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CRIME RATES IN VIRGINIA

An Analysis of Patterns and Trends

Virginia Department of Criminal Justice Services

In order to better understand Virginia's crime situation, it is useful to know how this State and its localities compare to its neighboring states and the Nation as a whole.

The purpose of this report is to examine some of the most recently available crime statistics and to present an overview of Virginia's crime patterns.

AN EXPLANATION OF THE INFORMATION THAT WE WILL USE

Through a series of maps and graphs we will look at the differing crime rates for Virginia's cities and counties and compare our crime rate trends to those for the United States and neighboring states. Our primary sources for data about other States and the Nation are the *Crime in the United States* reports which are published annually by the Federal Bureau of Investigation (FBI) using information from State and local police agencies. Crime data for Virginia's counties and cities was obtained from the *Crime in Virginia* reports which are produced each year by the Department of State Police. These reports contain information

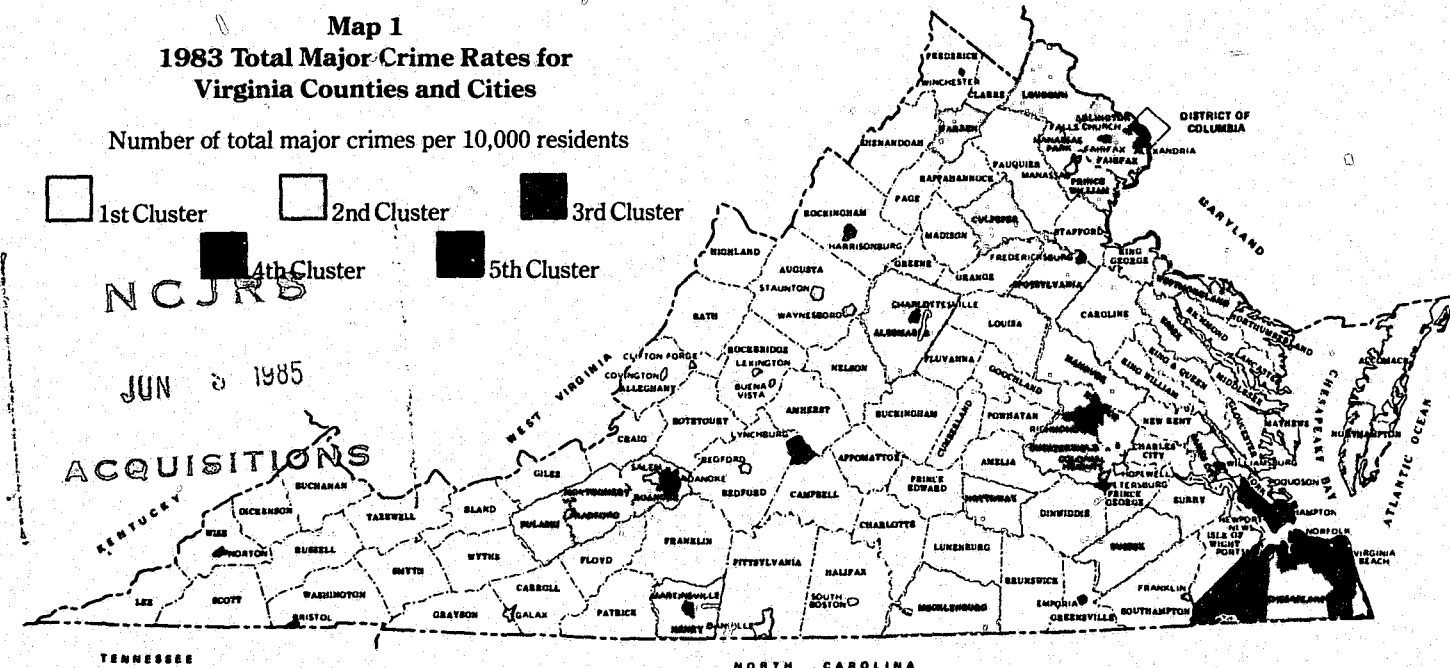
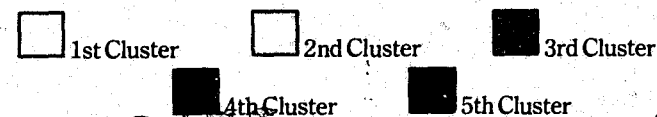
on seven major crimes—murder/nonnegligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny and motor vehicle theft. Since 1978 the FBI's reports have also included data on arson. However, this was not used in our calculations because the arson statistics are unavailable for all of the years depicted in our comparisons.

In analyzing the crime statistics presented in these reports, criminologists will often differentiate between violent crimes and property crimes. Violent crimes involve the use or threat of force against a person; property crimes do not have this element of personal injury or threat. Four crimes—murder/nonnegligent manslaughter, forcible rape, robbery and aggravated assault—are usually considered as the violent crimes. Although these crimes are very serious community concerns, they constitute a relatively small proportion of total crimes committed. For example, in 1983 violent crimes were just over 10 percent of all crimes reported nationally.

Because a jurisdiction's population size can be an important influence on the absolute number of crimes occurring within its boundaries, crime rates have been calculated for each jurisdiction so that they may be compared on a more equal basis. A crime rate is calculated by dividing the number of crimes reported for a city, county or state by its respective population. The result is then multiplied by a factor such as 1,000 or 10,000 to give a figure which applies to a fixed population size for comparison purposes. For example, a county having 2,000 reported major crimes and a pop-

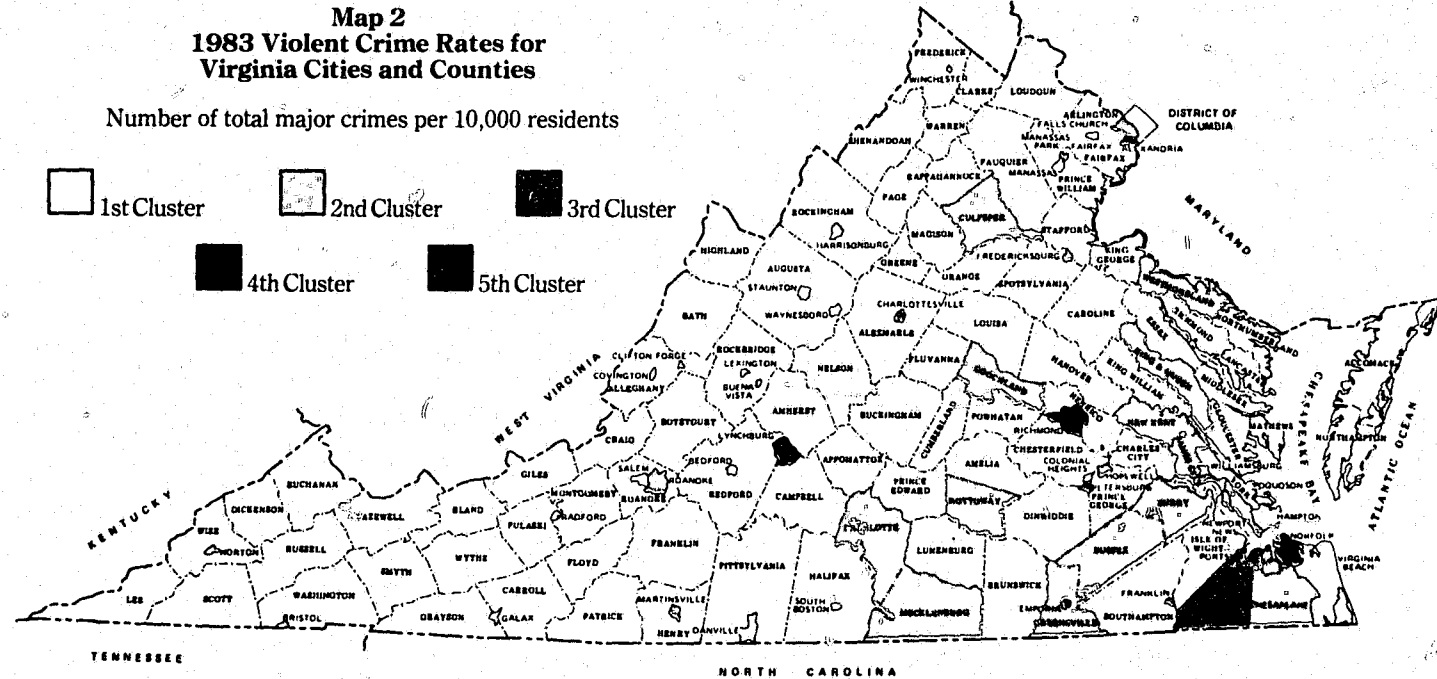
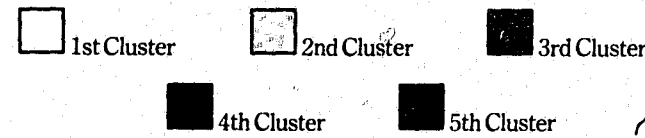
Map 1
1983 Total Major-Crime Rates for
Virginia Counties and Cities

Number of total major crimes per 10,000 residents



Map 2
1983 Violent Crime Rates for
Virginia Cities and Counties

Number of total major crimes per 10,000 residents



ulation of 50,000 would have a crime rate of 400 per 10,000 residents (i.e. $2,000/50,000 \times 10,000 = 400$). This figure could then be compared with any other jurisdictions which have also had crime rates calculated for a standard population level of 10,000.

The Methodology section at the end of this report discusses some of the more technical aspects of the data and analytic techniques used in preparing this report.

WHERE DO CRIMES MOST FREQUENTLY OCCUR IN VIRGINIA?

Virginia's highest crime rates occur in its cities. The rural areas, particularly in the western half of the State, have the lowest crime rates.

Map 1 shows how Virginia's 95 counties and 41 independent cities are distributed among five total major crime rate clusters. The First Cluster has the lowest crime rates and the Fifth Cluster has the highest. (For an explanation of how this grouping was done, see the Methodology section at the end of this report.)

The First Cluster which has the lowest crime rates also has the most jurisdictions in it. There are 76 counties and cities or 56% of the State total in this Cluster.¹ These are primarily rural areas such as Tazewell and Lunenburg Counties. Their populations range from 3,900 to 66,300 persons, with an average of 20,628. The Second Cluster has 34 localities which is 25% of the State's total. This group could be described as being predominantly a mix of small urban and suburban communities such as the City of Radford and Chesterfield County, with some rural areas included. Population sizes range from 4,900 to 650,900 with an average of 53,411. It consists of almost equal numbers of counties and cities. The Third Cluster has 17 localities which is 13% of the State's total. This group consists almost entirely of cities and urban counties such as Newport News and Arlington County. Their populations range from 4,700 to 295,000, with an average of 78,717. The Fourth Cluster has 8 communities which is 6% of the State's total. All are cities and tend to be the urban centers for their respective areas of the State. Population sizes are from 4,800 to 278,800, with an average of 75,875. The Fifth Cluster has 1 community which is less than 1% of the State's total. This is the City of Richmond which has a population of 220,100.

National studies generally confirm what these statistics show: that higher crime rates are usually associated with heavily urbanized areas. In part, this may be the result of the more sophisticated resources and larger law enforcement staffs in urban areas being better able to detect crime. Some areas may also have higher rates due to large numbers of transients such as tourists, military personnel or students which may have a greater likelihood of being involved in crime as either perpetrators or victims. The presence of these groups may result in a larger number of reported crimes while they may not be included in the local population estimate.

¹Percentages may not add to 100 due to rounding errors.

WHERE DO VIOLENT CRIMES MOST FREQUENTLY OCCUR IN VIRGINIA?

The highest violent crime rates occur in the cities. Most of Virginia's communities have low to very low violent crime rates.

Since about 90% of all crimes are property crimes, the total major crime rates are heavily weighted toward the incidence of property crimes. It is, therefore, worthwhile to look at violent crimes alone to see if there are any differences in distribution that are not evident from the total crime rates. Map 2 displays Virginia's cities and counties by violent crime rate clusters. Jurisdictions were assigned to the five groupings by the same procedure as was used for Map 1. The First Cluster has the lowest violent crime rates; the Fifth Cluster has the highest.

The vast majority of Virginia's cities and counties are in the First Cluster—104 or 77% of the State's total. This group is mostly made up of rural counties with the remainder being suburban and small urban areas. Examples of jurisdictions in this group are Wise and Fairfax Counties and the City of Poquoson. Populations range from 2,800 to 650,900 with an average of 36,843. The Second Cluster consists of 24 communities, which is 18% of the State's total. This group is evenly divided between cities and counties and they are predominantly located in the eastern half of the State. Included in this group are communities such as the Cities of Fredericksburg and Chesapeake and King & Queen County. Their populations range from 5,900 to 153,800. The Third Cluster has 7 cities which is 5% of the State's total. These tend to be the urban centers for their respective areas of the State. Their populations range from 4,800 to 278,800 with an average of 83,614. The Fourth Cluster has no jurisdictions assigned to it because none have violent crime rates which fall within its range. The Fifth Cluster contains 1 community, the City of Richmond.

Overall Virginia's communities have relatively low violent crime rates. Most of Virginia's cities have moderate to low violent crime rates. The higher violent crime rates tend to occur in the eastern half of the State where the population densities are greater.

HOW DOES VIRGINIA'S OVERALL CRIME RATE COMPARE TO OTHER AREAS?

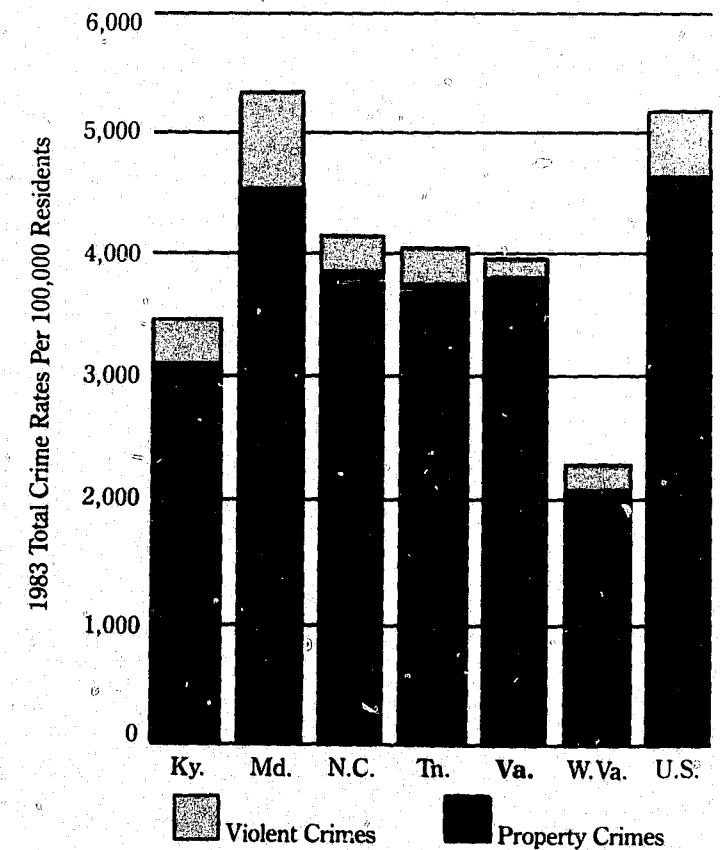
Virginia's overall crime rate is lower than the rates of several of its neighboring States, as well as the national rate. Both Virginia's violent and property crime rates are substantially lower than those in many areas.

Figure 1 compares the 1983 total, violent and property crime rates for Virginia to those of its five neighboring States and the United States. Virginia's overall crime rate is lower than those for three of its five neighboring States and it is substantially (23%) less than that for the United States.

The violent crime rate in Virginia is the second lowest among the six States in our regional comparison. Virginia's violent crime rate is nearly 45% less than the national rate.

Virginia's property crime rate is the third highest in the six State area. However, it is still nearly 21% below the national rate.

Figure 1
1983 Crime Rate for Virginia, Surrounding States
and the United States



WHAT ARE THE TRENDS IN VIRGINIA'S OVERALL CRIME RATE AND HOW DOES IT COMPARE TO OTHER AREAS?

Virginia's overall crime rate has closely followed rises and declines in the national crime rates while remaining substantially lower. Since 1981 Virginia's crime rate has had a greater rate of decline than the six State average and the national rate.

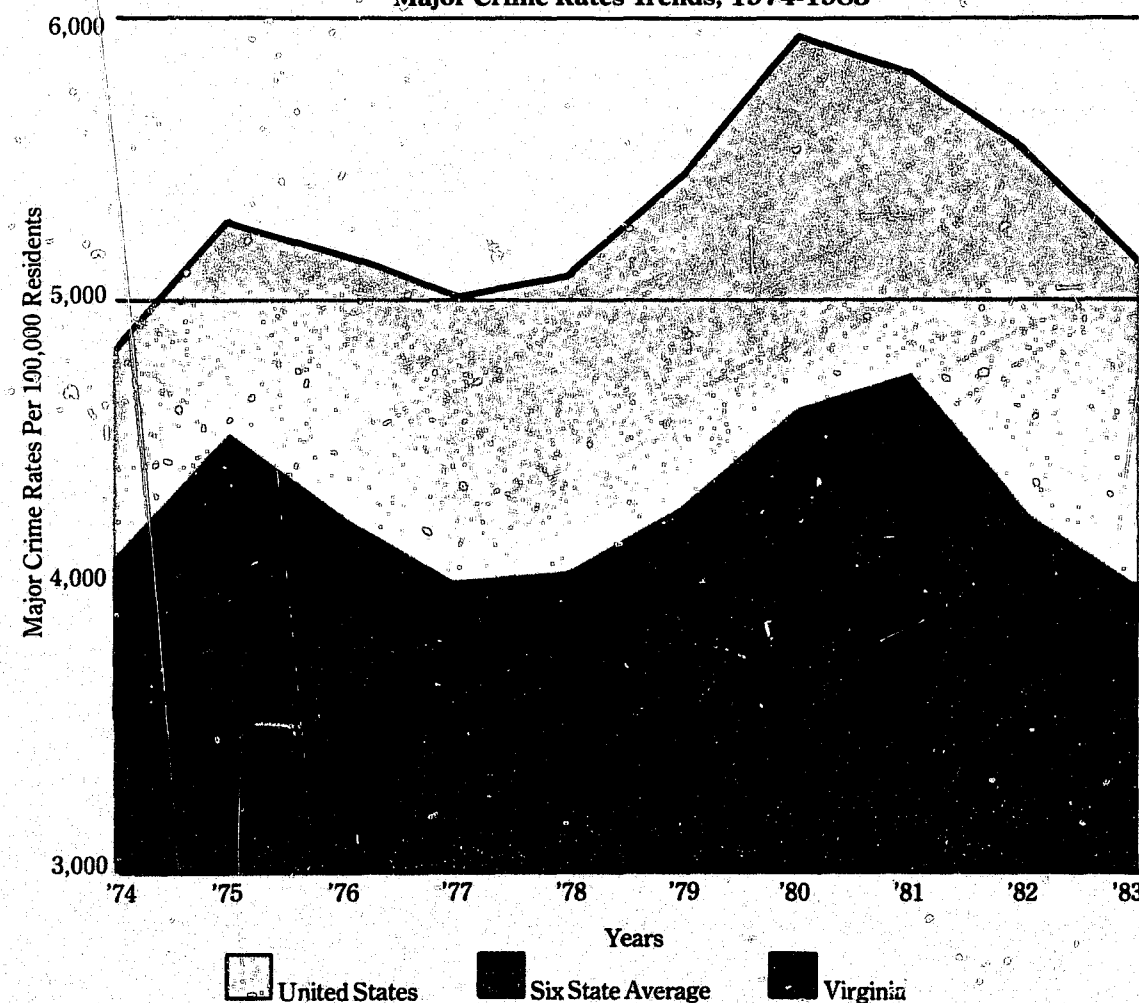
Figure 2 displays the 1974 to 1983 overall crime rates for Virginia, the six State average, and the United States. The crime rates for all three geographic areas generally rise and fall at the same time even though they are at substantially different levels of incidence. This suggests that national events such as changes in economic, employment, and demographic conditions which affect criminal activities are closely mirrored at the State level.

Prior to 1980, overall crime rates tended to increase. Since then, crime rates have declined. Although many factors have probably contributed to this change in direction, one major reason cited by several sources has been the passing of the peak of the "baby boom" generation through the crime prone young adult age group. National crime data indicate that property crime arrests peak at age 16 and by age 20 have dropped 50%; violent crime arrests peak at age 18.² Barring major changes in other circumstances it would appear likely that this trend will continue as the number of young adults declines in the population.

Since 1981 Virginia's crime rate has experienced a steeper decline than the national or six State average. Consequently, its crime rate, which had been significantly higher than the six State average, is now nearly equal to that figure. This movement toward the six State average can be seen in the earlier years. It would, therefore, seem probable that this fortunate trend will continue in the near future.

²Report to the Nation on Crime and Justice, U.S. Department of Justice, Bureau of Justice Statistics, NCJ-87068, October 1983, page 32.

Figure 2
Major Crime Rates Trends, 1974-1983



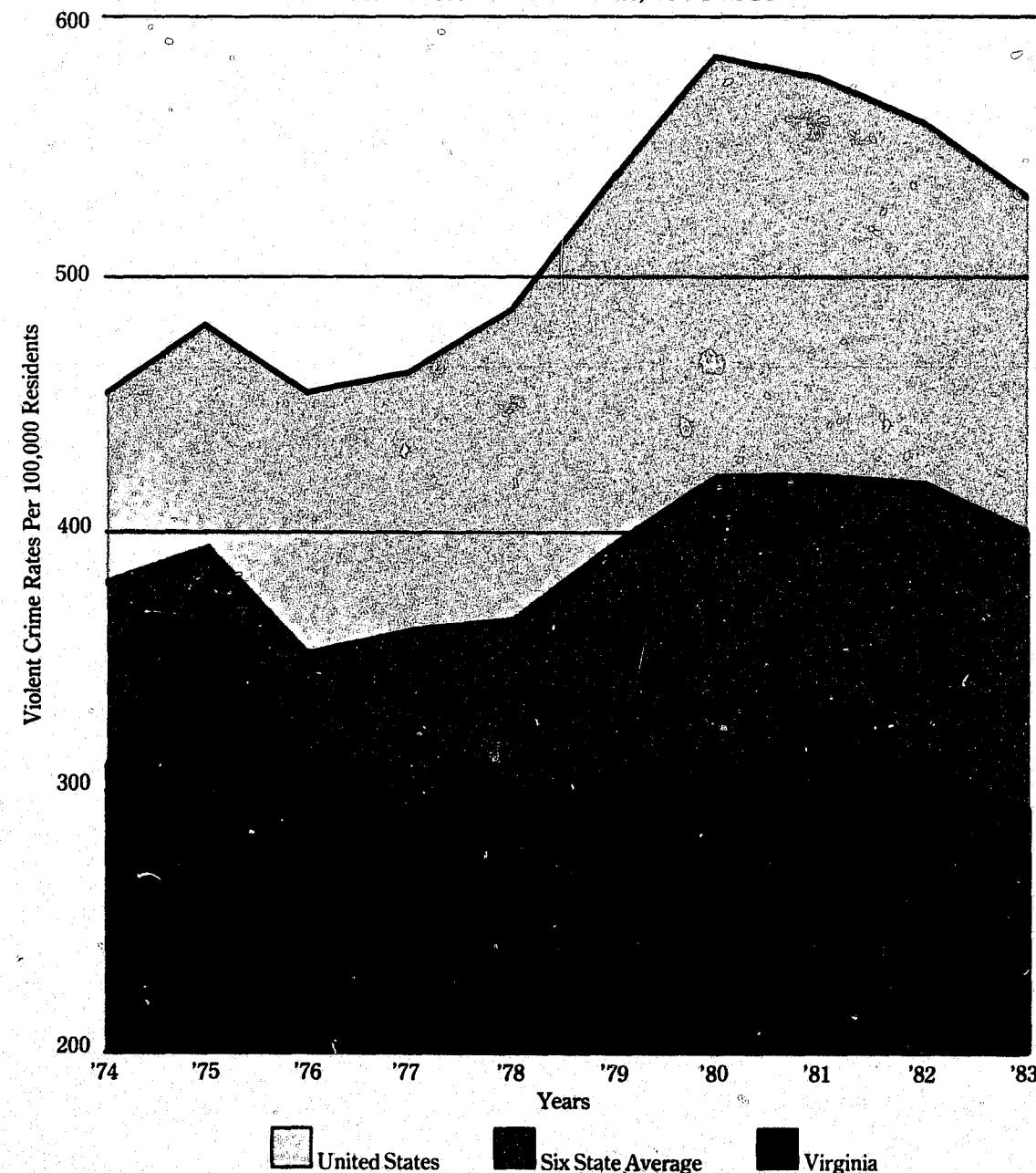
WHAT IS THE TREND IN VIRGINIA'S VIOLENT CRIME RATE AND HOW DOES IT COMPARE TO OTHER AREAS?

Virginia's violent crime rate has generally followed the same pattern of rises and declines exhibited by the United States and the six State area. However, Virginia's violent crime rate has been much lower than other areas.

Figure 3 compares the violent crime rates in Virginia, the six State area, and the United States from 1974 to 1983. During this period violent crimes have followed a pattern similar to total crimes with an upward trend peaking in 1980. There was a drastic increase in violent crimes in 1975 which subsided into a more gradual curve in later years. As was previously noted with the total crime rate, much of the change in the violent crime rate is attributed to the aging of the general population.

The six State average for violent crime has been substantially below the national rate for all ten years. Similarly, Virginia's violent crime rate has been well below the six State average for this entire period. Furthermore, it appears that the gap between these geographic areas continues to widen.

Figure 3
Violent Crime Rate Trends, 1974-1983



CONCLUSION

The preceding maps and charts seem to indicate that Virginia's communities have relatively low crime problems. However, several cities do have substantially higher crime rates than the rest of the State. When comparing Virginia to its neighbors and the nation its crime rates are quite favorable. Most importantly, Virginia seems to be sharing the recent trend toward lower crime rates which may continue for some time.

METHODOLOGY

MAPS 1 AND 2—the number of crimes reported for each Virginia county and independent city in 1983 was obtained from the most recent *Crime in Virginia* report issued by the Department of State Police. Because this report focuses on Virginia's independent cities and counties as its unit of analysis, crime data reported by institutions such as universities and other agencies such as port authorities have been added to the figures for the jurisdictions in which they are located.

The major limitation of this data is that it only includes crimes which are reported to or by law enforcement agencies. Consequently, these figures may understate the actual number of crimes being committed in a community. Some studies have indicated that nearly two-thirds of all crimes committed are not reported to police.

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However, these statistics should still be adequate for comparison purposes since there should not be a substantial difference across communities in the degree of under-reporting.

The 1983 population figures were taken from *Estimates of the Population of Virginia Counties and Cities* published by the Tayloe Murphy Institute in February 1985. Even though these are only provisional estimates of the population, they were used in our calculations because they provide a more accurate reflection of the actual population levels at this time than do other available population figures.

Using the formula described earlier in this report the total major crime rates and the violent crime rates were calculated for all of Virginia's 95 counties and 41 independent cities. The counties and independent cities were placed in rank order by their total major crime rate. Next, the counties and cities were divided into five clusters, or groups, based on their total crime rates. This was done by first finding the difference between the lowest and highest crime rates. Second, this figure was divided by five to determine the breakpoints for each Cluster. Finally, the counties and cities were separated into the five groups.

FIGURES 1, 2 AND 3—The crime rates used in these charts were obtained from the 1974 to 1983 issues of the *Crime in the United States* Reports published by the FBI. The six state average was derived by calculating the mean for the States of Kentucky, Maryland, North Carolina, Tennessee, Virginia and West Virginia.

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