis, operationalizing the relationship between a city's size and the stolen vehicle recovery rate expected a negative correlation. The results of data analysis on the twenty-six cases reporting data did not support the hypothesis. The Pearson's Correlation Coefficient was slightly positive +0.0130. The value of

the correlation coefficient was not significant, indicating no relationship between the two variables. Cities in the interior of the United States have typically demonstrated a moderate negative correlation between the two variables, making important distinctions between inland cities and those along the U.S. - Mexican Border.

Conclusion

This chapter has reported and analyzed the data indicated in chapter 4 of this paper. The findings indicate an unexpectedly high negative relationship between law enforcement contacts with their Mexican Counterparts and the stolen vehicle recovery rate. Further, there is a strong positive relationship between a city's distance from Mexico and its ability to recover stolen vehicles. Finally, no relationship was demonstrated between population and stolen vehicle recovery outcomes in the U.S. Mexican Border Region countering the trend present in the interior of the United States. A summary of the results of data analysis are presented in Table 5.1. The following chapter will summarize the major points of this research project, draw conclusions and indicate possible avenues for future research.

Table 5.1
Correlation Summary

Independent Variable	Expected Relationship		Conclusion
H1 Cross - Border Contacts	+	-	Not Supported
H2 Access to Mexico	+	+	Supported
H3 City Size	-	0	Not Supported

Chapter 6 Summary and Conclusions

Restatement of the Research Purpose

The purpose of this research was to explain the wide variation in stolen vehicle recovery rates in Texas cities in counties along the U.S. Mexican border. A city's access to Mexico, when calculated by distance from a border crossing, does seem to be a positive indicator of stolen vehicle recovery potential. Cross-border relationships between local law enforcement agencies, as tested in this research, are not a positive indicator of stolen vehicle recovery potential. Finally, there is a slight positive relationship between a city's size, when determined by population and its stolen vehicle recovery potential, distinguishing border cities from those in the interior. The remainder of this chapter will indicate the limits of this research and indicate directions for future research in the topic area of vehicle theft in the U.S. Mexican Border Region.

Limits of This Research and Avenues for Future Research

The ground-breaking aspect of this research was an attempt to quantify the value of cross-border relationships between law enforcement agencies in improving the stolen vehicle recovery rates of cities in the U.S. Mexican Border

Region. The results actually indicated that cross - border relationships may decrease stolen vehicle recovery rates. This finding is, however, counterintuitive. This researcher can only conclude that telephone survey research conducted by someone outside the law enforcement community may not be the proper methodology to employ to get real insight to the truth. Future research should probably be conducted by the Texas Department of Public Safety or other law enforcement agency employing the more expensive and time consuming methodology of direct observation. Such methods would likely provide a more accurate data set and thus more valid results.

Final Remarks

Before this project, the most recent scholarly research examining the phenomena of stolen vehicle recovery in the U.S. - Mexican Border region was Michael Miller's 1987 work. More research is desperately needed in this area as the region becomes more open to uninspected traffic resulting from the North American Free Trade Agreement. Border Region Law enforcement agencies need new tools to combat cross-border crime such as vehicle theft. Improvements there can have effects on all of our lives. Stolen vehicle recovery rates are significantly lower than the national average in San Antonio and Corpus Christi, two cities far removed from the Border Region. Thus, at a minimum, all Texans are affected by

border vehicle theft in the form of higher insurance rates. Our failure to attempt to understand the phenomenon now that it is a remote issue may have direct effects on us in the future. One day it may become commonplace for a person to return to the parking lot of a Suburban Dallas shopping mall and find his vehicle missing. Learning later that it had been repainted, given new identification, and was being driven by a middle-class Mexican going about his daily life.

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Appendix I.

Survey

How many times in a typical week does your office have contact with

Mexican Law Enforcement Agencies regarding the recovery of stolen vehicles

using the following methods?

1. Telephone	
2. Electronic Mail	
3. Facsimile (Fax)	
4. Meeting	
5. Telex	
6. Mail	
7. Other (Specify)	
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