

THE BILL BLACKWOOD  
LAW ENFORCEMENT MANAGEMENT INSTITUTE  
OF TEXAS

A STUDY IDENTIFYING THE FACTORS  
THAT INFLUENCE THE LEVEL OF REPORTED  
INDEX CRIME ON TEXAS' PUBLIC UNIVERSITIES

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## I. INTRODUCTION

Historically, the causes and origins of crime have been the subjects of investigation by varied disciplines. Some factors are known to affect the volume and type of crime occurring from place to place are: population density and degree of urbanization, homogeneity of the population, youth concentration, stability of population, commuting patterns, and transient factors, modes of transportation and highway system, economic conditions, religious characteristics, family conditions with respect to divorce and family cohesiveness, climate, effective strength of law enforcement agencies, administrative and investigative emphases of law enforcement, policies of other components of the criminal justice system (i.e., prosecutorial, judicial, correctional, and probational), citizens' attitudes toward crime, and crime reporting practices of the citizenry.<sup>1</sup>

The purpose of this paper is to identify and measure those internal and external factors that influence the level of reported criminal activity on Texas' public universities. The need for this type of research became apparent while examining the level of reported violent and nonviolent index crime on campuses throughout Texas from 1991 to 1993. Adjusted for population, violent crime ranged from 0.00 to 4.51 offenses per 1000 population on university campuses. Nonviolent crime ranged from 1.96 to 53.86 per 1000 population on university campuses. Index crime rates per population are further illustrated in Appendix A.

This research involves a three-year period beginning with calendar year 1991 and ending with calendar year 1993. The major sources of data used for the statistical analyses was obtained through the cooperation of the Texas Higher Education Coordinating Board and the Texas Department of Public Safety Uniform Crime Reporting Section. These agencies collect and compile the majority of data needed for this research. The remainder of the data was obtained through direct contact with the universities included in this study.

This research project attempts to address the issue of campus crime on Texas' public universities by statistically comparing a series of variables believed to influence the level of reported index crimes. The variables tested were determined through experience and intuition, and subsequently supported by existing criminological research. The strength of the correlations between the variables and reported index crimes were tested using Pearson's Product Moment Coefficient of Correlation. Because the number of reported murders at Texas' public universities is so small, the lack of variability has little value for modeling. However, the number of reported rapes, robberies, burglaries, aggravated assaults, larceny/thefts and motor vehicle thefts occur with greater frequency. Hence, there are patterns that can be modeled.

The State of Texas supports 33 public universities. Of

these, 31 public universities are incorporated into the study. Two public universities are not included in this study due to a lack of available statistical data. This study also includes 28 Texas municipalities where the public universities are located. Only statistical data from these twenty-eight municipalities are included in this research. It should be noted, that two municipalities support more than one public university; Houston with three public universities and Denton with two. The universities are listed with their corresponding municipalities:

Angelo State University	San Angelo
East Texas State University	Commerce
Lamar University-Beaumont	Beaumont
Midwestern State University	Wichita Falls
Prairie View A&M University	Waller
Sam Houston State University	Huntsville
Southwest Texas State University	San Marcos
Stephen F. Austin State University	Nacogdoches
Sul Ross State University	Alpine
Tarleton State University	Stephenville
Texas A&M University	College Station
Texas A&M University-Corpus Christi	Corpus Christi
Texas A&M University-Galveston	Galveston
Texas A&M University-Kingsville	Kingsville
Texas Southern University	Houston
Texas Tech University	Lubbock
Texas Woman's University	Denton
University of Houston	Houston
University of Houston-Clear Lake	Pasadena
University of Houston-Downtown	Houston
University of Texas-Arlington	Arlington
University of Texas-Austin	Austin
University of Texas-Brownsville	Brownsville
University of Texas-Dallas	Richardson
University of Texas-El Paso	El Paso
University of Texas-Pan American	Edinburg
University of Texas-Permian Basin	Odessa
University of Texas-San Antonio	San Antonio
University of Texas-Tyler	Tyler
University of North Texas	Denton
West Texas A&M University	Canyon

The public universities included in this study are referred to as "the universities" and "public universities". The municipalities included in this study are referred to as "municipalities". Public universities not included in this study were:

Texas A&M University-International  
University of Houston-Victoria

University administrators will benefit from this research by gaining an insight into how policy decisions impact the level of violent and nonviolent crime on their campuses. University police departments will benefit from the results of this research through a better understanding of the factors influencing different types of criminal activity on their campuses. Understanding these factors will facilitate the development of policies and strategies to address and prevent index crime on Texas' public university campuses.

## II. SOCIOLOGICAL REASONS FOR CRIME

### A. Age

During 1991-1993, 1,868 persons were arrested on Texas' public universities for offenses reported as index crimes under Uniform Crime Reporting (UCR) guidelines. Of those arrested at public universities, offenders under the age of 18 accounted for 23.8% of the arrests. Offenders arrested by University Police for index crimes between the ages of 18 and 24 accounted for 51.3% of the arrests. Offenders between the ages of 25 and 39 accounted for 20.6% of the arrests, while those over the age of 40 accounted for 4.3% of the offenders arrested.<sup>2</sup> As a result, the average age of the student population is believed to be a factor in the number of index crimes reported at individual universities.

### B. Gender

Of the 1,868 offenders arrested on public universities between 1991 and 1993, 87.8% were male and 12.2% were female. During this same period, 48.5% of the students enrolled at Texas' public universities were male and 51.5% were female. The majority of females were arrested at universities for larceny/theft, while males were responsible for the remaining reported index crimes.<sup>3</sup>



### C. Socioeconomic

While theorists disagree about how economic distress influences individuals to commit particular criminal offenses, they generally agree that systemic economic distress increases the probability of higher rates of criminal activity.<sup>4</sup>

It is commonly assumed that delinquents tend to come from family backgrounds which are "deprived" through material disadvantages such as poverty, poor housing, overcrowding, and dependence on welfare. The association of these with delinquency is well established. The psychological effects of such conditions are again obscured by their association with other variables, such as parental criminality and supervision. However, it is unlikely that they exert a direct effect on criminal behavior, since deprivation is defined as relative rather than in absolute terms, and delinquents do not often steal solely because they lack food or clothing. Moreover, not all poor families produce delinquents.<sup>5</sup>

Social class is thought to have a weak correlation to delinquency. Studies show that behavior that may be defined as criminal is more evenly distributed throughout the class structure. Lower-class people are more likely to engage in activities that tend to be classified as index crimes. Middle- and upper-class people tend to be involved in criminal offenses not classified as index crimes, such as;

fraud, falsification of records, tax evasion, misuse of funds and malpractice.<sup>6</sup>

#### **D. Population size and density**

Crime rates in Texas cities are higher in larger cities than in smaller cities when adjusted for population. During the three-year period examined in this study, cities in Texas with a population over 100,000 averaged 100.25 reported index crimes per 1000 population. Cities with a population between 50,000 and 100,000 averaged 84.89 reported index crimes per 1000 population. Cities with populations between 25,000 to 50,000 averaged of 68.50 reported index crimes per 1000 population. Smaller cities with populations between 10,000 and 25,000 people averaged 59.43 reported index crimes per 1000 population. Cities with 2,500 to 10,000 population and under 2,500 population averaged 49.87 and 41.20 reported index crimes per 1000, respectively.<sup>7</sup> Based on this information, universities located in larger urban cities would be exposed to a greater risk of index crime than would universities located in small, rural cities.

#### **E. Educational level**

In several studies, educational under achievement correlates with antisocial behavior in the early school years, as well as, with later delinquency. It has generally

been assumed that the influence of both intelligence and learning disabilities is indirectly mediated by poor school performance. A common view is that the experience of school failure leads to negative self-esteem or hostile attitudes to school, which in turn leads to association with other "problem" children, and hence greater opportunity for delinquent behavior. Control theory, for example, sees educational failure as promoting negative attitudes to school, and hence weaker attachment to the societal values represented by the school. It was found that delinquents failing at school were more likely to come from disorganized families. This suggests that both antisocial behavior and poor school performance are a consequence of family disorganization. Other studies suggest a direction of effect from antisocial behavior to school failure and delinquency.<sup>8</sup>

Based on the research, it is believed that admissions requirements could impact the level of index crime on campuses. The hypothesis being that the lower the admissions requirements, the greater the frequency of reported index crime on the respective campuses.

#### **F. Opportunity**

It is well known within the law enforcement community that three elements must exist before a criminal offense can occur. The elements are the desire, the ability and the

opportunity. The element addressed in this study is opportunity. Opportunity is the availability of potential victims and property, such as vehicles and residences. Opportunity not only involves people and things, but time and location as well. The presence of residence halls expands the period of time in which the opportunity of index crime can occur from daytime and evenings, to nighttime and weekends also. Consequently, the presence of residence halls on campus also involves the presence of motor vehicles on campus during the same time periods and the possibility of personal conflict.

Therefore, it is hypothesized that the presence of residence halls on campuses will increase the frequency of reported index crime on university campuses.

### III. CHARACTERISTICS

#### A. Demographics

##### Universities

During the Fall semester of 1991, Texas' public universities enrolled 402,815 students and employed the full-time equivalent of 61,434 staff and faculty members. During the 1992 and 1993 Fall semesters, public universities enrolled 405,908 and 402,470 students, respectively. Full-time equivalent employees at these institutions during the 1992 and 1993 Fall semesters totaled 63,474 and 63,516, respectively. See Appendix B for individual university enrollment and staffing.

During the Fall semester of 1991, 58,654 students lived on university campuses. This accounted for 14.6% of the total number of students enrolled at public universities. During the next two Fall semesters (1992 and 1993), 57,326 and 55,715 students lived on campus, accounting for 14.1% and 13.8% of total enrollment, respectively. Appendix B reports individual university housing statistics.

Public universities are found in every region of Texas. The characteristics of the universities are as diverse as the regions they serve. Public universities are represented in three distinct population areas. These areas are described as Non-Metropolitan Statistical Areas, Metropolitan Statistical Areas and Primary Metropolitan Statistical Areas. The universities located in Non-

Metropolitan Statistical Areas tend to be smaller and serve sparsely populated regions of Texas. The universities located in Metropolitan Statistical Areas tend to attract students from nearby urban and suburban communities. Universities located in Primary Metropolitan Statistical Areas tend to have very large enrollments or provide a highly specialized curriculum.

#### Municipalities

The municipalities in which universities are located are highly diverse with respect to their populations, cultures and demographics. According to FBI estimates, municipal populations in Texas range from Waller, Texas with 1,607 people to Houston, Texas with 1,724,327 people. Public universities can be found in every major metropolitan area in Texas. Many of the municipalities not only support public universities, but also public colleges and junior colleges, as well as, private institutions. However, most municipalities support only one public university, with the exceptions of Denton, Texas and Houston, Texas which support two and three universities, respectively.

When considering population densities, counties in Texas are classified as either Metropolitan Statistical Areas, Primary Metropolitan Statistical Areas or Non-Metropolitan Statistical Areas. A Metropolitan Statistical Area is defined as a county with at least one central city and a population of 50,000 or more people, or an urbanized

area with a population of 50,000 or more people and a total metropolitan population of 100,000 or more people.

A Primary Statistical Area is a county with at least one city with a population of 100,000 or more people. Non-Metropolitan Statistical Areas are counties that are not included in metropolitan or primary statistical area.<sup>9</sup> The statistical area classification of each university and municipality can be found in Appendix C.

## **B. Descriptive Statistics**

### Universities

During the period of this study, the enrollments at the thirty-one universities in this study ranged from 1,213 students to 49,961 students for an average enrollment of 13,024 students. The average age of the student enrollment at each university ranged from 21 to 33 years of age for an average and median age of 26.3 and 26.0 years, respectively. The annual level of index crime per population ranged from 2 reported offenses to 103 reported offenses per 1000 population. The average total number of reported index crimes per 1000 population at the universities was 15.2 offenses, with a median of 14 reported offenses per campus. The average number of reported index crimes per university campus was 233.6 offenses.

The population per university police officer at public universities ranged from 1:243 to 1:2,075 people, with an

average of 1:888 students, full-time equivalent staff and faculty. The number of police officers commissioned by university police departments ranged from 2 to 66 officers with a mean and median of 15.7 and 13 police officers per university, respectively. Refer to Table 1 for additional descriptive statistics.

Table 1: Descriptive Statistics for Universities  
including Mean, Standard Deviation,  
Median, Minimum and Maximum.

Descriptive Statistics for Public Texas Universities 1991-93					
Variables	Mean	Standard Deviation	Median	Minimum	Maximum
Enrollment	13,024	11,466	8,980	1,213	49,961
Full-Time Equivalent Employees	2,026	2,836	1,098	115	13,924
Total Population	15,050	14,129	10,120	1,513	63,411
Number of Students Living Campus	1,846	2,421	955	0	11,777
Percent of Students Living on Campus	14.5%	13.5%	86.6	0	52.0%
Occupancy Rate of Residence Halls	73.2%	33.7%	12.3	0	104.0%
Average Age of Students	26.3	3.2	26	21	33
Average number of Credit Hours	10.7	1.8	10.8	7	14.6
Number of Males	6,322	6,427	3,917	511	27,166
Number of Females	6,701	5,196	4,617	529	22,795
Number of Parking Spaces	5,505	4,270	4,028	800	17000
Average amount of Financial Aid received					
per Recipient	3,113	1,229	2,981	1,171	6,548
per Enrollment	1,643	834	1,348	489	4,150
Number of Police Officers	15.7	12.5	13	2	66
Population per Police Officer	888	320	909	243	2,075
Reported Index Crimes					
Total	234	238	149	4	1081
per 1000 Population	15.2	9.9	14	2	103
Compiled from data obtained from the Texas Higher Education Coordinating Board and the Texas Department of Public Safety Uniform Crime Reporting Section.					

### Municipalities

The population per police officer within the local municipalities where the public Texas universities are located ranged from 1:191 to 1:864 people. The average population per police officer within the local



municipalities was 1:608 people. See Table 2.

Meanwhile, the number of reported index crimes per 1000 population within the municipalities ranged from 18.2 to 138 reported offenses. The average number of reported index crimes per population was 78.7 offenses with a standard deviation of 26.9 reported offenses. Additional Descriptive statistics are listed in Table 2.

Table 2: Descriptive Statistics for Municipalities  
including Mean, Standard Deviation,  
Median, Minimum and Maximum.

Descriptive Statistics for Municipalities for 1991-93					
	Mean	Standard Deviation	Median	Minimum	Maximum
Number of Police Officers	626	1259	154	7	4734
Population per Police Officer	608	146	614	191	864
Total Number of Reported Index Crimes					
Total	517,435	34,221	6069	119	180,308
per 1000 Population	92.8	27.5	79.5	18	138
Compiled from data provided by the Texas Department of Public Safety Uniform Crime Reporting Section.					

### C. Crime Statistics

#### Universities

In 1991, 7,565 index crimes were reported to public Texas university police departments. The number of reported index crimes declined to 7,468 offenses in 1992 and to 6,523 reported index crimes in 1993.

Of the index crimes reported to Texas' public university police departments in 1991, 7,403 offenses were classified as nonviolent crimes. Nonviolent crime includes burglary, larceny/theft and motor vehicle theft. Of the reported index crimes, 162 were classified as violent

crimes. Violent crime includes murder, rape, robbery and aggravated assault. In 1992, 7,290 nonviolent and 178 violent index crimes were reported. The number of reported index crimes at universities declined to 6,523 nonviolent and 173 violent index crimes in 1993.

The number of reported index crimes, violent and nonviolent, for the 31 public Texas universities was compiled from information reported by the Texas Department of Public Safety Uniform Crime Reporting Section.

#### Municipalities

In 1991, 542,601 index crimes were reported to local municipal police departments. The number of reported index crimes declined to 521,117 offenses in 1992 and 488,588 reported index crimes in 1993.

Of the index crimes reported to municipal police departments in 1991, 485,921 offenses were classified as nonviolent crimes. Violent offenses characterized 56,680 of the reported index crimes. In 1992, 463,824 nonviolent and 57,293 violent index crimes were reported. In 1993, 431,635 nonviolent and 56,953 violent index crimes were reported.

The number of commissioned police officers employed by the 28 local municipalities was compiled from information reported by the Texas Department of Public Safety Uniform Crime Reporting Section.

## **D. Law Enforcement Agencies**

### Universities

During 1991, the Texas Department of Public Safety Uniform Crime Reporting Section reported that 476 commissioned police officers staffed the 31 public Texas university police departments. The number of commissioned university police officers increased to 485 officers in 1992 and to 499 officers in 1993.

The ratio of students and full-time equivalent employees, as reported by the Texas Attorney General's Office, to the number of commissioned university police officers declined during the three-year period. During the fall semesters of 1991, 1992 and 1993, there was an average of 1:917, 1:888 and 1:860 students and full-time equivalent employees for each university police officer, respectively.

### Municipalities

During 1991, the Texas Department of Public Safety Uniform Crime Reporting Section reported that 10,006 police officers were commissioned by the 28 local Texas municipal police departments included in this study. The number of commissioned municipal police officers in the communities where the universities were located increased to 10,230 officers in 1992 and to 11,044 officers in 1993.

The ratio between the Federal Bureau of Investigation's estimate of local populations and the number of locally

commissioned municipal police officers declined during the three-year period. During 1991, 1992 and 1993, there was an estimated average of 1:616, 1:610 and 1:597 people for each municipal police officer, respectively.

#### **E. Comparison**

The total population at Texas' public universities remained relatively constant during the three-year period at 464,729 students, full-time equivalent staff and faculty. During the same time period, the total estimated population of the twenty-eight municipalities where universities are located grew 3.6% from 5,357,420 in 1991 to 5,549,074 in 1993. The number of police officers increased by 4.8% for universities and by 10.4% within the local municipalities during the three-year period.

During 1991-93, the Texas Department of Public Safety Uniform Crime Reporting Section reported the average total number of commissioned police officers at public universities was 487, while in the 28 local municipalities there was an average total of 10,427 commissioned police officers. Adjusted for population per police officer, public universities had a population of 888 people per police officer while local municipalities had an estimated population of 608 people per police officer. See Appendix D for further comparison by university and municipality.

The Texas Department of Public Safety Uniform Crime

Reporting Section reported the average annual number of reported index crimes during the three-year period were 2,414 offenses at the 31 public universities, while the average annual number of reported offenses for the 28 local municipalities was 172,478. Adjusted to a per population basis, there were 15.13 reported index crimes per 1000 population at public universities. This is compared to 92.84 reported index crimes per 1000 population in the local communities where the universities were located. The average number of violent index crimes (murder, rape, robbery and aggravated assault) per population during the three-year period was .49 and 10.22 offenses per 1000 population for universities and municipalities, respectively. The average number of nonviolent index crimes (burglary, larceny and motor vehicle theft) per population during the study period was 14.64 and 82.62 per 1000 population at universities and municipalities, respectively. Further comparison by university and municipality can be found in Appendix E.

#### IV. ANALYSIS AND RESULTS

##### A. Description of Variables

###### Response Variables

###### Rape

The Federal Bureau of Investigation Uniform Crime Report defines Rape as the carnal knowledge of a female forcibly and against her will. Rapes or attempted rapes accomplished by force or threat of force are classified as forcible regardless of the age of the female victim. Statutory rape in which no force is used is not included under this section as forcible rape.<sup>10</sup>

Two response variables are measured for rape on a calendar year basis. The first response variable is the total number of rapes reported within a given jurisdiction. The second response variable takes into consideration the size of the population within the given jurisdiction and adjusts the total number of rapes to the number of rapes per 1000 population.

Universities and municipalities reported an average of .06 and .64 rapes per 1000 population, respectively, during the three-year period (see Table 3). Despite some estimates that only one in ten rapes are reported to police, victimization surveys report that 64% of the rapes occurring in Texas are reported to police.<sup>11</sup>

### Robbery

The Federal Bureau of Investigation's Uniform Crime Report defines Robbery as the taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear. Purse-snatching and pocket-picking are not included in this section because of the absences of force or the threat of force.<sup>12</sup>

Two response variables are measured for robbery on a calendar year basis. The first response variable is the total number of robberies reported within a given jurisdiction. The second response variable takes into consideration the size of the population within the given jurisdiction and adjusts the total number of robberies to the number of robberies per 1000 population.

Universities and municipalities reported an average of .07 and 4.02 robberies per 1000 population, respectively, during the three-year period (see Table 3). Victimization studies report that robberies in Texas are reported approximately 54% of the time.<sup>13</sup>

### Aggravated Assault

Aggravated Assault is defined by the Federal Bureau of Investigation's Uniform Crime Report as an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault

usually is accompanied by the use of a dangerous weapon or other means with intent to kill, maim or inflict serious bodily injury.<sup>14</sup>

Two response variables are measured for aggravated assault on a calendar year basis. The first response variable is the total number of aggravated assaults reported within a given jurisdiction. The second response variable takes into consideration the size of the population within the given jurisdiction and adjusts the total number of aggravated assaults to the number of aggravated assaults per 1000 population.

Universities and municipalities reported an average of .24 and 5.37 aggravated assaults per 1000 population, respectively, during the three-year period (see Table 3). Based on victimization studies, aggravated assaults occurring in Texas are reported to police 52% of the time.<sup>15</sup>

### Burglary

The Federal Bureau of Investigation Uniform Crime Report defines Burglary as the unlawful entry of a structure to commit a felony or a theft. Burglary includes all offenses where force of any kind is used to unlawfully enter a structure for the purpose of committing a theft or felony. If the area entered was one of open access, thefts from the area would not involve an unlawful trespass and would,



therefore, be classified as larceny. Attempted forcible entry is classified as burglary unless it is clearly established that the unlawful entry was for the purpose of committing a felony or theft.<sup>16</sup>

Two response variables are measured for burglary on a calendar year basis. The first response variable is the total number of burglaries reported within a given jurisdiction. The second response variable takes into consideration the size of the population within the given jurisdiction and adjusts the total number of burglaries to the number of burglaries per 1000 population.

Universities and municipalities reported an average of 1.87 and 17.24 burglaries per 1000 population, respectively, during the three-year period (see Table 3). It is estimated that of the burglaries committed in Texas, 52% are reported to police.<sup>17</sup>

### Larceny/Theft

Larceny/Theft is defined by the Federal Bureau of Investigation's Uniform Crime Reports as the unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another. All thefts and attempted thefts are counted except motor vehicle theft; embezzlement; fraudulent conversion of entrusted property; conversion of goods lawfully possessed by bailees, lodgers, or finders of lost property; counterfeiting;

obtaining money by false pretenses; larceny by check; larceny by bailee; and check fraud. Offenses included in this category are pocket-picking; purse-snatching; shoplifting; thefts from motor vehicles; theft of motor vehicle parts and accessories; thefts of bicycles; theft from within buildings that are open to the general public and where the offender has legal access; and thefts from coin-operated devices or machines.<sup>18</sup>

Two response variables are measured for larceny/theft on a calendar year basis. The first response variable is the total number of larceny/thefts reported within a given jurisdiction. The second response variable takes into consideration the size of the population within the given jurisdiction and adjusts the total number of larceny/thefts to the number of larceny/thefts per 1000 population.

Universities and municipalities reported an average of 12.81 and 52.96 larcenies per 1000 population, respectively, during the three-year period (see Table 3). It is estimated that only 27% of all larcenies are reported to Texas police departments by victims.<sup>19</sup>

#### Motor Vehicle Theft

The Federal Bureau of Investigation's Uniform Crime Report defines Motor Vehicle Theft as the theft or attempted theft of a motor vehicle. The definition of motor vehicle includes automobiles, trucks, buses, motorcycles, motor

scooters, snowmobiles, etc. The theft or attempted theft of farm equipment, bulldozers, airplanes, construction equipment or motorboats are not included in this category. Unauthorized use of a motor vehicle is not reported as a motor vehicle theft under Uniform Crime Reporting (UCR) guidelines.<sup>20</sup>

Two response variables are measured for motor vehicle theft on a calendar year basis. The first response variable is the total number of motor vehicle thefts reported within a given jurisdiction. The second response variable takes into consideration the size of the population within the given jurisdiction and adjusts the total number of motor vehicle thefts to the number of motor vehicle thefts per 1000 population.

Universities and municipalities reported an average of .48 and 12.43 motor vehicle thefts per 1000 population, respectively, during the three-year period (see Table 3). Motor vehicle theft has the highest rate of reporting, by victims, of any index crime. Victimization surveys report that 70% of motor vehicle thefts are reported to police in Texas.<sup>21</sup>

**Table 3: Average Number of Reported Index Crimes  
per 1000 Population over Three-year Period between  
Local Municipalities and Universities.**

Average Number of Reported Index Crimes per 1000 Population 1991-1993		
Index Crime	Local Municipalities	Public Universities
Murder	.18	.00
Rape	.64	.06
Robbery	4.02	.07
Aggravated Assault	5.37	.24
Burglary	17.24	1.87
Larceny/Theft	52.96	12.81
Motor Vehicle Theft	12.43	.48
Compiled from data received from the Texas Department of Public Safety Uniform Crime Reporting Section.		

### **Predictor Variables**

#### Population

The variable "population" combines student enrollment and full-time equivalent employees. Full-time equivalent employees is determined based on a formula that converts full and part-time student assistants, staff and faculty positions into the equivalent number of full-time employees.

As demonstrated, the size of the population of a community has a direct correlation on the level of index crime at an accelerated rate as the population density increases.

#### Number of students living on campus

The number of students living on campus consists of all students living in residence halls, apartments and married student housing under the direct supervision and jurisdiction of the university. As the number of students

living on campus increases, the opportunity for crime increases because of the availability of potential victims. Similarly, the risk of violent crime would increase. Violent crimes are most likely to occur between the hours of 6:00 PM and 6:00 AM, with the most likely days of occurrence being Friday and Saturday.<sup>22</sup>

#### Occupancy rate of residence halls

This variable is included under the assumption that the occupancy rate of residence halls might have an impact on the level of rape, robbery, aggravated assault and burglary. Residence halls with lower occupancy rates may have a higher incidence of rape, robbery and burglary due to a sense of seclusion.<sup>23</sup> In contrast, residence halls with high occupancy rates might experience a greater incidence of assault.

#### Percentage of enrollment living on campus

This variable measures the ratio of the number of students residing on campus relative to the total enrollment. This ratio is useful for comparing university campuses. Again, the higher the percentage of students living on campus, the greater the opportunity for index crime to occur.

Average age of student enrollment

As has been reported, age is a definite factor when considering the characteristics of those arrested for index crimes. Age may also be a factor for victims of index crime. However, the age of victims is not a variable examined in this particular study.

Average number of credit hours students are enrolled

The average number of credit hours each student is enrolled for the fall semesters is determined by dividing the total number of credit hours enrolled by students, as reported by each university, by total enrollment. It is hypothesized, that the lower the average number of credit hours students are enrolled, the more free time students have, and the greater the opportunity to become involved in criminal activity.

Number of male students

This variable reports the total number of male students at each university. This is considered relevant in light of the disproportionate number of males arrested by university police departments. As a result, the number of males attending each university may be related to the level of reported index crime.

#### Number of female students

Arrest statistics for the universities indicate that females are "generally" arrested for the offense of larceny/theft. This variable can also be used in an attempt to identify the relationship between females as possible victims of specific types of reported index crime on university campuses. Other than murder, statistical data is not compiled for victims of index crime. This predictor variable is primarily exploratory in nature.

#### Ratio of male to female students

This variable measures the ratio between the number of males and the number of females on each university campus. Arrest statistics and social research suggest that the number of males as a percentage of the student enrollment may be significant in the number and type of reported index crime on university campuses. This ratio is more effective for comparing the demographic characteristic between university campuses.

#### Number of parking spaces

The number of parking spaces at universities again measures the level of opportunity for those with a propensity to commit criminal offenses. The universities with limited parking shift the burden to the local community. As a result, students parking their vehicles off

campus fall under the jurisdiction of the local municipal police departments. Furthermore, parking spaces are consistently located on the outer perimeter of the campus and tend to be isolated. Both these factors, number and location of parking spaces on campus, suggest increased opportunity for reported index crime.

Admissions requirements for graduating high school students ranked in each quartile of graduating class

Based on the indirect relationship between education and delinquency, the Scholastic Aptitude Test scores could conceivably be used to predict the level of criminal activity on individual university campuses. Scholastic Aptitude Test score requirements for admission into public Texas universities are based on class ranking. The high school graduating class ranking is divided into quartiles. The upper quartile, top 25% of the graduating high school class, generally requires a nominal Scholastic Aptitude Test score. The lower quartile, bottom 25% of the graduating high school class, generally requires a significantly higher Scholastic Aptitude Test score. The hypothesis being that the higher the Scholastic Aptitude Test score requirements to attend a particular university, the lower the level of reported index crime on the respective university campus. Public university admissions requirements are reported in Appendix F.



Average amount of financial aid received per recipient

Use of financial aid is one method of measuring the socioeconomic background of students attending each university. The amount of financial aid awarded by universities to recipients includes a variety of grants, loans, scholarships and work/study programs. Grants, work/study programs and subsidized loans are awarded on the basis of financial need. Scholarships are generally based on accomplishment. Unsubsidized loans do not require the applicant to demonstrate a financial need. However, unsubsidized loans do require the applicant to qualify for the loan.

Average amount of financial aid received per enrollment

This variable measures the overall level of financial aid received at each university. The total amount of financial aid received at each university is divided by the total enrollment. The use of this predictor variable is believed to be one of several methods for measuring the socioeconomic background of the general student population. This formula is more effective for comparison purposes by measuring the overall amount of financial aid received at each university.

Percentage of students within each classification

The number of students attending the universities within each academic classification is also believed to be a factor in the level of index crimes reported. The classification of students reflects a combination of age, level of education and assimilation into the university environment.

This variable measures the ratio, as a percentage of total enrollment, the number of freshmen, sophomores, juniors and seniors on each university campus. This ratio is more effective for comparing the relative academic classification of the student populations between university campuses.

Number of police officers

The number of police officers reflect the total number of commissioned officers on each campus. The more officers in the department, the greater the opportunity for specializing in the investigation of different types of criminal offenses and crime prevention.

Population per police officer

This variable is determined by combining the number of enrolled students and full-time equivalent employees and dividing this total by the number of police officers commissioned at each university. The assumption being, the

lower the number of people per police officer, the more manpower police departments have in deterring and investigating criminal activity. This ratio is also more effective for comparing the number of police officers, adjusted for population, between university campuses and municipal police departments.

#### Level of index crime in local communities

The level of index crime in the 28 local municipalities is reported both as a total number of each type of offense reported to the municipal police department and on a population adjusted basis by offense. This results in six predictor variables reporting the total number of murders, rapes, aggravated assaults, burglaries, larcenies and motor vehicle thefts reported within each local community. An additional six predictor variables are used to report the number of murders, rapes, aggravated assaults, burglaries, larcenies and motor vehicle thefts reported per population within each local community. It is widely accepted within university law enforcement that the level of reported index crime in the local community has a direct impact on the level of reported index crime on respective campuses.

### **B. Methodology**

The vast majority of information, including university demographics and reported index crimes, for both the universities and municipalities has already been compiled by the Texas Higher Education Coordinating Board, The Texas Department of Public Safety Uniform Crime Reporting Section and the Texas Attorney General's Office. The information not available from these state agencies were obtained directly from and with the cooperation of the Universities. From the data obtained, fifty-seven variables were considered in this study. These variables were chosen either because prior research has demonstrated that they were factors in crime trends or that, intuitively, it is believed they might be pertinent.

The general research hypothesis is that there is a relationship between each of the predictor variables and the number of index crimes reported at public universities throughout Texas. The null hypothesis states that there is not a correlation between the observations within each predictor variable and the observations within each response variable. When testing the correlation coefficient, attempts are made to show that the null hypothesis is false. This suggests that there is a relationship between each of the predictor variables to the number and type of index crimes reported at public universities.

Correlation analysis is used to analyze pairs of

variables. Statistical analysis was conducted on the university's computer system at Sam Houston State University using Statistical Analysis Software (SAS).

### **C. Pearson's Product Moment Coefficient of Correlation**

Criminal justice theory suggests that many social variables are related. These relationships can include not only pairs, but complex models involving numerous variables. In this study, only the relationship between each response variable and one predictor variable at a time will be addressed. The predictor variables that were previously described were investigated in every possible combination to determine if they had a linear relationship.

The strength of the correlations between response variables and predictor variables, with 92 observations, is described as having a high correlation, moderate correlation, weak correlation or no correlation. Variables with a high correlation are those relationships with a significance level of less than .005. Therefore, a coefficient of correlation greater than .267 would be needed to reject the null hypothesis. Those relationships with a level of significance greater than .005, but less than .01 are described as having a moderate correlation and would, therefore, require a coefficient of correlation greater than .242 to reject the null hypothesis. Variables with a weak correlation are those relationships with a significance

level greater than .01, but less than .025. A coefficient of correlation greater than .205 would be needed to reject the null hypothesis. The null hypothesis is not rejected for correlations with a level of significance greater than .025.

Although these variables are described as having moderate, weak or no relationship, perimeters for this study are more stringent than the standards normally used when conducting social research of this type. This is due to not only the number of variables, but the strength of the relationship between a large number of the predictor variables and the response variables.

### Rape

Results from the regression analysis indicates a strong correlation between the total number of rapes reported on campuses, by university, and some predictor variables. The predictor variables showing correlations are the total number of students living on campus and the occupancy rate of the residence halls, the number of parking spaces on campus, the average number of credit hours each student is enrolled, and the university's total student enrollment. This suggests that there is a relationship between a university's enrollment, the number of parking spaces and the number of students living on campus and the incidence of rape. The fact that students are living on campus places

them on campus during the nighttime and on weekends when violent crime is most likely to occur. It also suggests that the incidence of rape increases as the number of students and parking spaces increases. Again, the opportunity and availability of potential victims increases.

The average number of credit hours each student has enrolled has a strong correlation with the incidence of rape on campus. In contrast, the average age of the student population has a strong inverse relationship with the number of reported rapes on campus. This suggests that public universities with a large number of older, part-time students would experience a lower incidence of reported rape. While conversely suggesting that universities attracting younger, full-time students could expect a higher incidence of reported rape. Table 4 reports the correlation coefficient between the predictor variables and the incidence of rape.

The regression analysis also suggests that the number of reported rapes per population on universities is affected by, or related to, the level of reported crime in the local community. An almost perfect correlation exists between the number of rapes per population at universities and the number of reported aggravated assaults per population in the local municipality. This suggests that the same factors that influence rape on campus also influence the level of aggravated assault in the local community. The correlation

coefficients are illustrated in Table 4.

Table 4: Results of Correlation Testing between  
Predictor Variables and Reported Rape

Correlation Coefficient between Predictor Variables and Reported Rape at Universities		
Predictor Variables	Rapes per Population	Number of Reported Rapes
Enrollment	-	.459
FTE Employees	-	.372
Population	-	.447
Number of Students living on Campus	-	.500
Occupancy Rate of Halls	-	.306
Percentage of Students living on Campus	-	.293
Average Age of Student enrollment	-	-.346
Average number of Credit Hours enrolled	-	.319
Number of Parking Spaces on Campus	-	.463
Total number of Male students	-	.467
Total number of Female students	-	.435
Ratio of males to females	-	-
Admissions Requirements (SAT)		
1st Quartile	-	-
2nd Quartile	-	-
3rd Quartile	-	-
4th Quartile	-	-
Amount of Financial Aid per Recipient	-	-
Amount of Financial Aid per Enrollment	-	.218
Classification of Enrollment-Percentage		
Freshmen	-	-
Sophomores	-	-
Juniors	-	-.221
Seniors	-	-
Number of Police Officers	-	.456
Population per Police Officer	-	-
Index Crime in City		
Murder	.250	-
Rape	.262	-
Robbery	.263	-
Aggravated Assault	.312	-
Burglary	.220	-
Larceny	.212	-
Motor Vehicle Theft	.216	-
Offenses per Population in City		
Murder	-	-
Rape	.393	-
Robbery	.237	-
Aggravated Assault	.967	-
Burglary	-.262	-
Larceny	-.304	-
Motor Vehicle Theft	-	-
Computerized analysis performed using SAS statistical software		

An inverse relationship exists between the number of



reported rapes per population on campus and the number of reported larceny/thefts and burglaries per population in the local municipality.

The number of reported robberies, rapes and murders in the local municipality indicates a moderate correlation with the number of rapes per population on campus. This further suggest that a relationship exist between the level of violent crime in the local community and the number of reported rapes per population on campus.

### Robbery

A strong correlation was found between the total number of reported robberies on university campuses and the number of reported murders, rapes, robberies, aggravated assaults, burglaries, larceny/thefts and motor vehicle thefts in the local municipality. A strong relationship also exists between the number of reported robberies on campus and the number of reported robberies and motor vehicle thefts per population in the local municipality. The strong correlations suggest again that the level of reported index crime in the local community is related to the incidence of robbery on the university campus.

A strong correlation also exists between the average amount of financial aid received per student and per enrollment at each university. This suggests that the more economically deprived the student enrollment, the greater

the possibility of robbery occurring on campus. The negative correlation between the number of robberies on campus and the admissions requirements for high school students graduating in the lower 3rd and 4th quartiles of their class suggests that the lower the Scholastic Aptitude Test requirements to gain admission to any given university, the greater the incidence of robbery on campus (refer to Table 5).

The regression analysis also suggests that the number of reported robberies per population at universities is related to the number of murders, rapes, robberies, aggravated assaults, burglaries, larceny/thefts and motor vehicle thefts reported in the local municipality. The number of robberies reported on university campuses has an almost perfect relationship with the number of reported aggravated assaults per population in the local municipality. The strength of this relationship indicates that the factors influencing the level of reported robbery on campus also influence the number of reported aggravated assaults in the local community. This suggests that the level of reported index crime in the local community is related to the number of robberies per population on university campuses. The correlation coefficients for the number of robberies per population are found in Table 5. An inverse relationship exists between the reported number of robberies on campus and the number of reported

larceny/thefts and motor vehicle thefts per population in the local municipality.

Table 5: Results of Correlation Testing between Predictor Variables and Reported Robbery

Correlation Coefficient between Predictor Variables and Reported Robbery at Universities		
Predictor Variables	Robberies per Population	Number of Reported Robberies
Enrollment	-	-
FTE Employees	-	-
Population	-	-
Number of Students living on Campus	-	-
Occupancy Rate of Halls	-	-
Percentage of Students living on Campus	-	-
Average Age of Student enrollment	-	-
Average number of Credit Hours enrolled	-	-
Number of Parking Spaces on Campus	-	-
Total number of Male students	-	-
Total number of Female students	-	-
Ratio of males to females	-	-
Admissions Requirements (SAT)		
1st Quartile	-	-
2nd Quartile	-	-
3rd Quartile	-	-.280
4th Quartile	-	-.253
Amount of Financial Aid per Recipient	-	.328
Amount of Financial Aid per Enrollment	-	.334
Classification of Enrollment-Percentage		
Freshmen	-	-
Sophomores	-	-
Juniors	-	-.212
Seniors	-	-
Number of Police Officers	-	-
Population per Police Officer	-	-
Index Crime in City		
Murder	.311	.384
Rape	.332	.408
Robbery	.327	.409
Aggravated Assault	.388	.436
Burglary	.283	.382
Larceny	.271	.320
Motor Vehicle Theft	.275	.386
Offenses per Population in City		
Murder	-	-
Rape	.450	-
Robbery	.321	.378
Aggravated Assault	.989	-
Burglary	-.229	-
Larceny	-.290	-
Motor Vehicle Theft	-	.340
Computerized analysis performed using SAS statistical software		

### Aggravated Assault

The results of the regression analysis indicates a strong relationship between the number of aggravated assaults reported on university campuses and the university's demographics. A strong correlation exists between the number of reported aggravated assaults on campus and the percentage of students classified as freshmen, while simultaneously having a strong inverse relationship with the percentage of students classified as juniors and seniors. Analysis also showed an inverse relationship between the number of aggravated assaults and the average age of the student population and Scholastic Aptitude Test admissions requirements for students graduating in the lower half of their graduating high school class. This suggests that there is a correlation between the number of reported aggravated assaults on campus and the level of education and maturity in the student population.

The regression analysis also showed a strong correlation between the number of reported aggravated assaults on campus and the average amount of financial aid per student enrolled, by university. This suggests that the socioeconomic background of the student population is related to the incidence of aggravated assault on campus.

And lastly, the average number of credit hours each student is enrolled is believed to be related to the number of reported aggravated assaults on campus (see Table 6).

This suggests that the larger the percentage of traditional students on campus, the more free time students have to get into mischief and interpersonal conflict.

Table 6: Results of Correlation Testing between Predictor Variables and Reported Aggravated Assault

Correlation Coefficient between Predictor Variables and Reported Aggravated Assault at Universities		
Predictor Variables	Assaults per Population	Number of Reported Assaults
Enrollment	-	-
FTE Employees	-	-
Population	-	-
Number of Students living on Campus	-	-
Occupancy Rate of Halls	-	-
Percentage of Students living on Campus	-	.216
Average Age of Student enrollment	-	-.204
Average number of Credit Hours enrolled	-	.262
Number of Parking Spaces on Campus	-	-
Total number of Male students	-	-
Total number of Female students	-	-
Ratio of males to females	-	-
Admissions Requirements (SAT)		
1st Quartile	-	-
2nd Quartile	-	-
3rd Quartile	-	-.245
4th Quartile	-	-.254
Amount of Financial Aid per Recipient	-	.232
Amount of Financial Aid per Enrollment	-	.349
Classification of Enrollment-Percentage		
Freshmen	-	.395
Sophomores	-	-
Juniors	-	-.323
Seniors	-	-.291
Number of Police Officers	-	-
Population per Police Officer	-	-
Index Crime in City		
Murder	.281	-
Rape	.294	-
Robbery	.295	.211
Aggravated Assault	.351	.216
Burglary	.248	-
Larceny	.236	-
Motor Vehicle Theft	.245	-
Offenses per Population in City		
Murder	-	-
Rape	.446	-
Robbery	.283	-
Aggravated Assault	.983	-
Burglary	-.225	-
Larceny	-.274	-
Motor Vehicle Theft	-	-
Computerized analysis performed using SAS statistical software		

As observed in the analysis of incidence of rape and robbery on university campuses, the regression analysis again showed that the number of reported aggravated assaults per population at universities is related to the number of reported aggravated assaults per population in the local municipalities. This suggests that the level of violent crime in the local municipality, especially aggravated assault, is strongly related to the level of aggravated assault on university campuses. There were also correlations between the number of aggravated assaults per population on universities and the number of reported murders, rapes, burglaries, larceny/thefts and motor vehicle thefts in the local municipalities. Once again, this suggests that the level of index crime in the local community is related to the level of violent crime on campus.

An inverse relationship existed between aggravated assaults per population on universities and the number of reported larceny/thefts and motor vehicle thefts per population in the local municipalities (see Table 6).

### Burglary

As indicated by the results from regression analysis, a strong correlation exist between the number of burglaries reported on university campuses and the universities' demographics. A strong correlation exists between the

number of students living on campus, students living on campus as a percentage of total enrollment, as well as, the occupancy rate in the residence halls and the number of reported burglaries on campus.

This suggests that more students living on campus creates a greater opportunity for the incidence of burglary on university campuses.

Regression analysis further revealed a strong correlation between the number of reported burglaries and the percentage of students classified as freshmen and sophomores. While, a strong inverse relationship exists between burglary and the average age of the student population and the percentage of students classified as juniors.

The average age of the student population and the classification mix of the student enrollment suggests that maturity and the level of education at the university is related to the number of burglaries on campus.

Many of the universities require freshmen, 18-19 years of age, to live on campus. While experience shows that few students continue to live on campus by their senior year. This could explain why the number of burglaries on campus have a strong correlation with the percentage of freshmen and sophomores on campus, an inverse relationship with the percentage of juniors on campus, and no correlation with the percentage of seniors on campus.

The last predictor variables are the average number of credit hours each student is enrolled and the average amount of financial aid per recipient and average amount of financial aid per enrollment. A strong correlation was found between the average number of credit hours enrolled per student and the number of reported burglaries on campus. This suggests that universities with a large percentage of traditional students experience a higher incidence of burglary on campus. A strong correlation between the number of reported burglaries on campus and the average amount of financial aid received per recipient and average amount of financial aid received per enrollment suggests that the socioeconomic background of the student population also influences the incidence of burglary on university campuses.

The regression analysis also suggests that the number of reported burglaries per population at universities is related to the percentage of enrollment classified as freshmen and sophomores, the percentage of student enrollment living on campus, the average amount of financial aid received per enrollment at each university, and the average number of semester credit hours students are enrolled at each university. Again, an inverse relationship exists with the average age of the student population and the percentage of student enrollment classified as juniors and seniors.

Once again, this suggests that the maturity of the



student population and the presence of residents halls were significant factors relating to the number of burglaries per population on university campuses.

Table 7: Results of Correlation Testing between Predictor Variables and Reported Burglary

Correlation Coefficient between Predictor Variables and Reported Burglary at Universities		
Predictor Variables	Burglaries per Population	Number of Reported Burglaries
Enrollment	-	.377
FTE Employees	-	.319
Population	-	.370
Number of Students living on Campus	-	.622
Occupancy Rate of Halls	-	.322
Percentage of Students living on Campus	.511	.409
Average Age of Student enrollment	-.310	-.498
Average number of Credit Hours enrolled	.405	.491
Number of Parking Spaces on Campus	-	.458
Total number of Male students	-	.385
Total number of Female students	-	.356
Ratio of males to females	-	-
Admissions Requirements (SAT)		
1st Quartile	-	-
2nd Quartile	-	-
3rd Quartile	-	-
4th Quartile	-.206	-
Amount of Financial Aid per Recipient	-	.312
Amount of Financial Aid per Enrollment	.458	.383
Classification of Enrollment-Percentage		
Freshmen	.515	.318
Sophomores	.224	.315
Juniors	-.343	-.283
Seniors	-.300	-
Number of Police Officers	-	.355
Population per Police Officer	-.234	-
Index Crime in City		
Murder	-	-
Rape	-	-
Robbery	-	-
Aggravated Assault	-	-
Burglary	-	-
Larceny	-.238	-
Motor Vehicle Theft	-	-
Offenses per Population in City		
Murder	-	-
Rape	-.229	-
Robbery	-.264	-.225
Aggravated Assault	-	-
Burglary	-	-
Larceny	-.268	-.296
Motor Vehicle Theft	-.293	-.254
Computerized analysis performed using SAS statistical software		

Regression analysis also suggests that the number of reported burglaries per population on campus has an inverse relationship to the number of reported rapes, robberies, larcenies and motor vehicle thefts per population in the local community (refer to Table 7).

#### Larceny/Theft

Results from regression analysis indicate a highly significant correlation between the number of reported larceny/thefts reported on university campuses and the number of students enrolled at the universities. This simply suggests that the number of students attending any given public Texas university is related to the number of larceny/thefts reported to university police departments.

A very strong correlation was also found between the number of larceny/thefts reported on university campuses and the number of students living on campus, the number of parking spaces on campus, the number of male and female students and the number of police officers commissioned by the university police department. It is suspected that some of these predictor variables could serve as proxies for one another because of a very high correlation between the predictor variables. The number of male or female students could serve as a proxy for the predictor variable measuring the number of students enrolled at university campuses.

The average age of the student population was found to

have a strong inverse relationship with the number of reported larceny/thefts on campus. Table 8 illustrates the correlation coefficients between larceny/thefts and the predictor variables.

The regression analysis also suggests that the number of reported larceny/thefts per population at universities has a strong inverse relationship to the average age of the student population. As the average age of the student population at a given university increases, the incidence of larceny/theft per population would be expected to decline. This would be consistent with the strong relationship between the percentage of students classified as freshmen and sophomores, and the number of reported larceny/thefts on campus.

An inverse relationship was found between the number of reported larceny/thefts per population on university campuses and the admissions requirements for high school students graduating in the lower 2nd, 3rd and 4th quartiles of their class. This suggest that the lower the Scholastic Aptitude Test admissions requirements for students graduating in the bottom 75% of their class, the higher the incidence of larceny/theft per population on campus (see Table 8). However, the fact that the correlation coefficients are small suggests these predictor variables by themselves are not enough to explain the likelihood of larceny/theft on university campuses.

Table 8: Results of Correlation Testing between  
Predictor Variables and Reported Larceny/Theft

Correlation Coefficient between Predictor Variables and Reported Larceny/Theft at Universities		
Predictor Variables	Larcenies per Population	Number of Reported Larcenies
Enrollment	-	.863
FTE Employees	-	.774
Population	-	.855
Number of Students living on Campus	.293	.741
Occupancy Rate of Halls	-	.336
Percentage of Students living on Campus	.259	-
Average Age of Student enrollment	-.353	-.449
Average number of Credit Hours enrolled	.229	.342
Number of Parking Spaces on Campus	.241	.846
Total number of Male students	.239	.869
Total number of Female students	-	.829
Ratio of males to females	-	-
Admissions Requirements (SAT)		
1st Quartile	-	.211
2nd Quartile	-.220	.230
3rd Quartile	-.286	.215
4th Quartile	-.220	.238
Amount of Financial Aid per Recipient	-	.322
Amount of Financial Aid per Enrollment	-	-
Classification of Enrollment-Percentage		
Freshmen	.315	-
Sophomores	.222	.219
Juniors	-	-
Seniors	-	.217
Number of Police Officers	.205	.823
Population per Police Officer	-	.394
Index Crime in City		
Murder	-	-
Rape	-	-
Robbery	-	-
Aggravated Assault	-	-
Burglary	-	.204
Larceny	-	.206
Motor Vehicle Theft	-	-
Offenses per Population in City		
Murder	-	-
Rape	-	-
Robbery	-	-
Aggravated Assault	-	-
Burglary	-	-
Larceny	-	-
Motor Vehicle Theft	-	-
Computerized analysis performed using SAS statistical software		

### Motor Vehicle Theft

Results from the regression analysis indicate a significant correlation between the total number of motor vehicle thefts reported on university campuses and the number full-time equivalent employees at each university. Significant correlations were also observed involving the number of students enrolled and the population of the university. A correlation was also noted between the number of students living on campus and the number of reported motor vehicle thefts.

As the number of full-time equivalent employees and students on university campuses increase, the number of vehicles that park on campus increases. Thereby providing a larger number and broader range of vehicle types for auto thieves to choose from. This takes into consideration the fact that motor vehicles are stolen for a variety of reasons, such as trafficking in narcotics, use in committing other offenses, for parts and accessories, for sale outside the United States and joyriding.

A strong correlation was noted between the number of motor vehicle thefts on campus and the number of motor vehicle thefts in the local community.

The average amount of financial aid received per recipient and per enrollment at each university appears to be closely related. This suggest that the socioeconomic background of the student population impacts the level of

motor vehicle theft on university campuses.

Regression analysis concerning the number of motor vehicle thefts per population at universities suggests that a strong inverse relationship exists with the admissions requirements for high school students graduating in each quartile of their class, as well as, the occupancy rate of residence halls on campus.

These results suggest that admissions requirements, especially for students graduating in the lower half of their high school class, at each university are related to the level of motor vehicle thefts on campuses. The results further suggest that as the percentage of student enrollment living on campus increases, the incidence of motor vehicle theft per population actually declines.

Analysis further indicates that the percentage of students classified as juniors and seniors is related to the number of reported motor vehicle thefts per population. (see Table 9). The relationship between the percentage of students living on campus and the percentage of students classified as juniors and seniors when compared to motor vehicle theft per population can be at least partially explained. Most students living on university campuses are freshmen and sophomores. Interpolation of this relationship suggests that campuses without residence halls are more vulnerable to motor vehicle theft. The rationale could range from a sense of community among the students to more

aggressive law enforcement at universities with residence halls. Again however, the fact that the correlation coefficients are small suggests these predictor variables by themselves are not enough to explain the likelihood of reported motor vehicle theft on university campuses.

Table 9: Results of Correlation Testing between  
Predictor Variables and Reported Motor Vehicle Theft

Correlation Coefficient between Predictor Variables and Reported Motor Vehicle Theft at Universities		
Predictor Variables	Motor Vehicle Thefts per Population	Number of Reported Motor Vehicle Thefts
Enrollment	-	.395
FTE Employees	-	.507
Population	-	.422
Number of Students living on Campus	-	.230
Occupancy Rate of Halls	-	-
Percentage of Students living on Campus	-.219	-
Average Age of Student enrollment	-	-
Average number of Credit Hours enrolled	-	-
Number of Parking Spaces on Campus	-	-
Total number of Male students	-	.391
Total number of Female students	-	.388
Ratio of males to females	-	-
Admissions Requirements (SAT)		
1st Quartile	-.255	-
2nd Quartile	-.295	-
3rd Quartile	-.465	-
4th Quartile	-.455	-
Amount of Financial Aid per Recipient	-	.317
Amount of Financial Aid per Enrollment	-	.263
Classification of Enrollment-Percentage		
Freshmen	-	-
Sophomores	-	-
Juniors	.244	-
Seniors	.381	-
Number of Police Officers	-	.476
Population per Police Officer	-	-
Index Crime in City		
Murder	-	-
Rape	-	-
Robbery	-	-
Aggravated Assault	-	-
Burglary	-	-
Larceny	-	-
Motor Vehicle Theft	-	.331
Offenses per Population in City		
Murder	-	-
Rape	-	-
Robbery	-	-
Aggravated Assault	-	-
Burglary	-	-
Larceny	-	-
Motor Vehicle Theft	-	-
Computerized analysis performed using SAS statistical software		



## V. SUMMARY

The purpose of this research is to provide insight into to the factors that influence different types of index crimes on university campuses. This insight would provide university administrators with an understanding of how policy decisions affect certain types of offenses and to help university police departments effectively develop proactive strategies and tactics to prevent and investigate the commission of these offenses on campus. This research shows that a certain level of violent and nonviolent crime can be expected at public universities.

The results suggest that the level of violent crime on university campuses is strongly related to the rate of violent crime in the associated local municipalities. Regression analyses suggest that the level of reported aggravated assault per population in the local municipality is almost perfectly correlated with the level of reported rape, robbery and aggravated assault per population on university campuses.

The level of property crime is related primarily to factors influenced by the demographics of the university. These factors include the population of the university, the presence of residence halls, the average number of credit hours each student is enrolled, the average age of the student population, the percentage of the student population classified as freshmen and sophomores and the average amount

of financial aid used by students.

This suggests that the number of reported index crimes, classified as property crime, is greater where opportunities exist in the form of vehicles and residence halls. It further suggests that younger students, often less fully assimilated into the university community such as freshmen and sophomores, may be responsible for committing much of the property crimes on university campuses.

Factors that have an inverse relationship with the level of property crime on campus are the average age of the student population and admissions score requirements. This suggests that, independently, the older the student population and the higher the admissions requirements, the lower the level of property crime on campus.

It should be noted, it was hypothesized that an inverse relationship should exist between the level of index crime and the average number of credit hours each student is enrolled. However, results show that the higher the average number of credit hours, the higher the level of index crime. This suggests that the non-traditional student is less likely to commit criminal offenses on university campuses. These students, often termed non-traditional, are more likely to be attending school part-time and working. This further suggests that the more credit hours in which students are enrolled, the less time they have to work. It should also be noted, there is a strong correlation between

the average number of credit hours per student and the amount of financial aid received by students. Analysis also suggests that there is a relationship between the level of property crime on university campuses and in the local municipalities.

As earlier suggested, the number of rapes on university campuses is related to the number of parking spaces on the respective campuses. The number of parking spaces on campus increases in proportion to the number of enrollment and full-time equivalent employees. As a result, this could suggest that the opportunity for rape grows as the number of parking lots are built along the perimeter of the university campus.

One of the notable differences between universities and municipalities is the level of reported index crime when adjusted for population. This can be attributed to social and administrative controls at universities which are not available to municipalities, as well as, the transient nature of the university population.

Because of the almost perfect correlation between the level of reported violent index crime at universities and the local municipalities, the question arises on whether university policies affect the level of criminal activity within the local community or vice versa. University policies which affect the local community may include a wide range of areas including employment practices, the quality

of students recruited and retained, as well as, the type and level of disciplinary action taken against students for violations of the code of student conduct. Realizing that the university community and the local municipality do not exist mutually exclusive of one another, university policy could conceivably affect the level of reported index crime in the local community, and therefore, indirectly influence the level of criminal activity on its own campus.

Because of the number of predictor variables that are correlated with each index crime, the next logical step would be to look at more complex models. It is suspected that some of the predictor variables could serve as proxies for one another because of highly correlated relationships between the predictor variables. However, multiple regression analysis and the use of multicollinearity will not be addressed in this study.

It is recommended that further research be conducted to address how university policies and demographics affect the local community.

**Appendix A: 3-Year Average of Violent and Nonviolent Index  
Crime per Population at Texas' Public Universities**

Average Number of Violent and Nonviolent Index Crimes per Population at Texas' Public Universities during 1991-93.			
University	Violent Crime per Population	Nonviolent Crime per Population	Index Crime per Population
Angelo State University	0.05	11.66	11.71
East Texas State University	0.73	16.43	17.15
Lamar University-Beaumont	0.81	17.46	18.27
Midwestern State University	0.37	14.17	14.54
Prairie View A&M University	3.48	44.79	48.27
Sam Houston State University	0.10	13.07	13.17
Southwest Texas State University	0.60	20.29	20.89
Stephen F. Austin State Univ.	0.30	26.95	27.26
Sul Ross State University	0.94	12.26	13.21
Tarleton State University	0.42	13.54	13.95
Texas A&M University	0.16	14.90	15.06
Texas A&M University-Corpus Christi	0.00	3.56	3.56
Texas A&M University-Galveston	0.22	2.70	2.92
Texas A&M University-Kingsville	0.05	17.04	17.08
Texas Southern University	2.67	18.64	21.31
Texas Tech University	0.21	21.25	21.46
Texas Woman's University	0.03	4.56	4.59
University of Houston	0.11	15.74	15.84
University of Houston-Clear Lake	0.00	4.28	4.28
University of Houston-Downtown	0.48	11.87	12.35
University of Texas-Arlington	0.41	15.65	16.05
University of Texas-Austin	0.18	14.88	15.06
University of Texas-Brownsville	0.85	36.85	37.70
University of Texas-Dallas	0.13	6.44	6.57
University of Texas-El Paso	0.19	12.29	12.48
University of Texas-Pan American	0.34	13.17	13.52
University of Texas-Permian Basin	0.27	5.04	5.31
University of Texas-San Antonio	0.09	7.70	7.79
University of Texas-Tyler	0.23	5.37	5.61
University of North Texas	0.39	12.63	13.02
West Texas A&M University	0.43	19.11	19.54
Average	0.49	14.64	15.13
Compiled from data obtained from the Texas Department of Public Safety Uniform Crime Reporting Section and the Sam Houston State University Police Department.			

Appendix B: Enrollment, Full-time Equivalent Employees,  
Percentage of Students Living on Campus and Number of  
Police Officers by University for Fall 1993.

Characteristics of Universities for Fall 1993 Semester				
University	Enrollment	Full-Time Equivalent Employees	Percentage of Students Living on Campus	Number of Police Officers
Angelo State Univ.	6,099	608	27.78%	9
East Texas State Univ.	8,096	1148	17.48	14
Lamar Univ.-Beaumont	9,097	1305	8.38	11
Midwestern State Univ.	5,791	574	10.55	7
Prairie View A&M Univ.	5,848	854	46.99	16
Sam Houston State Univ.	12,800	1337	23.27	13
Southwest Texas State Univ.	20,879	2355	19.63	20
Stephen F. Austin State Univ.	12,497	1727	32.35	17
Sul Ross State Univ.	2,181	390	28.89	6
Tarleton State Univ.	6,455	815	18.73	10
Texas A&M Univ.	39,975	9880	29.17	42
Texas A&M Univ.-Corpus Christi	4,489	523	1.80	9
Texas A&M Univ.-Galveston	1,335	366	46.44	7
Texas A&M Univ.-Kingsville	6,570	948	14.54	14
Texas Southern Univ.	10,800	1067	6.53	16
Texas Tech Univ.	24,007	4234	21.28	28
Texas Woman's Univ.	9,658	1241	16.07	16
Univ. of Houston	32,116	4671	1.43	31
Univ. of Houston-Clear Lake	7,194	674	0.00	6
Univ. of Houston-Downtown	7,377	598	0.00	14
Univ. of Texas-Arlington	23,749	2614	6.98	25
Univ. of Texas-Austin	48,555	13924	12.50	64
Univ. of Texas-Brownsville	1,911	599	0.00	5
Univ. of Texas-Dallas	8,640	1235	0.00	9
Univ. of Texas-El Paso	16,999	1996	2.34	15
Univ. of Texas-Pan American	13,702	1149	1.77	12
Univ. of Texas-Permian Basin	2,219	243	2.16	5
Univ. of Texas-San Antonio	17,097	1762	3.60	21
Univ. of Texas-Tyler	3,935	385	8.13	4
Univ. of North Texas	25,759	3504	14.06	25
West Texas A&M Univ.	6,640	789	21.23	8
Enrollment totals obtained from the Texas Higher Education Coordinating Board. Full-Time Equivalent Employees obtained from the Texas State Attorney General's Office. The Number of Police Officers obtained from the Texas Department of Public Safety Uniform Crime Reporting Section.				

Appendix C: Local University, Estimated Population,  
Statistical Area Description and Number of Police  
Officers by Municipality for 1993.

Characteristics of Municipalities for 1993				
Municipality	University	Population	Statistical Area	Number of Police Officers
San Angelo	Angelo St. Univ.	87,793	MSA	158
Commerce	East Texas St. Univ.	6,855	PMSA	19
Beaumont	Lamar Univ.	117,766	MSA	266
Wichita Falls	Midwestern St. Univ.	96,887	MSA	170
Waller	Prairie View A&M Univ.	1,607	MSA	7
Huntsville	Sam Houston St. Univ.	29,084	Non-MSA	34
San Marcos	Southwest Tx St. Univ.	30,074	MSA	51
Nacogdoches	Stephen F. Austin St. Univ.	31,281	Non-MSA	51
Alpine	Sul Ross St. Univ.	5,775	Non-MSA	7
Stephenville	Tarleton St. Univ.	13,799	Non-MSA	29
College Station	Texas A&M Univ.	56,777	MSA	72
Corpus Christi	TAMU-Corpus Christi	271,654	MSA	385
Galveston	TAMU-Galveston	60,754	PMSA	159
Kingsville	TAMU-Kingsville	25,932	Non-MSA	44
Houston	Texas Southern Univ.	1,724,327	PMSA	4734
	Univ. of Houston			
	U of H-Downtown			
Lubbock	Texas Tech Univ.	191,639	MSA	312
Denton	Texas Woman's Univ.	69,167	PMSA	104
	Univ. of North Texas			
Pasadena	U of H-Clearlake	127,886	PMSA	206
Arlington	UT-Arlington	281,336	PMSA	381
Austin	UT-Austin	502,018	MSA	881
Brownsville	UT-Brownsville	107,838	MSA	165
Richardson	UT-Dallas	77,866	PMSA	144
El Paso	UT-El Paso	554,515	MSA	850
Edinburg	UT-Pan American	33,268	MSA	43
Odessa	UT-Permian Basin	95,605	MSA	168
San Antonio	UT-San Antonio	985,456	MSA	1662
Tyler	UT-Tyler	78,384	MSA	133
Canyon	West Texas A&M Univ.	11,617	MSA	15
Populations estimates and Number of Police Officers obtained from the Texas Department of Public Safety Uniform Crime Reporting Section.				
Statistical area designation obtained from <u>Crime and Justice in Texas</u> .				

**Appendix D: Comparison of Population per Police Officer  
between Municipalities and Universities in 1993.**

Comparison of Population per Police Officer by Municipality and University for 1993			
Municipality	Population per Police Officer	University	Population per Police Officer
San Angelo	556	Angelo St. Univ.	745
Commerce	361	East Texas St. Univ.	660
Beaumont	443	Lamar Univ.	946
Wichita Falls	570	Midwestern St. Univ.	909
Waller	230	Prairie View A&M Univ.	419
Huntsville	855	Sam Houston St. Univ.	1087
San Marcos	590	Southwest Tx St. Univ.	1162
Nacogdoches	613	Stephen F. Austin St. Univ.	837
Alpine	825	Sul Ross St. Univ.	428
Stephenville	476	Tarleton St. Univ.	727
College Station	789	Texas A&M Univ.	1187
Corpus Christi	706	TAMU-Corpus Christi	557
Galveston	382	TAMU-Galveston	243
Kingsville	589	TAMU-Kingsville	537
Houston	364	Texas Southern Univ.	742
		Univ. of Houston	1187
		U of H-Downtown	570
Lubbock	614	Texas Tech Univ.	1009
Denton	665	Texas Woman's Univ.	681
		Univ. of North Texas	1171
Pasadena	621	U of H-Clearlake	1311
Arlington	738	UT-Arlington	1055
Austin	570	UT-Austin	976
Brownsville	654	UT-Brownsville	502
Richardson	541	UT-Dallas	1097
El Paso	652	UT-El Paso	1266
Edinburg	774	UT-Pan American	1238
Odessa	569	UT-Permian Basin	492
San Antonio	593	UT-San Antonio	898
Tyler	589	UT-Tyler	1080
Canyon	774	West Texas A&M Univ.	929
Average	597	Average	860

Populations estimates for municipalities and Number of Police Officers obtained from the Texas Department of Public Safety Uniform Crime Reporting Section. University Population was determined by combining Enrollment and Full-time Equivalent Employees for each respective university. Enrollment figures obtained from the Texas Higher Education Coordinating Board. Full-time Equivalent Employees figures obtained from the Texas State Attorney General's Office.



Appendix E: Comparison of Reported Index Crime per Population between Municipalities and Universities in 1993.

Comparison of Reported Index Crimes by Municipality and University for 1993			
Municipality	Index Crimes per 1000 Population	University	Index Crimes per 1000 Population
San Angelo	54.81	Angelo St. Univ.	7.60
Commerce	116.12	East Texas St. Univ.	15.69
Beaumont	106.80	Lamar Univ.	14.61
Wichita Falls	82.60	Midwestern St. Univ.	15.08
Waller	82.14	Prairie View A&M Univ.	55.65
Huntsville	47.45	Sam Houston St. Univ.	12.38
San Marcos	54.67	Southwest Tx St. Univ.	20.75
Nacogdoches	50.61	Stephen F. Austin St. Univ.	25.17
Alpine	31.69	Sul Ross St. Univ.	11.28
Stephenville	50.51	Tarleton St. Univ.	9.22
College Station	40.16	Texas A&M Univ.	14.46
Corpus Christi	100.92	TAMU-Corpus Christi	2.59
Galveston	109.46	TAMU-Galveston	2.35
Kingsville	65.09	TAMU-Kingsville	15.30
Houston	81.87	Texas Southern Univ.	22.67
		Univ. of Houston	14.24
		U of H-Downtown	13.79
Lubbock	64.46	Texas Tech Univ.	18.13
Denton	56.10	Texas Woman's Univ.	4.77
		Univ. of North Texas	11.86
Pasadena	71.46	U of H-Clearlake	3.05
Arlington	71.81	UT-Arlington	12.63
Austin	102.52	UT-Austin	12.56
Brownsville	105.65	UT-Brownsville	27.49
Richardson	56.39	UT-Dallas	6.58
El Paso	84.29	UT-El Paso	14.74
Edinburg	78.15	UT-Pan American	13.26
Odessa	92.55	UT-Permian Basin	7.31
San Antonio	99.11	UT-San Antonio	7.90
Tyler	110.32	UT-Tyler	6.25
Canyon	20.49	West Texas A&M Univ.	20.73
Average	86.07	Average	14.37
Populations estimates for municipalities and Reported Index Crimes obtained from the Texas Department of Public Safety Uniform Crime Reporting Section. University Population was determined by combining Enrollment and Full-Time Equivalent Employees for each respective university. Enrollment figures obtained from the Texas Higher Education Coordinating Board. Full-Time Equivalent Employees figures obtained from the Texas State Attorney General's Office.			

Appendix F: SAT and Class Rank Requirements for Admission  
by University for Fall 1994 Semester.

Admissions Requirements by University for Fall 1994 Semester Scholastic Aptitude Test and Graduating Class Rank				
University	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Angelo State University	----	----	920	1200
East Texas State University	800	800	800	800
Lamar University-Beaumont	----	800	900	1000
Midwestern State University	800	800	800	800
Prairie View A&M University	700	700	700	700
Sam Houston State University	----	----	900	900
Southwest Texas State University	800	900	1100	1200
Stephen F. Austin State Univ.	800	800	900	No Admit
Sul Ross State University	800	800	800	800
Tarleton State University	----	----	800	800
Texas A&M University	1000	1100	1200	1200
Texas A&M University-Corpus Christi	800	900	1000	1100
Texas A&M University-Galveston	800	950	1100	1100
Texas A&M University-Kingsville	----	850	850	850
Texas Southern University		Open Admission		
Texas Tech University	900	1100	1200	1200
Texas Woman's University	630	630	630	630
University of Houston	800	900	1000	1100
University of Houston-Clear Lake		Transfer Students Only		
University of Houston-Downtown		Open Admission		
University of Texas-Arlington	----	700	800	1000
University of Texas-Austin	1050	1050	1100	1100
University of Texas-Brownsville		Open Admission		
University of Texas-Dallas	1100	No Admission		
University of Texas-El Paso	----	700	800	800
University of Texas-Pan American		Open Admission		
University of Texas-Permian Basin	----	700	800	1000
University of Texas-San Antonio	700	750	800	850
University of Texas-Tyler		Transfer Students Only		
University of North Texas	800	900	1000	1100
West Texas A&M University	----	----	800	800
Admissions Requirements obtained from the Texas Higher Education Coordinating Board.				

Appendix G: Results of Correlation Testing between Predictor Variables and Response Variables: Total Number of Reported Offenses.

Correlation Coefficient between Predictor Variable and Response Variable						
Predictor Variables	Response Variables					Motor Vehicle
	Rape	Robbery	Assault	Burglary	Larceny	Theft
Enrollment	.459	-	-	.377	.863	.395
FTE Employees	.372	-	-	.319	.774	.507
Population	.447	-	-	.370	.855	.422
Number living on Campus	.500	-	-	.622	.741	.230
Occupancy Rate of Halls	.306	-	-	.322	.336	-
Percent living on Campus	.293	-	.216	.409	-	-
Avg. Age of Students	-.346	-	-.204	-.498	-.449	-
Avg. # of Credit Hours	.319	-	.262	.491	.342	-
# of Parking Spaces	.463	-	-	.458	.846	-
Total # of Males	.467	-	-	.385	.869	.391
Total # of Females	.435	-	-	.356	.829	.388
Ratio of Males to Females	-	-	-	-	-	-
Admissions Scores						
1st Quartile	-	-	-	-	.211	-
2nd Quartile	-	-	-	-	.230	-
3rd Quartile	-	-.280	-.245	-	.215	-
4th Quartile	-	-.253	-.254	-	.238	-
Aid per Recipient	-	.328	.232	.312	.322	.317
Aid per Enrollment	.218	.334	.349	.383	-	.263
% of Enrollment						
Freshmen	-	-	.395	.318	-	-
Sophomores	-	-	-	.315	.219	-
Juniors	-.221	-.212	-.323	-.283	-	-
Seniors	-	-	-.291	-	.217	-
Number of Police Officers	.456	-	-	.355	.823	.476
Pop. per Police Officer	-	-	-	-	.394	-
Index Crime in City						
Murder	-	.384	-	-	-	-
Rape	-	.408	-	-	-	-
Robbery	-	.409	.211	-	-	-
Agg. Assault	-	.436	.216	-	-	-
Burglary	-	.382	-	-	.204	-
Larceny	-	.320	-	-	.206	-
M.V. Theft	-	.386	-	-	-	.331
Offenses per Pop. in City						
Murder	-	-	-	-	-	-
Rape	-	-	-	-	-	-
Robbery	-	.378	-	-.225	-	-
Agg. Assault	-	-	-	-	-	-
Burglary	-	-	-	-	-	-
Larceny	-	-	-	-.296	-	-
M.V. Theft	-	.340	-	-.254	-	-

Computerized analysis performed using SAS statistical software.

Appendix H: Results of Correlation Testing between  
 Predictor Variables and Response Variables:  
 Number of Reported Offenses per Population.

Correlation Coefficient between Predictor Variable and Response Variable						
Predictor Variables	Response Variables					M.V. Theft
	Rape per Pop.	Robbery per Pop.	Assault per Pop.	Burglary per Pop.	Larceny per Pop.	
Enrollment	-	-	-	-	-	-
FTE Employees	-	-	-	-	-	-
Population	-	-	-	-	-	-
Number living on Campus	-	-	-	-	.293	-
Occupancy Rate of Halls	-	-	-	-	-	-.219
Percent living on Campus	-	-	-	.511	.259	-
Avg. Age of Students	-	-	-	-.310	-.353	-
Avg. # of Credit Hours	-	-	-	.405	.229	-
# of Parking Spaces	-	-	-	-	.241	-
Total # of Males	-	-	-	-	.239	-
Total # of Females	-	-	-	-	-	-
Ratio of males to females	-	-	-	-	-	-
Admissions Scores						
1st Quartile	-	-	-	-	-	-.255
2nd Quartile	-	-	-	-	-.220	-.295
3rd Quartile	-	-	-	-	-.286	-.465
4th Quartile	-	-	-	-.206	-.220	-.455
Aid per Recipient	-	-	-	-	-	-
Aid per Enrollment	-	-	-	.458	-	-
% of Enrollment						
Freshmen	-	-	-	.515	.315	-
Sophomores	-	-	-	.224	.222	-
Juniors	-	-	-	-.343	-	.244
Seniors	-	-	-	-.300	-	.381
Number of Police Officers	-	-	-	-	.205	-
Pop. per Police Officer	-	-	-	-.234	-	-
Index Crime in City						
Murder	.250	.311	.281	-	-	-
Rape	.262	.332	.294	-	-	-
Robbery	.263	.327	.295	-	-	-
Agg. Assault	.312	.388	.351	-	-	-
Burglary	.220	.283	.248	-	-	-
Larceny	.212	.271	.236	-.238	-	-
M.V. Theft	.216	.275	.245	-	-	-
Offenses per Pop. in City						
Murder	-	-	-	-	-	-
Rape	.393	.450	.446	-.229	-	-
Robbery	.237	.321	.283	-.264	-	-
Agg. Assault	.967	.989	.983	-	-	-
Burglary	-.262	-.229	-.225	-	-	-
Larceny	-.304	-.290	-.274	-.268	-	-
M.V. Theft	-	-	-	-.293	-	-

Computerized analysis performed using SAS statistical software.

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