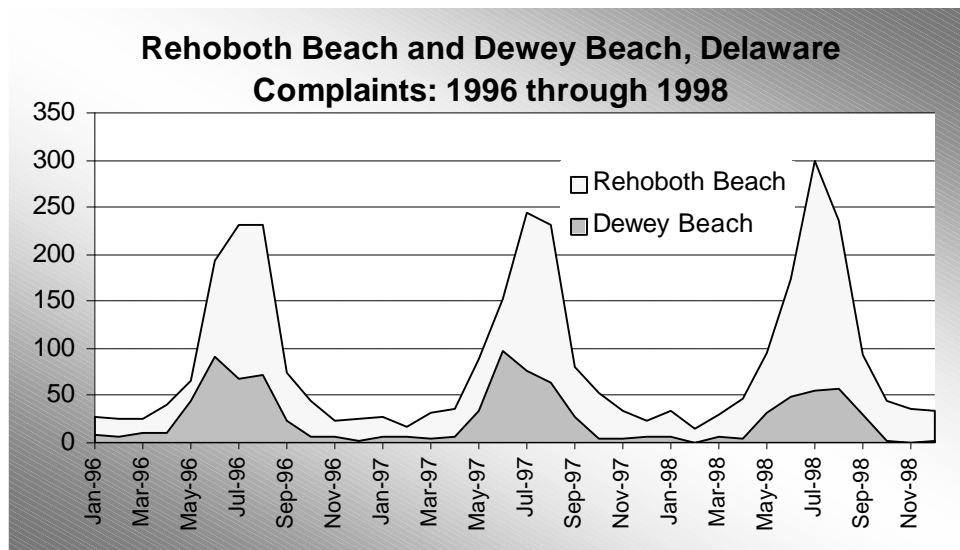


# Crime at the Beach

## An Analysis of Complaints, Charges, Victims, and Offenders in Rehoboth Beach and Dewey Beach, Delaware

1996 through 1998



June, 2000

## Preface

Crime, regardless of when and where it occurs, has an undesirable affect on individual victims as well as social order. In addition to the substantial human psychological impacts of criminal victimization very real economic costs accrue to society in general. When individuals suffer as a result of criminal activity the community in which they reside and, indeed, the community within which the activity occurs also suffers. This is especially true in communities where tourism is the mainstay of economic well-being.

The impact of crime on tourism is well documented. Between October of 1992 and September of 1993 the State of Florida experienced the murder of nine foreign tourists. The result of these sensational crimes on the tourist industry across the entire State of Florida was substantial. One study indicated that “As the murders captured headlines worldwide, the number of international tourists to Florida and South Florida fell dramatically, seriously affecting economies that rely heavily on tourism.” (Tilson, Donn and Don Stacks. “To Know Us Is To Love Us: The Public Relations Campaign To Sell A ‘Business-Tourist-Friendly Miami’” . Public Relations Review. Summer, 1977).

Admittedly the heinous crimes committed in Florida are not typical of the types of criminal behavior experienced by high-impact tourist areas. Reality and perception, however, are not necessarily related. Florida state officials found that of the approximately 40 million visitors in 1994 only .07% were the victims of any crime with .006% being injured as a result of criminal victimization. (“Visitor Crime in Florida: The Perception Vs. the Reality”. A Special Briefing for Lieutenant Governor Buddy McKay. January 22, 1997).

The economics of tourism would appear extremely susceptible to both the perceptions and the realities of criminal activity. Other nations have noted this relationship as well as groups and agencies concerned with both the tourist industry and crime. At the Second Annual Caribbean Tourism Investment Conference in Ocho Rios, Jamaica the Prime Minister of Saint Lucia, Dr. Kenny D. Anthony noted that “...if there is one industry that requires a crime free environment, it is tourism.” (March, 1998). The International Association of Chiefs of Police, recognizing the importance of security in tourism, currently offer a training course in Tourism, Crime and Security focusing on all aspects of law enforcement as it interacts with both the industry and the tourists that make a sustainable industry possible.

residents, business, and law enforcement remain similar. Both a real and perceived secure environment are critical to the health of the local economy.

As will be seen in the current study, the experiences of these two communities with crime reflects a somewhat more sedate picture. Most criminal activity is that which would be expected - minor infractions of the law where the victim is society in general. Nevertheless, the fragility of the tourist industry is well known. It remains important to understand both the extent and the nature of crime and criminal behavior if a viable tourist sector is to be sustained into the future.

Anova Associates  
May, 2000.

#### Acknowledgements

This study was completed by Anova Associates under contract to the Delaware Statistical Analysis Center, May 2000. Many thanks are due to John P. O'Connell, Director and his able staff Charles J. Heunke, Jr. and Brie A. Knox. Further gratitude is extended to Creig Doyle, Chief of Police, Rehoboth Beach, Delaware and Raymond Morrison, Chief of Police, Dewey Beach, Delaware. Any errors or omissions in this report are the sole responsibility of Anova Associates.

# **Crime at the Beach**

An analysis of Complaints, Charges, Victims, and Offenders  
in Rehoboth Beach and Dewey Beach, Delaware

1996 through 1998

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The points of view expressed in this document do not necessarily represent the official position of the U.S. Department of Justice.

State of Delaware Document #100703000605

### Director's Comments

Per agreement with the Bureau of Justice Statistics (BJS) and the Justice Research Statistics Association, we were one of a few sites solicited to prepare a national example analysis for using NIBRS "like" data.

National Incident Based Reporting System (NIBRS) is a decade old Federal effort to have states and localities expand Uniform Crime Reporting (UCR) to allow our crime databases to provide more detailed information regarding crime events, perpetrators, and victims. Delaware, via the efforts of the State Bureau of Identification, is still in the process of qualifying for full NIBRS status. Yet, compared to other states, Delaware has long had a NIBRS "like" system.

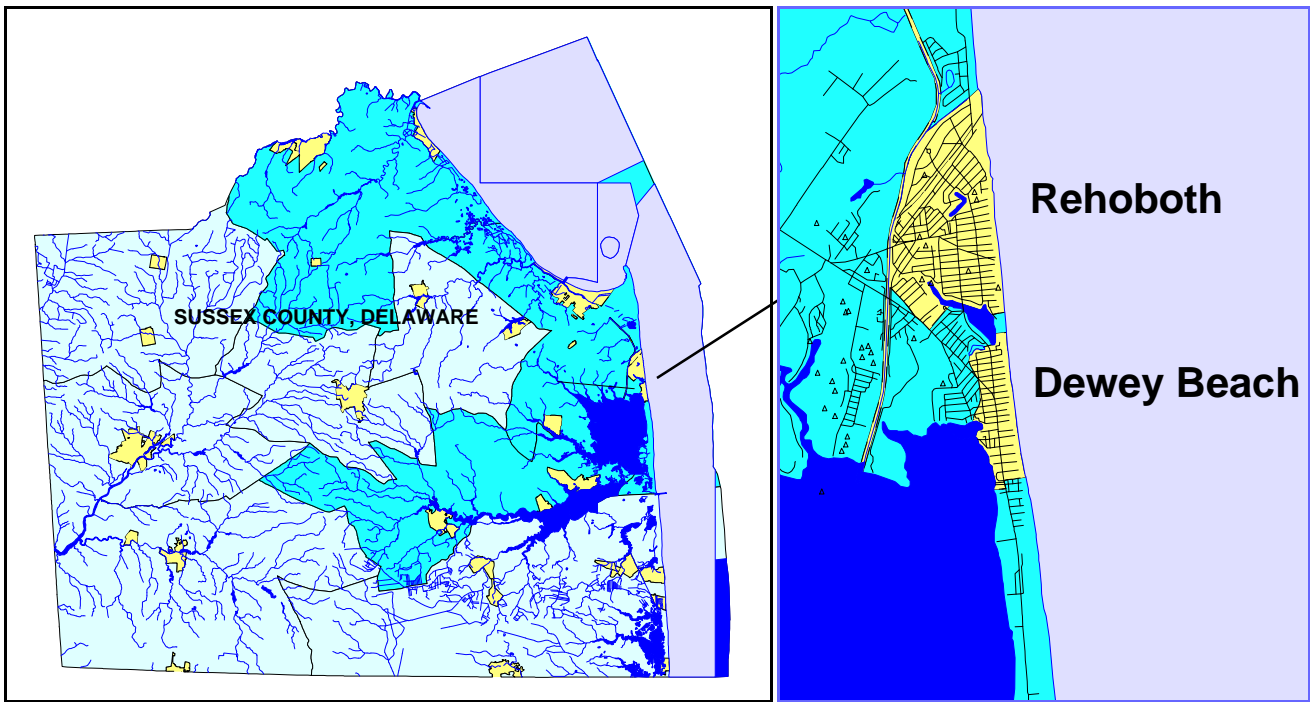
This study is more "techie" than our normal reports because of the Bureau of Justice Statistics' requirement to include in the presentation material information that we usually put in a technical note section. BJS is very interested in the question, "How do states turn these complex databases into informative studies?" Despite the inserted technical information, this report remains valuable with insights into the unique crime patterns in the Delaware resort areas.



## Introduction

“Crime at the Beach” provides an in-depth look at complaints and associated crimes recorded by the Rehoboth Beach, Delaware and Dewey Beach, Delaware police departments from January, 1996 through December, 1998. Across the three calendar years the combined departments recorded a total of 4,110 criminal complaints. These complaints contain a total of 5,941 unique criminal charges.<sup>1</sup>

Rehoboth Beach and Dewey Beach are small, adjacent coastal communities in Sussex County, Delaware. Sussex County is rural with agriculture as its main economic support, however,



the primary economies of the resort communities are driven by tourism, especially during the months of May through September. During the non-tourist season the permanent residential populations are approximately 1,250 in Rehoboth Beach and 450 in Dewey Beach. The tourist season, which can begin as early as the Easter holiday, typically runs from May through September. Early tourism can result in an influx of 25-30 thousand during the Easter weekend with peak summer weekend populations approaching 80 thousand.

The volume of people visiting these two communities during the ‘tourist’ months of May through September place a strain on the normally available law enforcement resources. As a result each community adds law enforcement personnel during these months. The Rehoboth Beach police department, with a normal compliment of eighteen officers, increases sworn staff to approximately

fifty sworn officers. The Dewey Beach department increases its normal staffing of eight officers to approximately sixty. The additional personnel are typically unarmed, maintain a high foot patrol presence, and engage both the visiting public and local residential and business interests through community policing practices. This high visibility and consistency of enforcement, coupled with professional community policing standards, serves to maintain social order while preserving an ensured and sustained tourist industry.

Crime in both communities varies from seasonal year to seasonal year as well as across the non-tourist months. Generally, the two communities differ in the type and quantity of social order problems experienced due to fundamental differences in characteristics. Rehoboth Beach provides substantial seasonal rental properties, has a beachfront boardwalk lined with both upscale and moderately priced hotels/motels, and a cul-de-sac main street framed by small tourist oriented business and bars which provide musical and other entertainment. Dewey Beach is located on the major north-south access highway south of Rehoboth Beach, is smaller in area, and has a much higher proportion of bars to other business interests than found in Rehoboth Beach. Dewey Beach serves as the main thoroughfare for all traffic going to and from Rehoboth Beach from the south and Ocean City from the north. Dewey Beach has a greater concentration of tourists during the evening hours with large groups of individuals congregating to party and drink at any of the several bars located within the city.

Neither Rehoboth Beach nor Dewey Beach have detention capacity beyond a few (three) hours. Any arrestee requiring incarceration must be transported to the Sussex Correctional Institution located in Georgetown, Delaware which is approximately thirty miles away. In most cases temporary detainees are held in a waiting area (affectionately referred to as the 'get acquainted room' in Dewey Beach) until release is possible. In most cases the arrestee appears in Alderman's Court where the charge is disposed by a non-lawyer judge who is hired and paid by the city. In more severe cases (or at the discretion of the arrestee) the detainee appears in Magistrate Court before a state appointed judge for disposition. Criminal acts may either be charged under Delaware state statute or local ordinance depending upon the severity and/or the discretion of law enforcement or the judge. During the tourist season most charges are disposed under local ordinance jurisdiction.

Law enforcement officials have perceived a change in both tourist demographics and criminal activity characteristics over the past several years. Some of these changes are noted as the result of policing practices with others attributable to overall population characteristics. Policing practices

have managed to alter the 'animal house' image attributed to both communities in the past, thus reducing the number of disorderly conduct arrests. Dewey Beach police, for example, cite a reduction in such arrests from as many as 300 several years ago to 40 during 1999. Other changes in character of the tourist population include greater expendable income as well as a tendency to engage in tourist activity during the evening hours.

In general the nature and extent of criminal behavior in both communities is driven by the economy and the weather. In years with an early spring a greater number of tourists appear earlier with a commensurate impact on law enforcement workload and crime statistics. The well-being of the economy in general also has a substantial impact on the number of individuals seeking holiday in either of these communities.

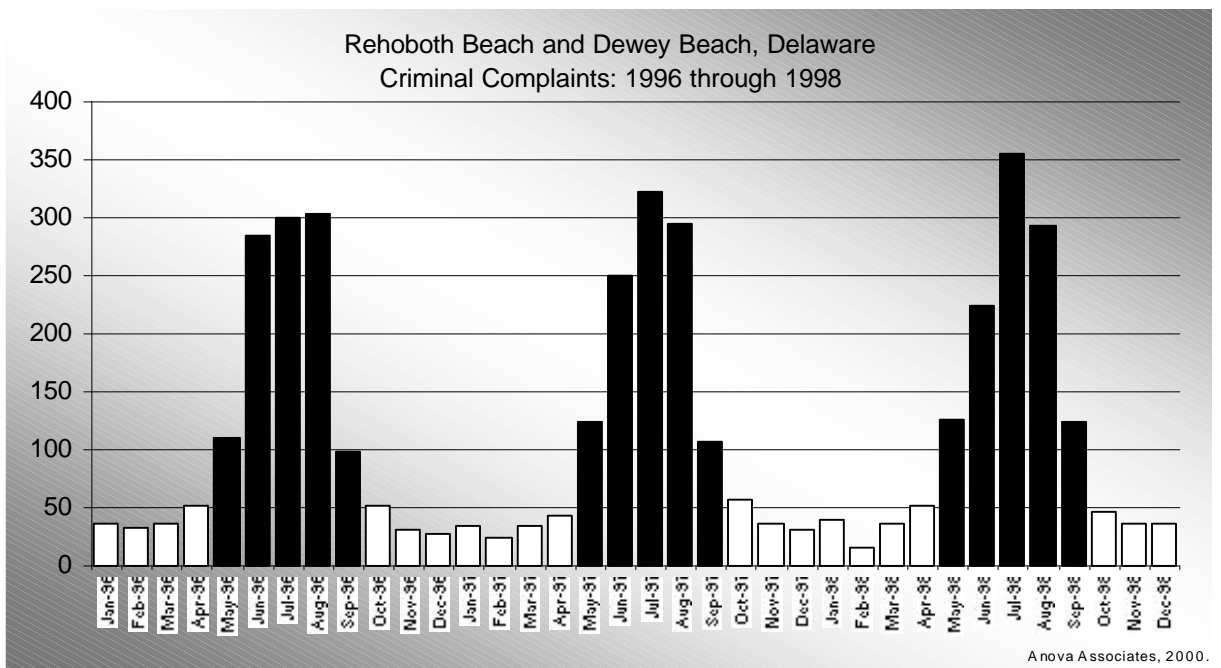
<sup>1</sup> The reader should note that the analyses represented in this report are based on NIBRS-like data and include all offenses within a complaint. Other reports such as "Crime In Delaware" and "Crime in the United States" reflect only the most serious offense of all offenses within a complaint. For this reason the numbers across the various reports will differ.

## The Data

The information used in this report was extracted from the NIBRS-like Uniform Crime Reporting system maintained by the State Bureau of Identification of the Delaware State Police. The data include information about criminal complaints, the various offenses which make up the complaints, the victim(s) of the crime if known and/or appropriate, and the offender(s), if known. The data represent all complaints recorded by the Rehoboth Beach and Dewey Beach police departments and submitted to the Delaware State Police from January of 1996 through December of 1998.

The graphic below shows the combined community complaints for each of the thirty-six months. The ‘tourist months’, shown in black for each year, clearly demonstrate the increase in criminal activity when compared to the ‘off-season’ months. Of the total 4,110 criminal complaints recorded, 81 percent occurred during the May through September months (Rehoboth Beach 79%; Dewey Beach 88%).

A major focus of the analysis revolves around the differences, if any, in the observed patterns of criminal behavior between the tourist season months and the off-season. The remainder of this document discusses and examines in some detail the patterns and characteristics of complaints, crimes within complaints, victims, offenders, and victim-offender residential relationships. As with any complex set of data compiled over time there are instances where data are missing or erroneous. Where appropriate notes are provided as to the extent of missing information.



## **Criminal Complaints**

Criminal complaints represent the highest level of documentation regarding the commission of criminal acts. Regardless of whether a citizen calls law enforcement regarding an overnight burglary where the perpetrator is unknown, or a police officer makes an instant arrest for assault on the beach, a complaint is recorded. Law enforcement agencies record the details of all criminal activity, actual and alleged, on a complaint form which is then forwarded to the Delaware State Police for centralized computerization. Complaint forms contain as much information as possible about one or more criminal acts. Within one complaint it is possible to have multiple, different crimes across several victims. As an example, a single complaint could contain two separate ‘breaking and entering’ crimes with two victims, and an ‘assault’ crime with one victim. The two separate ‘breaking and entering’ crimes are considered ‘property’ offenses, while the ‘assault’ crime is considered a ‘violent’. In this scenario there may or may not be three different victims depending on whether the ‘assault’ victim was also one of the ‘property’ victims. For purposes of considering levels of criminal activity and victim-offender relationships it is the crimes which are of the most interest. For other purposes, such as mapping where and when crime occurs, the complaint frequently becomes the focus.

**Graphs 1 through 5** on the following pages display information about the complaints recorded by the Rehoboth Beach and Dewey Beach, Delaware police departments across the thirty-six month period from January of 1996 through December of 1998. The data are divided into ‘Tourist Season’ and ‘Off Season’. They are further divided into ‘type of charge’ (violent crime, property crime, and societal crime) for all but the first graphic.

**Graph 1** displays by year and season the total number of unique complaints across the period. The most obvious observation is that the number of complaints taken across the period appears stable. When the seasons are totaled within each year there is a difference of fewer than 25 complaints across the years (1996, 1,365; 1997, 1,360; 1998, 1,385). From a complaint perspective the occurrence of criminal activity within the two communities changed little from 1996 to 1998.

**Graphs 2 and 3** break down the analysis further by focusing only on the ‘tourist season’ months. In these graphs the number of complaints are displayed according to the type of crime they contain. Three categories of crime type are represented. ‘Violent Crimes’ are offenses such as aggravated and simple assault, intimidation, rape, and kidnapping. ‘Property Crimes’ are offenses such as vandalism, theft, burglary, and stolen property among others. ‘Society Crimes’ are those offenses which technically do not have a specific victim. These crimes include liquor law violations,

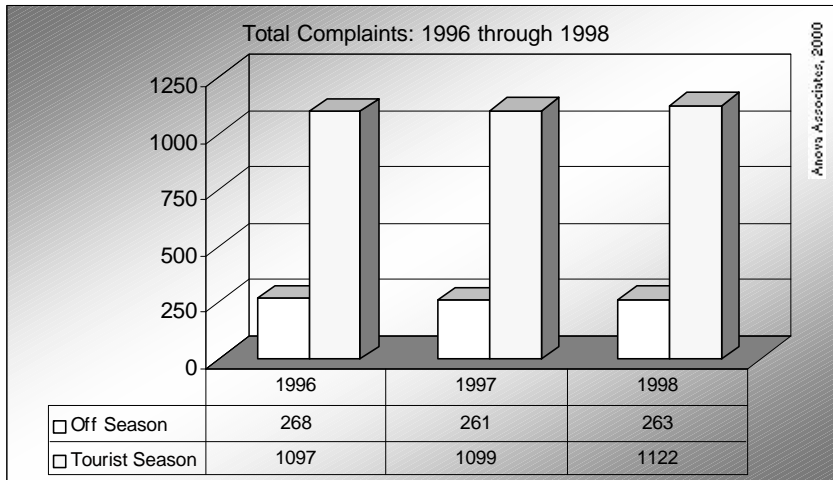
drunkenness, drug violations, disorderly conduct, and others of a similar type.

**Graph 2** provides some insight into changes in the types of criminal complaints during the tourist season months for each of the three years. Complaints containing violent crimes represent the fewest, have fluctuated only slightly across the years, and, indeed have been reduced in absolute number since 1996. Complaints containing property crimes show a similar, but more substantial, decline of 17% between the 1996 tourist season and the 1998 season. Unlike complaints containing both violent and property crimes, complaints containing societal crimes increased across the same period by 28%.

**Graph 3** provides information about the shifting relationships among complaint types by showing the percentage of all complaints. Mimicking the patterns in **graph 2**, complaints containing societal crimes have increased as a proportion of total complaints from 34% in 1996 to 43% during the 1998 tourist season. Complaints containing property crimes fell in proportion from 50% of all complaints during the 1996 season to 41% in 1998. Complaints containing violent crimes remained relatively stable at around 10%.

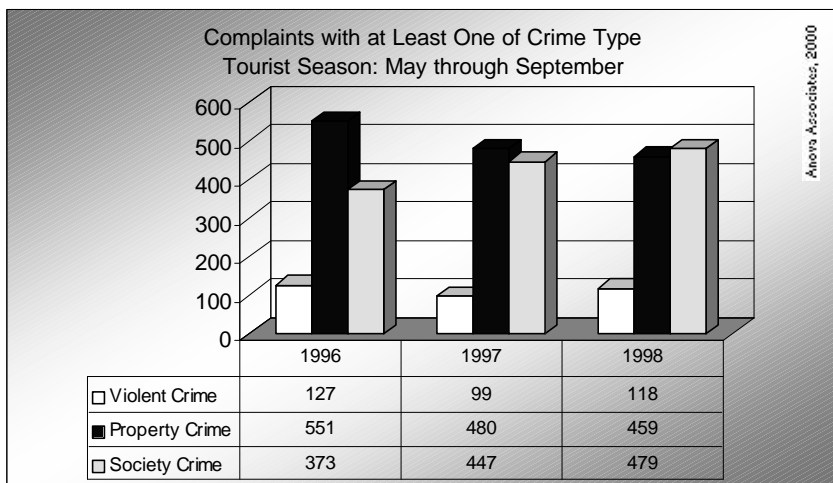
The graphs taken together indicate that total complaints across the years have increased only slightly while the types of criminal offenses contained in those complaints have shifted in relationship to each other. Since it is generally accepted that societal crimes are less serious than property crimes, it would appear that the overall seriousness of crime was reduced substantially from the tourist season in 1996 through the same period in 1998.

**Graph 1**



Graph 1 represents the combined absolute number of complaints recorded by Rehoboth Beach and Dewey Beach by year and season.

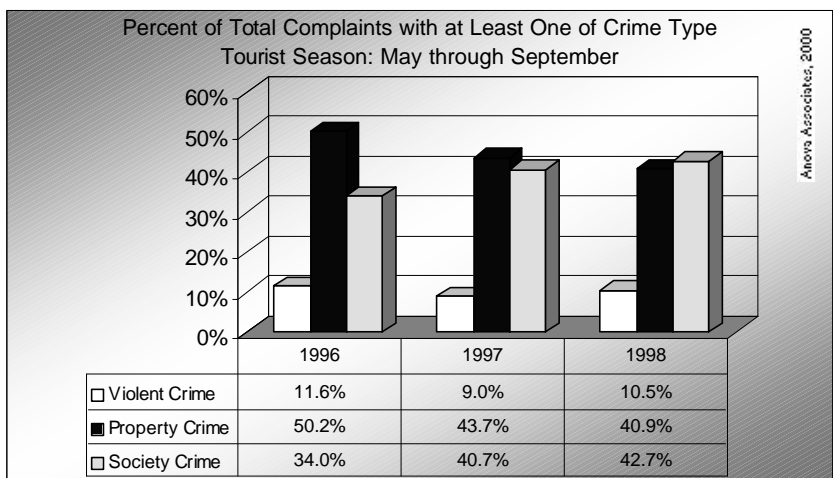
**Graph 2**



Graph 2 represents the combined absolute number of complaints for the tourist season only by year and crime category.

Note that a particular complaint may be counted more than once in a given year since individual complaints may contain different categories of crimes. For example, a complaint containing one violent crime charge, one property crime charge, and one societal crime charge would be counted three

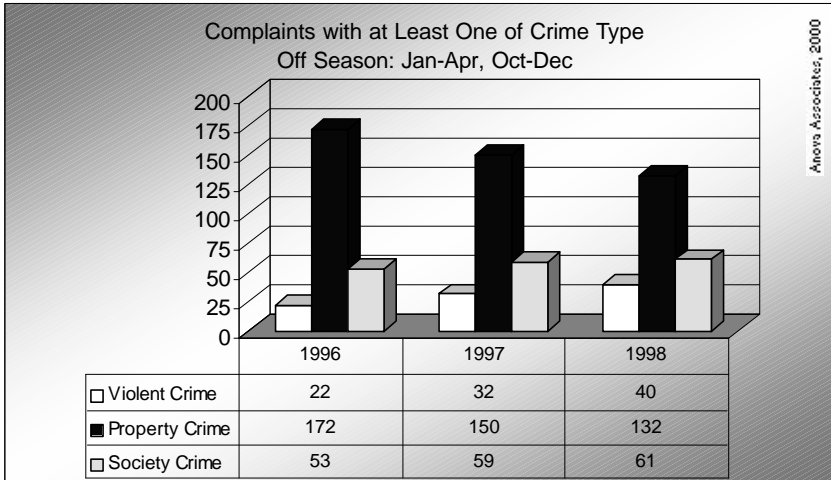
**Graph 3**



Graph 3 represents the percentage of total complaints for the tourist season only by crime category and year.

The percentages do not add to 1 because a category of crimes known as 'Other' is not represented.

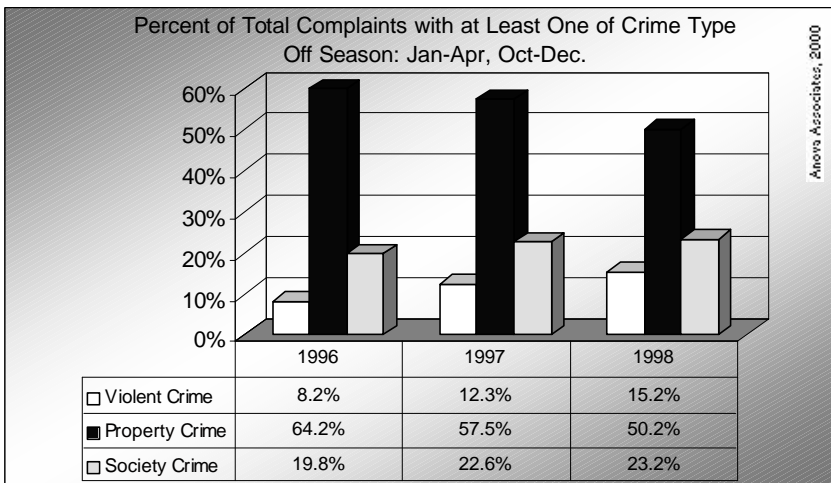
**Graph 4**



Graph 4 represents the combined absolute number of complaints for the non-tourist season (off-season) only by year and crime category.

Note that a particular complaint may be counted more than once in a given year since individual complaints may contain different categories of crime.

**Graph 5**



Graph 5 represents the percentage of total complaints for the non-tourist season (off-season) only by year and crime category.

The percentages do not add to 1 because a category of crimes known as 'Other' is not represented.

## Criminal Charges

Criminal charges are recorded within a complaint form. A single complaint may have multiple same or different charges, violent, property, societal, or other. An individual arrested for fraudulent use of a credit card, for example, may have used that card in several business locations prior to being arrested. Each use can be, and typically is, counted as a separate charge. Whereas the complaint information in the previous section gives only a crude view of the 'crimescape', an analysis of the charges shows a more detailed picture of criminal activity.

**Table 1** provides a detail listing of all charges recorded both off-season and during the tourist season for each of the three observed years. Within the group of crimes considered violent offenses it is clear that 'Simple Assault' constitutes the majority of violent crimes across the period (the total number of simple assaults is 281). Within property offenses, 'Vandalism' represents the largest number of crimes. 'Liquor Law Violations' lead the societal offenses group across all of the years. For example, total recorded simple assaults during the off-season period changed from 28.9% of total violent offenses in 1996 to 53.7% of total violent offenses in 1998. The converse is true of the offense of intimidation during that period. This reversal may, in fact, represent a change in

Table note: The percentage columns add to 1 within each offense grouping. By reading across the percentage columns within each season it is possible to monitor changes in the mix of specific offenses across the years. Offenses categorized as 'Other' are not displayed. See the footnote at the bottom of the table.

policing policy as well as actual changes in the number of occurrences of criminal behavior. Other interesting pattern shifts include the proportional decrease in 'aggravated assault' from 15.7% during the 1996 tourist season to 10.3% during the 1998 season, and an increase in the proportion of the property offense of 'theft in building' from 12.9% in 1996 to 17.6% in 1998.

**Graph 6** provides a display of the breakdown of the total crimes found in **table 1** by season and year. In both the tourist months and the off-season months total crimes tended to reach a low during 1997 with a slight rebound in 1998. Within the off-season months the rebound in 1998 achieved a level higher than 1996. The rebound within the tourist months for 1998 do not achieve the level of 1996.

**Graphs 7 and 8** display the information found in **graph 6** for the tourist season only with the added categories of crime type. Here is where the differences in the number of complaints within a category and the number of crimes across those complaints become clear. **Graph 2** in the prior complaints section shows a decline between 1996 and 1998 in the number of complaints con-

taining at least one violent offense. **Graph 7**, however, shows an increase from 1996 to 1998 in the number of violent crimes associated with those complaints. An analysis at the complaint level would result in an interpretation that violent crime has declined over the years. A more appropriate analysis at the criminal charge level yields the opposite interpretation. The number of instances of violent crime increased by 15%. From a victim perspective, this could reflect an increase in the number of victims per complaint, the number of offenses per victim, or a combination of both.

An analysis of the number of property crime charges shows a distribution similar to that seen in the analysis of property crime complaints - both declined between the 1996 tourist season and the 1998 season. Actual property crimes decreased by 19% across that period.

Societal crime increased substantially from the 1996 tourist season to the 1998 season. While the number of complaints containing at least one societal crime increased by 28% (see **graph 2** in the prior section) the total number of societal crimes across those complaints increased by 25% from 491 in 1996 to 616 in 1998. **Graph 8** displays the changes in the mix of crime types during the tourist months across the years. Violent crime constituted 9.4% of total charges during the 1998 season compared to 8.1% during the 1996 season. Property crimes dropped from 47% of total crimes in 1996 to 39% in 1998. Societal crimes increased from 31% to 40%.

**Graphs 9 and 10** replicate the above analysis of the tourist months for the off-season months of January through April and October through December in each year. While the magnitudes of charges are much lower during the off-season months, the patterns of change are similar. Violent crime increased by 42% from 1996 through 1998; property crime decreased by 10%; societal crime increased by 22%. The patterns of crime type proportions (**graph 10**) during the off-season months are also similar to the patterns seen across the tourist seasons (**graph 8**). Violent crime increased in proportional representation from 1996 to 1998; property crime decreased in proportional representation during that period, and; societal crime increased in proportion.

All things being equal, the similarity in patterns of change in both magnitude and proportionality for the tourist season and non-tourist season periods would not be expected. The tremendous influx of tourists into the Rehoboth Beach and Dewey Beach communities during the tourist season would argue for a fundamental change in population characteristics when compared to the very small and largely residential population during the off-season. One interpretation is that the population characteristics are different only in terms of magnitude. While there are certainly more individuals present during the tourist season, those individuals taken as a whole may not behave any

differently than the off-season population.

**Graphs 11 through 13** provide additional information about charging practices within the relevant law enforcement communities of Rehoboth Beach and Dewey Beach. **Graph 11** displays the total distribution of charges by local ordinance versus state statute across the thirty-six month period. Violations of the law may be charged at one of two levels. State statutes may be evoked or local ordinances may be enforced. The decision to charge at the state or local level results in the offender appearing in local Alderman's Court versus a state level Magistrate court. Further, cases charged in local courts result in the diversion of offender fines and costs to the municipal level rather than to the state. As is readily seen, the proportion of charges represented by local ordinance enforcement versus state statute enforcement has steadily increased across the three periods from approximately 25% in July of 1996, the height of the tourist season, to 45% in July of 1998.

Table 1

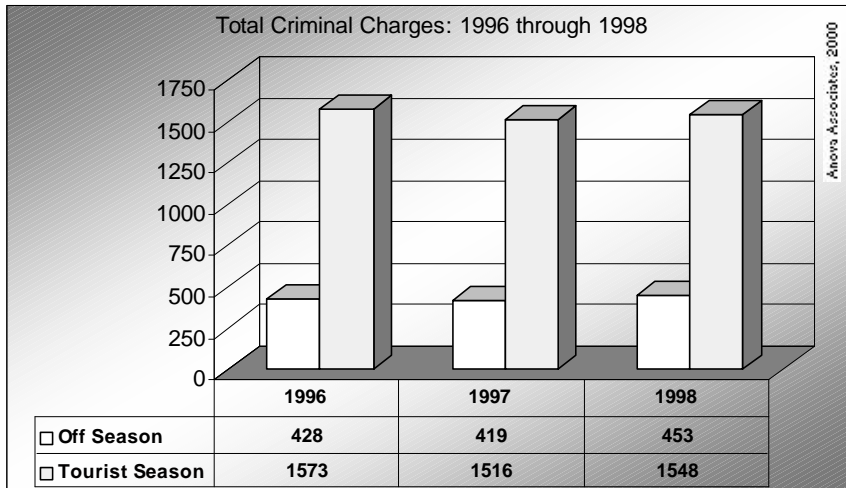
## Offenses as Percent of Crime Group

	Number of Charges	Off Season			Tourist Season		
		1996	1997	1998	1996	1997	1998
<b>Violent Offenses</b>	<b>522</b>	<b>38</b>	<b>32</b>	<b>54</b>	<b>127</b>	<b>125</b>	<b>146</b>
Assault Simple	281	28.9%	50.0%	53.7%	52.8%	60.8%	56.2%
Intimidation	162	65.8%	40.6%	25.9%	29.9%	24.8%	28.1%
Assault Aggravated	59	5.3%	9.4%	14.8%	15.7%	8.8%	10.3%
Forcible Rape	15			3.7%	0.8%	4.8%	4.1%
Kidnapping	5			1.9%	0.8%	0.8%	1.4%
<b>Property Offenses</b>	<b>2711</b>	<b>265</b>	<b>244</b>	<b>239</b>	<b>746</b>	<b>615</b>	<b>602</b>
Vandalism	670	26.0%	18.9%	27.2%	26.4%	23.3%	24.9%
Theft in Building	475	18.9%	20.1%	20.5%	12.9%	20.3%	17.6%
Larceny Other	381	7.2%	11.1%	5.9%	16.4%	16.4%	16.3%
Larceny Shoplifting	264	4.5%	4.1%	6.7%	13.4%	10.9%	9.8%
Burglary and Break/Enter	239	11.3%	7.4%	18.8%	6.7%	7.2%	8.6%
Theft from Vehicle	129	3.0%	2.0%	3.3%	4.7%	5.9%	6.1%
Bad Checks	102	8.3%	8.2%	6.7%	2.1%	2.3%	2.3%
Impersonation	95	3.4%	4.9%		2.3%	4.6%	4.8%
Theft of Motor Veh Parts	82	1.1%	2.0%	1.7%	6.2%	2.1%	1.8%
False Pretenses	72	4.2%	7.8%	4.6%	1.5%	2.0%	1.3%
Forgery	70	6.4%	4.5%	2.1%	3.1%	0.7%	1.7%
Stolen Property	37	1.1%	3.3%	0.4%	1.6%	0.8%	1.3%
Credit Card	34	1.5%	4.1%	0.4%	0.7%	2.0%	0.3%
Motor Vehicle Theft	20	0.8%	0.4%	0.8%	0.9%	0.5%	0.8%
Robbery *	17	0.4%	0.8%		0.3%	0.8%	1.2%
Theft Coin Oper Machine	16	1.5%		0.4%	0.7%	0.2%	0.8%
Pick Pocket	4				0.3%	0.2%	0.2%
Arson	2	0.4%		0.4%			
Extortion	1		0.4%				
Purse Snatching	1					0.2%	
<b>Society Offenses</b>	<b>1921</b>	<b>72</b>	<b>75</b>	<b>92</b>	<b>491</b>	<b>575</b>	<b>616</b>
Liquor Law Violations	717	16.7%	13.3%	17.4%	38.5%	42.8%	39.6%
Disorderly Conduct	289	15.3%	20.0%	19.6%	11.4%	15.5%	16.2%
Drunkenness	253	8.3%	6.7%	10.9%	16.7%	13.6%	11.7%
Drug Violation	208	12.5%	8.0%	4.3%	11.4%	11.7%	10.7%
Tresspassing	163	25.0%	28.0%	30.4%	7.5%	5.2%	4.7%
Drug Paraphernalia	138	12.5%	6.7%	3.3%	7.3%	7.5%	6.8%
Family Laws	93		14.7%	10.9%	3.1%	2.6%	6.8%
Weapons Laws	36	8.3%	2.7%	1.1%	2.6%	0.2%	2.1%
Curfew Viol / Vagrancy	12				0.8%	0.9%	0.5%
Driving Under the Influence	8	1.4%		1.1%	0.2%	0.2%	0.6%
Peeping Tom	1			1.1%			
Promoting Prostitution	1				0.2%		
Pornography	1						0.2%
Prostitution	1				0.2%		

Offenses designated as 'Other' are not included here (N = 783).

\* Delaware considers 'Robbery' to be a violent crime since at least one individual victim is always present.

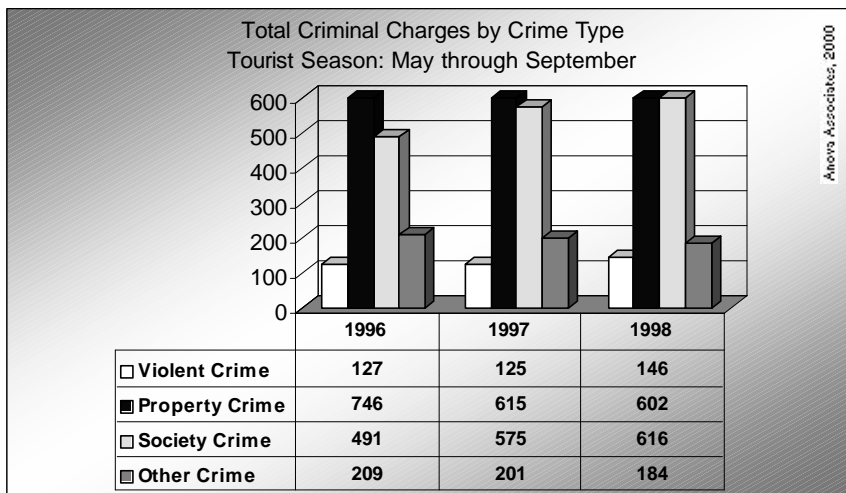
**Graph 6**



Graph 6 represents the combined absolute number of crimes recorded by Rehoboth and Dewey Beach by year and season.

One or more crimes are contained within any given criminal complaint.

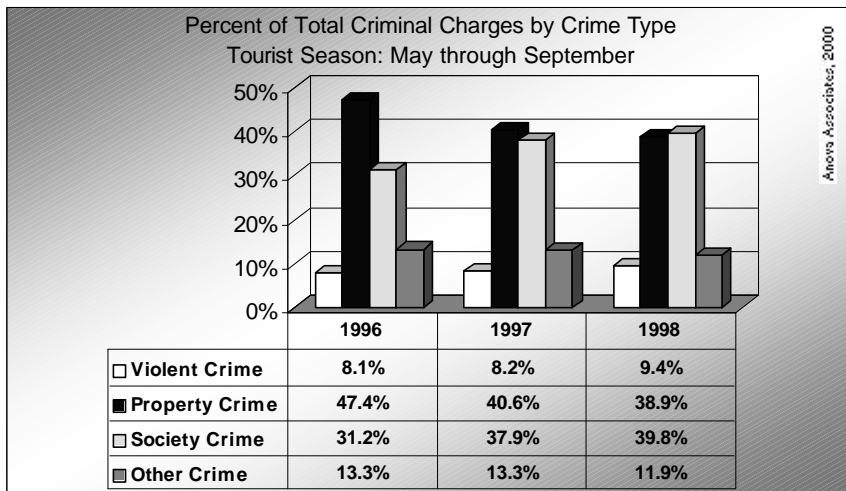
**Graph 7**



Graph 7 represents the combined absolute number of crimes for the tourist season only by year and crime category.

Unlike the analysis of complaints in the prior section, the crime category of 'other' is included here.

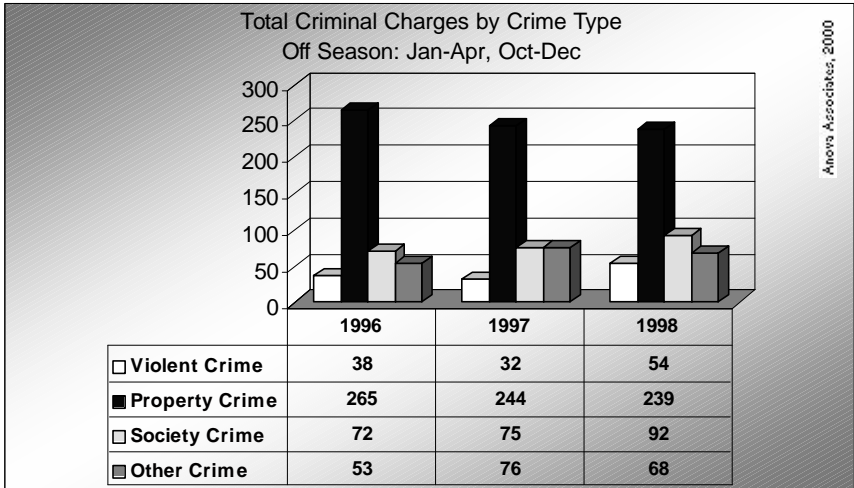
**Graph 8**



Graph 8 represents the percentage of total crimes for the tourist season only by year and crime category.

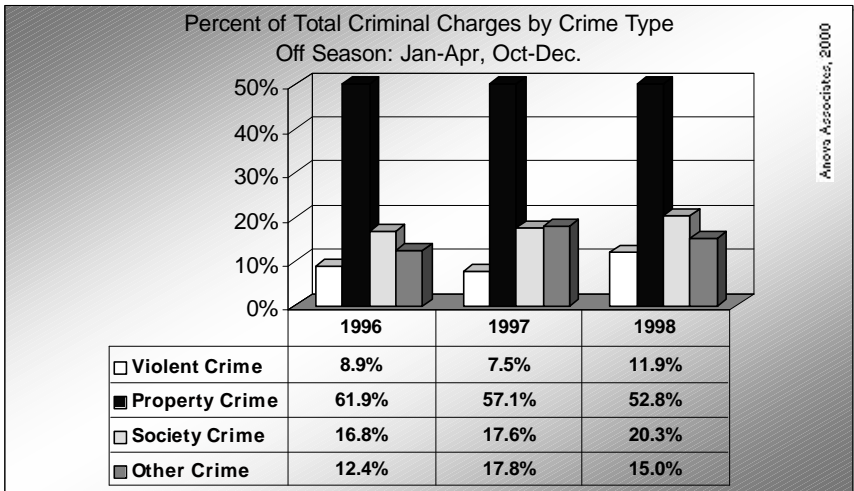
Percentages add to 1 within each year.

**Graph 9**



Graph 9 represents the combined absolute number of crimes for the non-tourist season (off-season) only by year and crime category.

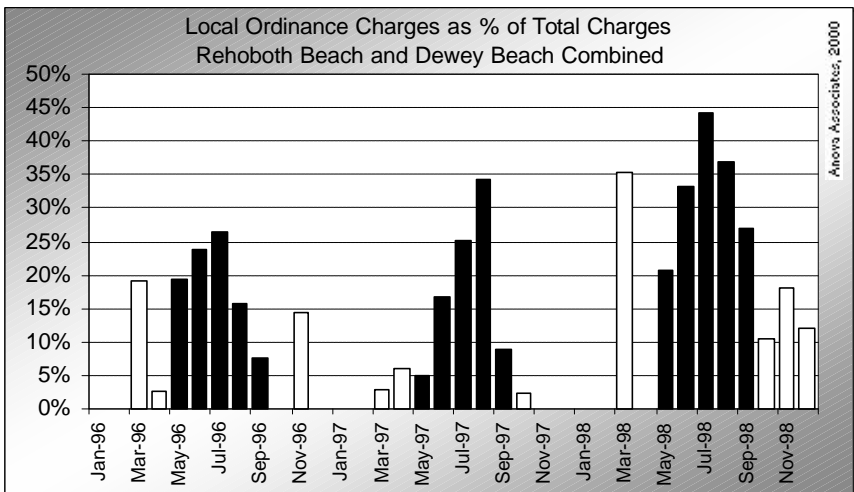
**Graph 10**



Graph 10 represents the percentage of total crimes for the non-tourist season (off-season) only by year and crime category.

Percentages add to 1 within each year.

**Graph 11**



It is important to note that this analysis is based on **55% of the total crimes**. Statute information is not recorded until an actual arrest is made. The trend may still be relatively accurate, however, since the percent of crimes where statute information is not available for each year is close to the 45% level (48%, 1996 tourist season charges; 44%, 1997; 45%, 1998).

## Characteristics of the Victims of Crime

All crimes are classified as having one or more victims. Victims of violent crimes are always one or more individuals. The victims of property offenses may be individuals, businesses, government, or financial institutions. Society is considered the victim of crimes that are classified as 'Society/Public' in nature (drug possession, drunkenness, disorderly conduct, etc.). **Graphs 1 and 2** in this section provide a pie chart representation of the type of victims for all off-season months and all tourist season months respectively. As would be expected, crimes with society as the victim predominate during the tourist months. The increased use of both legal and illegal drugs during the tourist seasons accounts for this difference. Correspondingly, individuals and business as victims decreased in proportion from off-season to tourist season.

**Graph 3** looks specifically at the number of victims during the tourist seasons only for each of the observed years. When considering the individual as victim there appears to be little change from 1996 to 1998 (although the 1997 year shows a level substantially below both 1996 and 1998). Businesses as crime victims dropped substantially in absolute occurrences from 1996 through 1998. Societal offenses increased in 1997 over 1996 and remained virtually unchanged from 1997 to 1998.

One of the more interesting aspects of criminal victimization revolves around the aging of the American population. As the 'baby boom' generation ages there are growing concerns that criminal victimization of this group will increase. Annual population projections provided by the Delaware Population Consortium (January 30, 1997) indicate an increase in the 'over 60' population of from 16.2% in the year 2000 to 22.2% in the year 2020. Further, this population represents an economic affluence not yet experienced in American demographics. Presumably this population, which is both living longer and has more expendable wealth, will fuel the tourist industry into the near future. While the fact and extent of increased victimization has yet to be established, a monitoring of the age of the victims of crime can provide information for law enforcement and policy makers.

Where appropriate and available the age of each crime victim has been categorized into one of several age range groups. **Graph 4** shows the general distribution of these age groups across all thirty-six months of the data. Clearly, the victim age group with the greatest representation is in the 18-25 year range. This group accounts for 22% of the victims across the period. A full 55% of all victims were under the age of 35 with 79% under the age of 50.

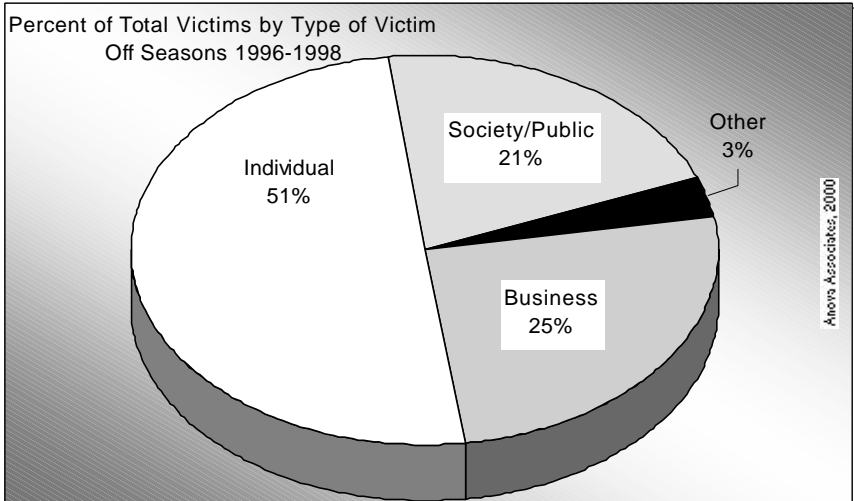
**Table 1** provides a specific look at victims of violent crimes during the tourist months only

across the three year observation period. The bold figures represent the age group at or below which 75% of the victims are represented. In no year were 75% of the victims older than age 40. Indeed, victims of violent crime during the tourist season over the age of 60 accounted for 3.3% in 1996, 3.8%, and 1.8% in 1998. There is further evidence that the target victim population (at least during the observed years) is getting younger and more tightly focused. Both the mean victim age and the standard deviation of the mean are getting smaller. In 1996 the mean age was 31 with 68% of all the victims during the tourist season falling between the ages of 15 and 46. During the 1998 season the mean age was 28 with 68% of the victims falling between the ages of 17 and 38. This phenomena could easily be a function of changes in the age distribution of the tourist population from the 1996 to the 1998 season. Demographic estimates of the age of the tourist population are not available.

Of all victims across the 36 month period 55% were males with the remaining 45% females. An analysis of gender patterns across years showed few differences in this split.

Where the victim actually lives is always a question of interest to communities which rely economically on tourism. Excessive criminal activity can have a dampening effect on the number of tourists visiting the area thus harming the economic well-being of the community. This is especially true when the touring public perceives itself as the target of criminal activity. **Graph 5** shows the residential distribution of known victims for the tourist seasons only across the years by percentage of total victims for each year. In each of the years the Rehoboth Beach residents were more frequently victimized, followed by out-of-state residents, residents of Delaware other than Sussex County, residents of Sussex County other than Rehoboth Beach or Dewey Beach, and, finally residents of Dewey Beach. It should be noted that both Rehoboth Beach and Dewey Beach have substantial long-term seasonal populations. It is not possible to know what percentage of the victims showing Rehoboth Beach or Dewey Beach as permanent residences actually live someplace other than Rehoboth Beach or Dewey Beach during the off-season. The graph reveals that Rehoboth Beach residential victims have declined in proportion of all known victims since 1996 (41% to 37%). The proportion of victims listing a permanent residence outside of the State of Delaware has increased since 1996 from 31% to 36%.

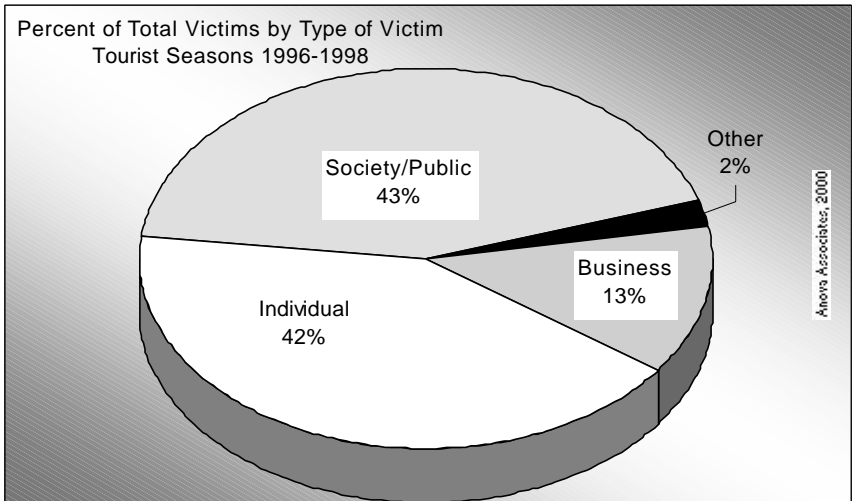
**Graph 1**



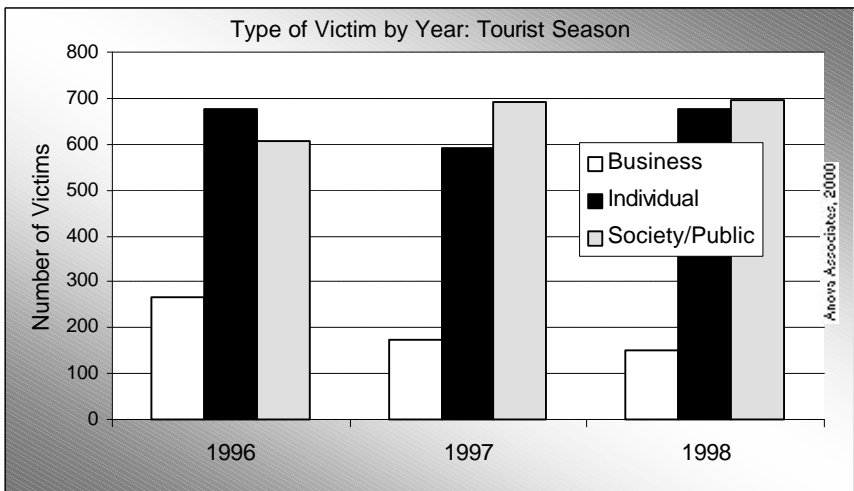
Pie graphs 1 and 2 display the distribution of crime victims by season across the 1996-1998 period. The 'Other' category in both charts includes victims such as financial institutions, government, and religious organizations.

Note that 'individuals' may be victimized through either violent or property offenses. The 'business' type is property only.

**Graph 2**

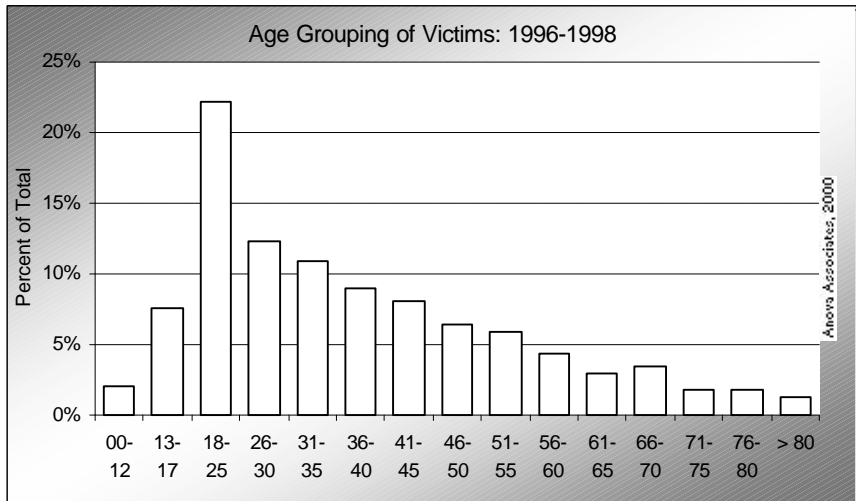


**Graph 3**



Graph 3 displays the absolute number of victims for the tourist seasons of each year. Only the major victim types are included in this display.

**Graph 4**



Graph 4 shows the age grouping of all 'individual' victims across the period.

While the groups are not equal in interval until the age 26-30 and higher, they do represent a commonly accepted breakdown of ages, especially within the criminal justice research community.

Note that 15% of the individual victim data are missing date of birth.

**Table 1**

Victims of Violent Crime: Tourist Season						
Age Group by Year						
Age Group	1996		1997		1998	
	%	Cum. %	%	Cum. %	%	Cum. %
00-12 Yrs	1.6%	1.6%	0.9%	0.9%	4.5%	4.5%
13-17 Yrs	5.7%	7.4%	17.9%	18.9%	10.7%	15.2%
18-25 Yrs	36.9%	44.3%	29.2%	48.1%	38.4%	53.6%
26-30 Yrs	13.1%	57.4%	16.0%	64.2%	10.7%	64.3%
31-35 Yrs	16.4%	73.8%	18.9%	83.0%	10.7%	75.0%
36-40 Yrs	4.9%	78.7%	4.7%	87.7%	7.1%	82.1%
41-45 Yrs	4.1%	82.8%	6.6%	94.3%	13.4%	95.5%
46-50 Yrs	6.6%	89.3%	0.9%	95.3%	1.8%	97.3%
51-55 Yrs	3.3%	92.6%	0.9%	96.2%	0.0%	97.3%
56-60 Yrs	4.1%	96.7%	0.0%	96.2%	0.9%	98.2%
61-65 Yrs	0.8%	97.5%	1.9%	98.1%	1.8%	100.0%
66-70 Yrs	0.0%	97.5%	0.9%	99.1%	0.0%	
71-75 Yrs	0.8%	98.4%	0.0%	99.1%	0.0%	
76-80 Yrs	0.8%	99.2%	0.9%	100.0%	0.0%	
> 80 Yrs	0.8%	100.0%	0.0%		0.0%	
<b>Totals</b>	<b>100.0%</b>		<b>100.0%</b>		<b>100.0%</b>	
Mean Age		31.1		27.7		27.6
St. Dev.		14.6		12.1		11.4
Median		27.5		26.0		25.0
Mode		18.0		18.0		21.0

The table should be read down the columns. For example, 38.4% of all victims of violent crime in 1998 were between the ages of 18 and 26 years (18 through 25).

The cumulative percentage column for the same year indicates that 53.6% of all victims of violent crime were 25 years of age or younger.

The mean is the average un-grouped age of all victims for the year. The standard deviation is the number of years above and below the mean which contains 68% of the cases. Standard deviation is a measure of dispersion.

For example, the mean (average) age of all victims in 1998 was 27.6 years. The standard deviation of 11.4 indicates that 68% of all violent crime victims in the 1998 tourist season were between the ages of 39 and 16.2 years.

The median is the age at which 50% of the cases lie both above and below.

The mode is the most frequently occurring age of all victims during the year.

Note: 15% of the data are missing.

**Graph 5**



Graph 5 displays the known residences of individuals victimized during each year's tourist season. Residential data are available for only 56% of the observations.

The residence categories are mutually exclusive.

'Other Delaware' indicates a residence not in Rehoboth Beach/Dewey Beach and not in Sussex County.

'Other Sussex' indicates Sussex County residence other than Rehoboth Beach/Dewey Beach.

## Characteristics of Criminal Offenders

Just as all crimes are considered to have victims, certainly all crimes are associated with one or more offenders. Not infrequently, however, the immediate identity of the offender is unknown. Unless the perpetrator is readily available to law enforcement when a crime is reported (or committed), the offender may be unknown for a long period of time. In many cases the identity of the offender may never be known. The NIBRS-like Uniform Crime Reporting data used in this analysis includes uncleared crime as well as criminal events where an arrest is made. Within the current data set of 5,941 unique crimes, offenders could be identified for only 3,733 (63%).

Age is an important variable in understanding the offender. **Graph 1** shows the distribution of known offenders by age grouping identical to that used in the prior section for victims. Not unlike the victim distributions (see **graph 4** in the Victim Characteristics section), the age group most represented by the offenders is 18-25 years of age. An important difference in the offender versus the victim distributions, however, is that while just over 20% of the victims fall within the 18-25 year age group, greater than 40% of the offenders fall within the same age group.

**Graphs 2 and 3** provide a more detailed view of the age distribution of offenders. Each graph looks at the tourist seasons only across the entire 36 month period. **Graph 2** concentrates on violent crime offenders while **graph 3** presents information about property crime offenders. Although the 18-25 category remains the largest group in both cases, the property offender age distribution is much younger overall. The 13-17 age group represents approximately 10% of the violent crime offenders, but almost 30% of the property crime offenders.

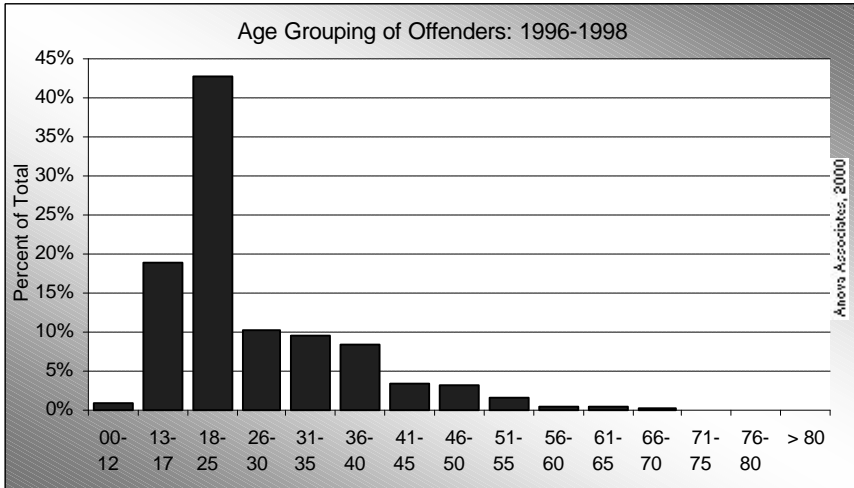
Where offenders reside is of paramount importance to local communities. Either the fact or the perception that tourists are being targeted by the local population can have devastating, long term effects on the local economy. **Graphs 4 through 6** provide some information as to the residential origin of offenders. **Graph 4** would indicate that the majority of offenders across all of the years (tourist season only) actually reside outside the State of Delaware. This, however, includes all categories of offenses from violent through property and societal. Offenders living in New Castle or Kent counties made up the next most frequent group ('Other Delaware'). During the 1997 season offenders living in Sussex County (not including Dewey Beach or Rehoboth Beach) increased in representation when compared to the earlier and later seasons.

**Graphs 5 and 6** remove the societal offender effects by concentrating on tourist season violent offenders and property offenders respectively. In both graphs the consistent majority of the

offenders reside outside of the State of Delaware. In 1998 offenders residing in Rehoboth Beach or Dewey Beach accounted for approximately 25% of violent offenses and less than 10% of property offenses.

Note: Again, caution should be used in placing too much emphasis on these proportions since approximately 18% of the overall violent offender data are missing across the years with 17% of the property offender data unavailable.

**Graph 1**

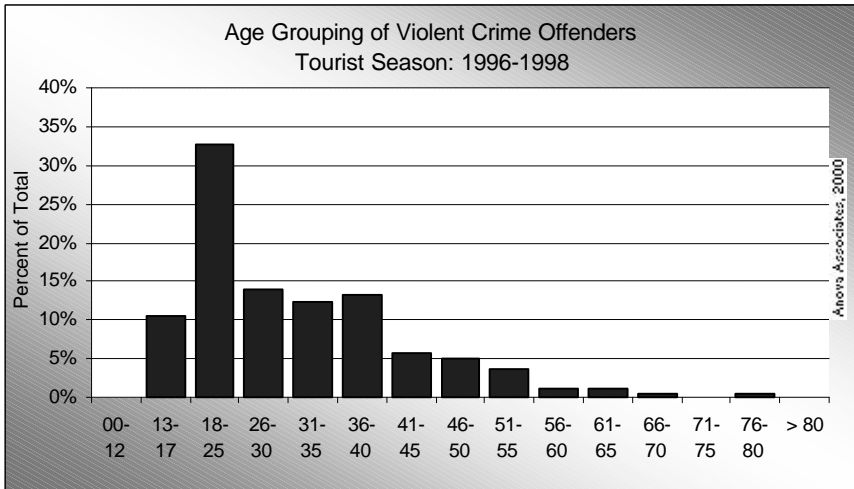


Graph 1 shows the known age grouping of all offenders across the period.

As with the victim age distribution graphic in the prior section the groups are not equal in interval until the age 26-30 and higher.

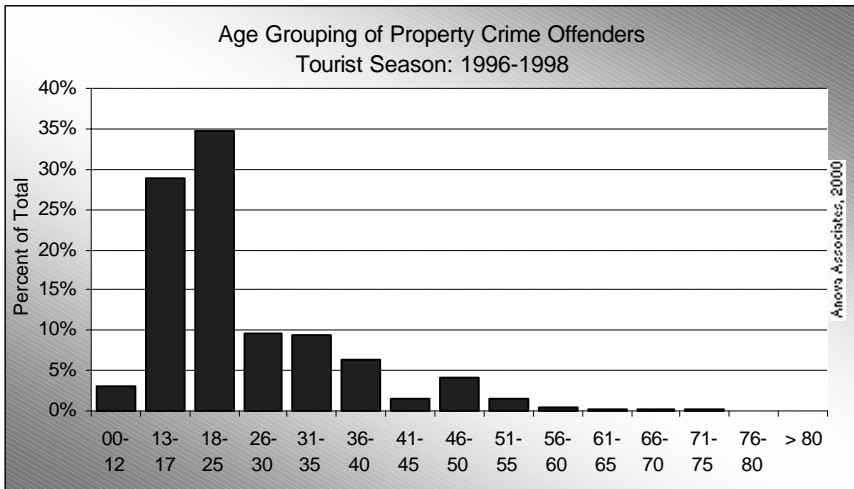
Note that approximately 12% of the individual offender data are missing date of birth.

**Graph 2**



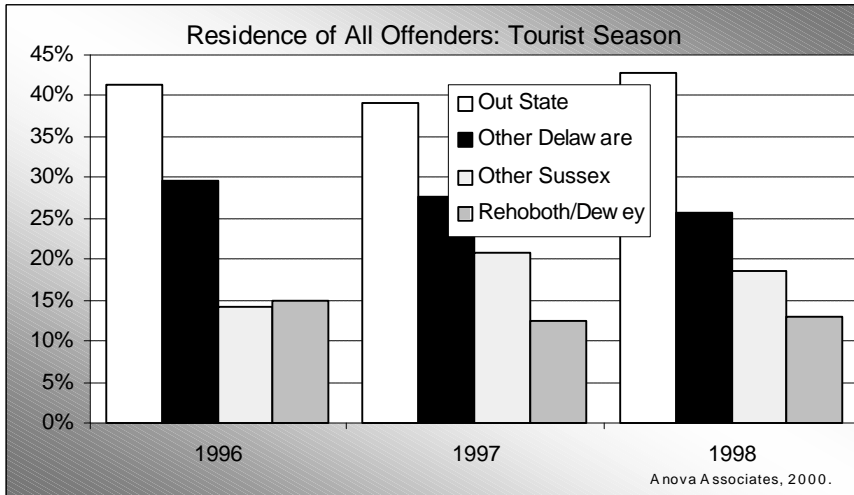
Graph 2 shows the known age grouping of violent offenders only across the pe-

**Graph 3**



Graph 3 shows the known age grouping of property offenders only across the pe-

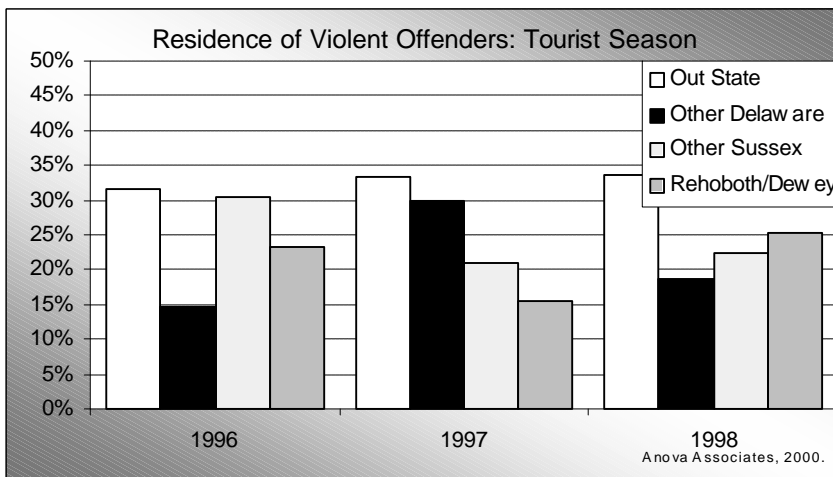
**Graph 4**



Graph 4 shows the residence of all tourist season offenders (all crime types are included) across the period. The data represent the percentage of all those offenders where residence is known.

Missing data across all offenders: 7.5% missing in 1996; 7.7% missing in 1997; 6.3% missing in 1998.

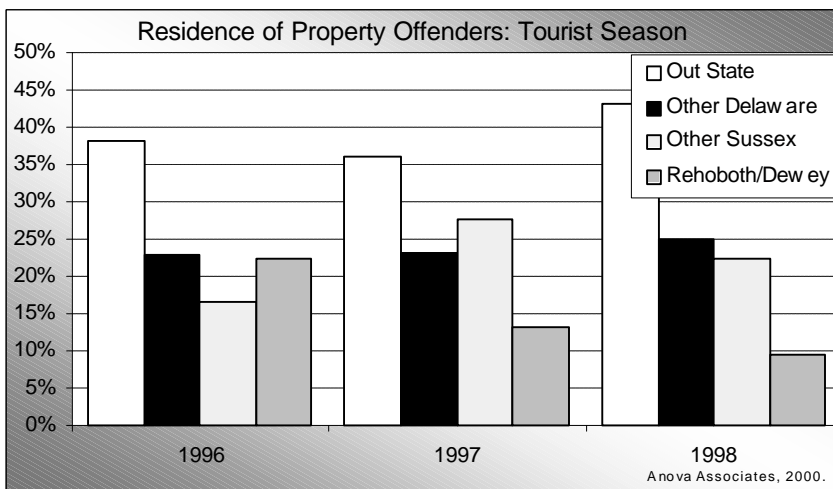
**Graph 5**



Graph 5 shows the residence of violent only tourist season offenders across the period. The data represent the percentage of all those offenders where residence is known.

Missing data across all violent offenders: 14% missing in 1996; 21% missing in 1997; 17% missing in 1998.

**Graph 6**



Graph 6 shows the residence of property only tourist season offenders across the period. The data represent the percentage of all those offenders where residence is known.

Missing data across all property offenders: 14% missing in 1996; 17% missing in 1997; 13% missing in 1998.

## Victim-Offender Relationships

The NIBRS-like complaint and charge data collected by the State of Delaware allow some exploration of the relationships between criminal offenders and their victims. In the prior sections both victims and offenders were described in some detail. However, in those sections the victims and offenders were analyzed individually. It is one thing to observe that residents of Rehoboth Beach or Dewey Beach, for example, account for 25% of the violent offenses during the 1998 tourist season (see **graph 5** in the prior section) yet quite another to determine exactly who the victims were. Within the current data set it is possible to match offender and victim characteristics on approximately 70% of the violent crime charges during the tourist seasons and 61% of the property crime charges. **Tables 1 and 2** provide a breakdown of victim residence by offender residence for both violent and property crimes.

When viewed from this perspective some interesting patterns emerge. The pattern within violent crime victim-offender residential relationships (**Table 1**) shows a clear tendency for victims and offenders to be from the same geographical location. Assaulting ones friends and neighbors appears to be the trend, vacationing or not.

**Table 2** displays the same type of information for property crimes. In the case of property offenses the tendency is similar to violent crimes except for victims residing in Rehoboth Beach or Dewey Beach. In the latter case these victims are more likely to encounter offenders from outside Delaware first and from elsewhere in Sussex County second. Victims from New Castle and Kent counties have offenders who are relatively evenly distributed across the geographical groups.

**Table 1**

**Victim Residence by Offender Residence  
Violent Crime During Tourist Seasons 1996-1998**

Offender Residence	Victim Residence			
	Outside Delaware	NewCastle/ Kent Co.	Sussex County	Rehoboth Beach/ Dewey Beach
Outside Delaware	67.4%	17.6%	14.9%	11.8%
NewCastle/Kent County	10.5%	52.9%	14.9%	11.8%
Sussex County	17.4%	20.6%	38.3%	29.4%
Rehoboth Beach/Dewey Beach	4.7%	8.8%	31.9%	47.1%
Total	100.0%	100.0%	100.0%	100.0%

These tables should be read down for each column. The boxed cells show the highest percentage in each column.

For example, 47.1% of violent crime victims from Rehoboth Beach or Dewey Beach were victimized by offenders who were also from Rehoboth Beach or Dewey Beach.

**Table 2**

**Victim Residence by Offender Residence  
Property Crime During Tourist Seasons 1996-1998**

Offender Residence	Victim Residence			
	Outside Delaware	NewCastle/ Kent Co.	Sussex County	Rehoboth Beach/ Dewey Beach
Outside Delaware	32.6%	25.6%	27.3%	29.1%
NewCastle/Kent County	22.8%	27.9%	22.7%	22.8%
Sussex County	17.4%	25.6%	40.9%	28.7%
Rehoboth Beach/Dewey Beach	27.2%	20.9%	9.1%	19.4%
Total	100.0%	100.0%	100.0%	100.0%

For example, 29.1% of property crime victims from Rehoboth Beach or Dewey Beach were victimized by offenders who were from outside of the State of Delaware.

Note that property crime victims in this table are individuals only.

State of Delaware

Victims of Violent Offenses  
Occurring in Rehoboth Beach  
and Dewey Beach

Tourist Seasons Only  
1996 through 1998

NewCastle County

Kent County

Sussex County

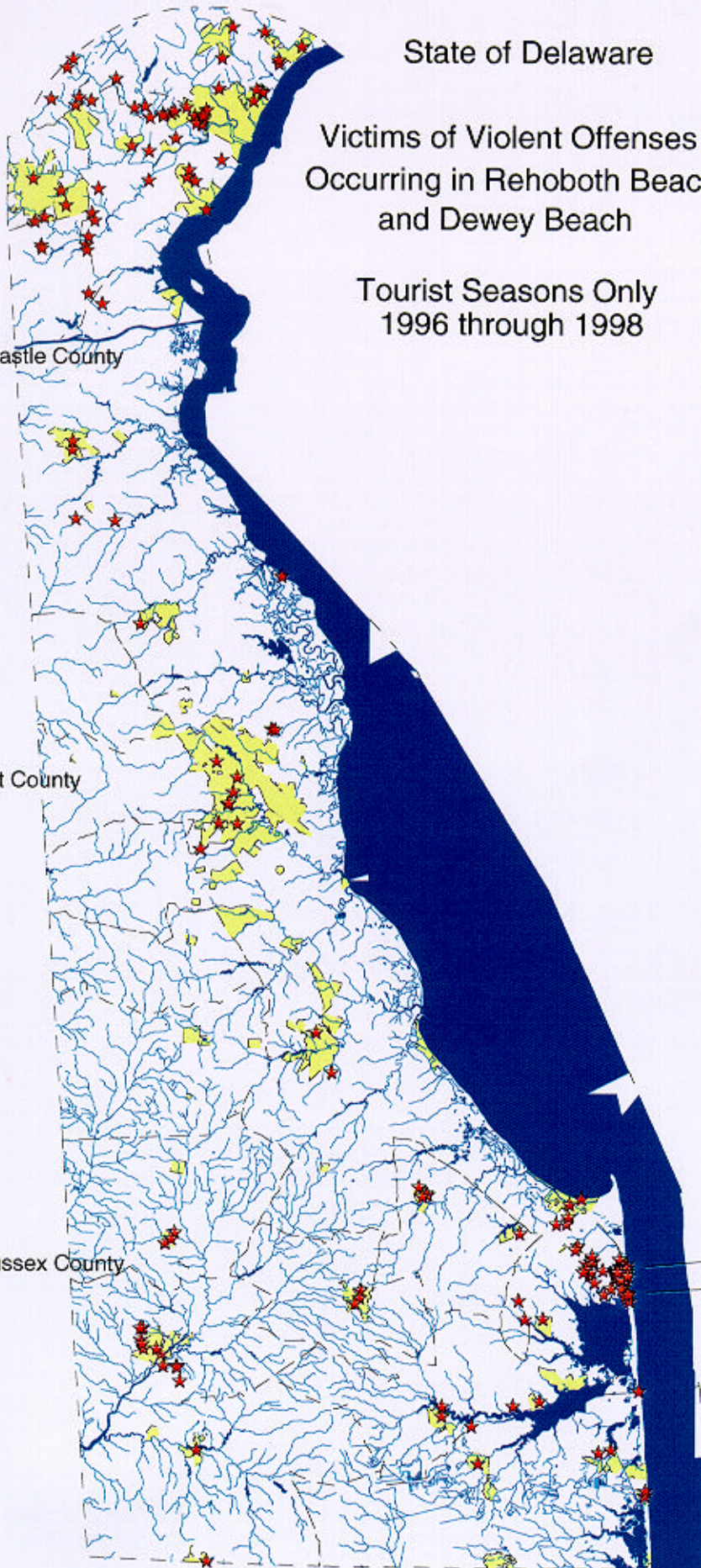
Rehoboth Beach  
Dewey Beach

Sussex County  
★★★★★ ★★★★★★  
★★★★★ ★★  
Nearest 10 n = 170

Out of State  
★★★★★ ★★★★★★  
★★★★  
Nearest 10 n = 133

NewCastle County  
★★★★★ ★★  
Nearest 10 n = 72

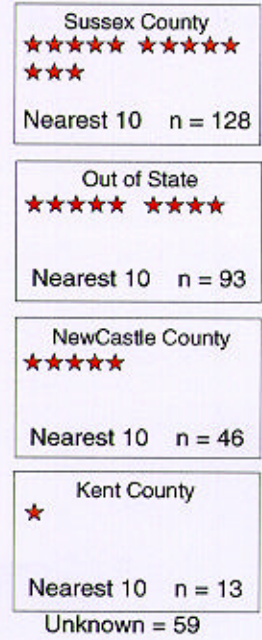
Kent County  
★  
Nearest 10 n = 14  
Unknown = 9



State of Delaware

Perpetrators of Violent Offenses  
Occurring in Rehoboth Beach  
and Dewey Beach

Tourist Seasons Only  
1996 through 1998

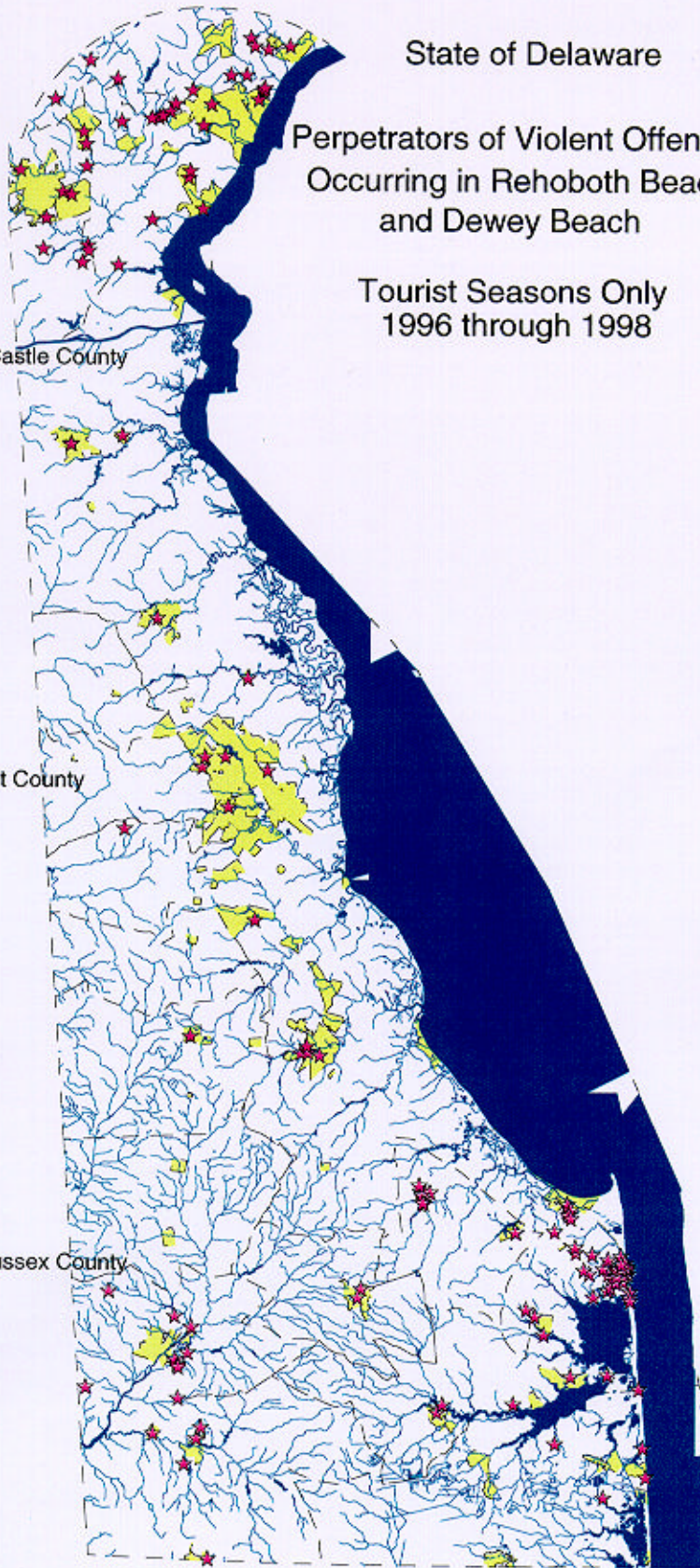


NewCastle County

Kent County

Sussex County

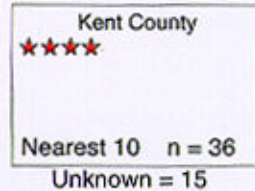
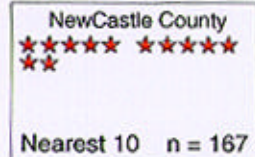
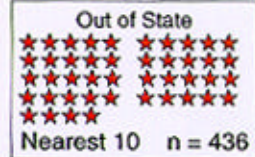
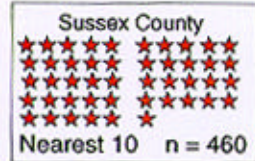
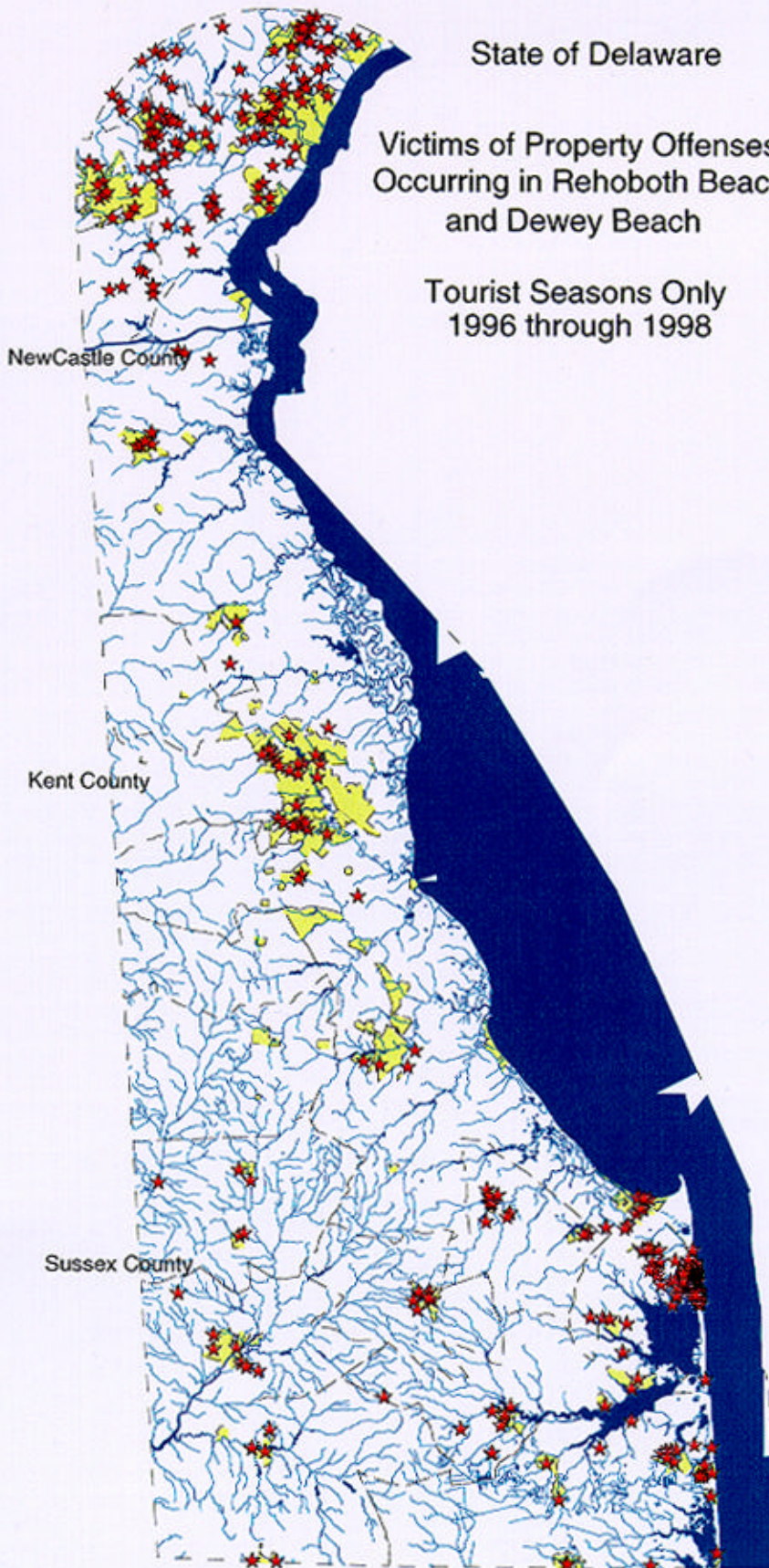
Rehoboth Beach  
Dewey Beach



State of Delaware

Victims of Property Offenses  
Occurring in Rehoboth Beach  
and Dewey Beach

Tourist Seasons Only  
1996 through 1998



Rehoboth Beach  
Dewey Beach

State of Delaware

Perpetrators of Property Offenses  
Occurring in Rehoboth Beach  
and Dewey Beach

Tourist Seasons Only  
1996 through 1998

NewCastle County

Kent County

Sussex County

Sussex County  
★★★★★ ★★★★★  
★★★★  
Nearest 10 n = 144

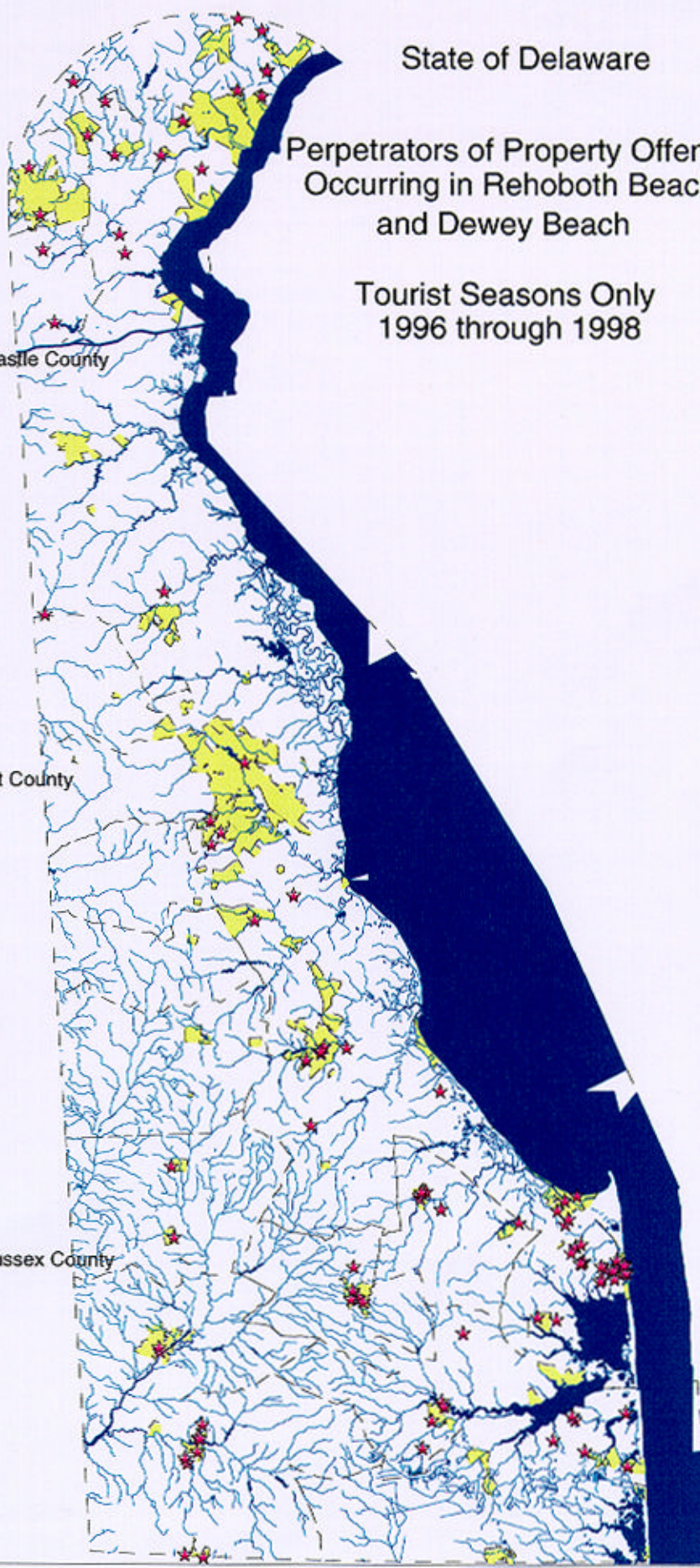
Out of State  
★★★★★ ★★★★★  
Nearest 10 n = 78

NewCastle County  
★★★  
Nearest 10 n = 32

Kent County  
★  
Nearest 10 n = 9

Unknown = 71

Rehoboth Beach  
Dewey Beach



## Appendix

### Summary of SAC Arrest Information Download and Data Preparation

Data collection for the Crime at the Beach analysis began with a query and download of mainframe IBR complaint records for the two resort agencies (Rehoboth Beach and Dewey Beach) from calendar years 1996 through 1998. The complaint data download includes incident types, incident locations, agencies, clearance codes, occur and report dates, as well as victim and offender descriptive data, where available. Victim and offender data are comprised of name, offender's State Bureau of Identification (SBI) number, address, age, sex, race, and driver's license state (for supplemental residential information).

Mainframe data were downloaded to SAC PC files for use in Visual FoxPro. This application facilitates data assessment and reconciliation prior to any statistical analyses (via SPSS, for example). Since the primary focus of this study is the victim and offender residence relationship, post-download data preparation began with an assessment of address data completeness. Victim and offender address data includes street address, city, county, state, and zip code. Some mainframe IBR records include only partial address information, however. City and state fields were regarded as the critical elements in records that had missing address data. These data were obtained for all offenders and all victims where possible and appropriate (society offenses are considered to have only society as the victim). In some cases city and/or state data were misplaced in other fields. Missing offender data were obtained from the state's offender identification file (offender demographics in the IBR files are redundant). Additionally, the primary SAC researcher on this project is very familiar with the Rehoboth Beach and Dewey Beach areas and was able to identify missing city/street addresses in those jurisdictions.

The data on the mainframe is available to the Statistical Analysis Center (SAC) through a standing agreement that encompasses the importance of security and privacy laws at both the State and Federal level. These agreements and policies prohibit the dissemination of individual criminal information. For example, researchers within SAC sign a confidentiality agreement upon employment and may be dismissed if ever they violate that contract.

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