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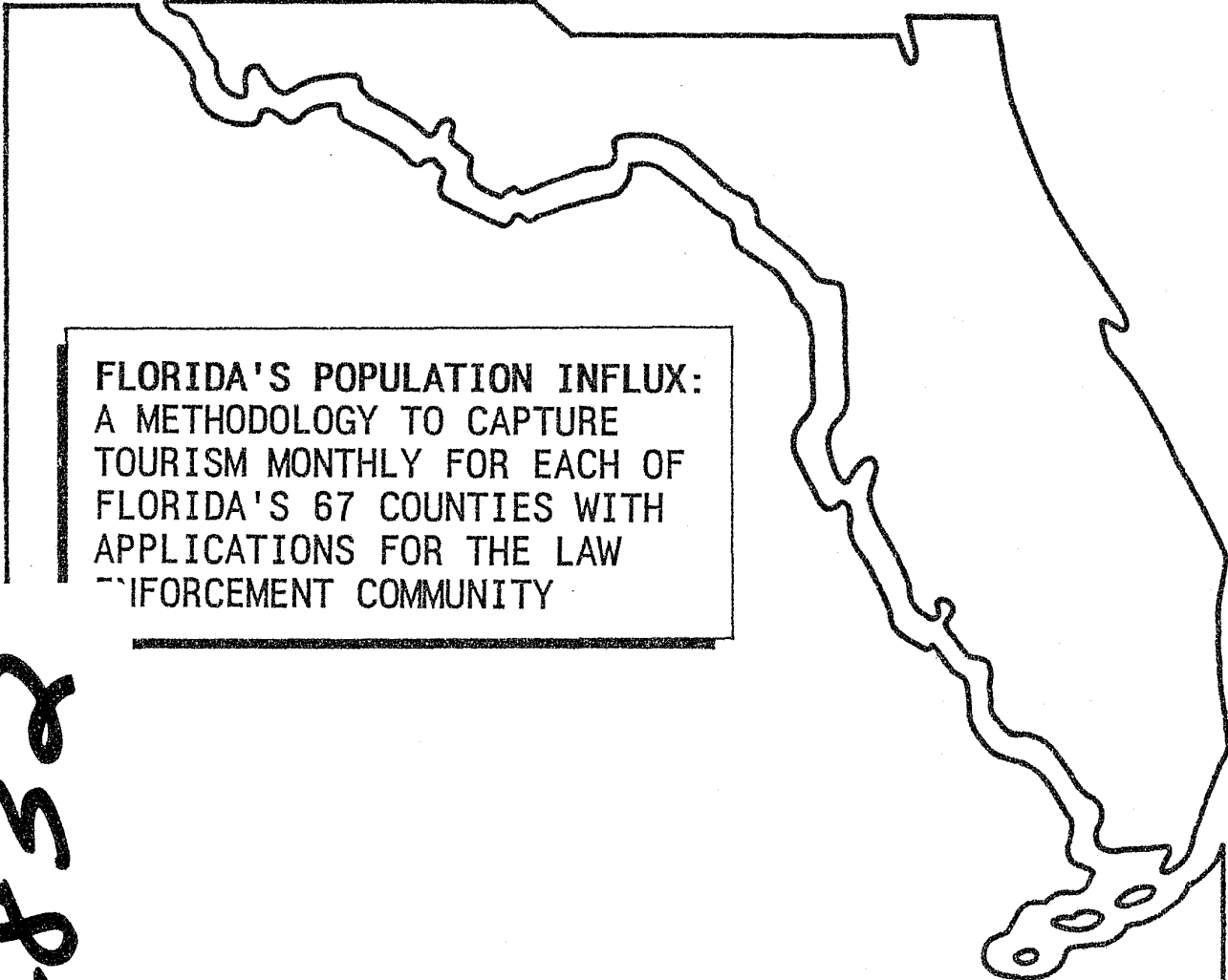
Florida Department of
Law Enforcement
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COMMISSIONER

FLORIDA'S POPULATION INFLUX:
A METHODOLOGY TO CAPTURE
TOURISM MONTHLY FOR EACH OF
FLORIDA'S 67 COUNTIES WITH
APPLICATIONS FOR THE LAW
⎯⎯IFORCEMENT COMMUNITY

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Florida Statistical Analysis Center

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December, 1986

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The Florida Statistical Analysis Center

The Florida Statistical Analysis Center (SAC) was funded for 1986 by a grant from the U.S. Department of Justice, Bureau of Justice Statistics. The Florida SAC is part of the Division of Criminal Justice Information Systems, Florida Department of Law Enforcement. Our primary responsibility is to improve the effectiveness of policy making, programs development and planning through the provision of data and interpretive analysis of data concerning crime, the criminal justice system and related issues.

The Florida SAC welcomes inquiries concerning any of our research studies. Please feel free to contact us should you require more methodological detail, or wish to offer comment.

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CHAPTER ONE

INTRODUCTION

An objective, easily reproducible methodology to capture tourism on a countywide basis is currently unavailable in Florida. The importance of tourism on the State of Florida has long been recognized. The effects of tourism reverberate throughout every facet of business and governmental life in the state, yet the private sector and various government agencies have been unable to objectively estimate tourism on a disaggregated (countywide) basis. The major barrier facing all researchers attempting to estimate tourism is the lack of a unified data base due to the fact that tourism is not reported in the National Income and Product Accounts (GNP Accounts). The lack of a universally acceptable definition of tourism further complicates most research efforts.

Tourism estimates are needed by Florida's law enforcement community to aid local agencies in budgetary matters, personnel decision making, and to provide an unbiased mechanism for the comparisons of crime rates across geographical boundaries (especially the relative comparison of state crime rates used in national reports). Although this research study was initiated to address the specific needs of Florida's law enforcement community, the tourism methodology and monthly tourism estimates are equally applicable to the needs of the Florida Legislature and the private sector.

Chapter Two discusses the definitional aspects of tourism, tourism estimates currently available through Florida's Department of Commerce, alternative tourism methodologies found in the literature, and the methodology developed by this study to capture tourism. It will be found that tourism estimates derived through survey techniques, econometric models, and tax base data are unable to provide disaggregated results of the highest possible frequency. Tourism methodologies, as they currently exist, do not meet the needs of Florida's law enforcement community.

It will be found that the methodology utilized in this study builds upon currently utilized tourism tax base methodologies with a number of significant departures. Utilizing tax base data for tourism estimates have the distinct advantage over other existing tourism methodologies of not having to build a tourist data base from scratch. Tax data are objective, audited, and available on a timely basis. In addition, tax base data are readily available in each of the 50 states; should other states wish to embrace the tourism methodology developed below, significant inroads could be achieved in establishing a unified, national tourism data base.

The focal point of this study's tourism methodology is the taxable sales tax data collected and reported by Florida's Department of Revenue. The data are reported monthly on a highly disaggregated basis. Tourism expenditures, along with resident expenditures, are captured in the taxable sales data. Tourism estimates require that all fluctuations in the taxable sales data base due to any measurable influence other than tourist activity must be isolated and normalized. Specifically, this includes movements in taxable sales due to: the increase in Florida's resident population, the economic cycle (including inflation), and changes in legislation which effect taxable sales.

Through a series of data adjustments, eacn of the above elements will be identified and the taxable sales data base will be normalized. Fluctuations in the resultant, adjusted taxable sales data base will then be due solely to tourism. Daily tourism expenditure estimates (which are available through the Florida Department of Commerce) will be used to map the fluctuations in the adjusted taxable sales data to tourism estimates for each Florida county and the state total.

Chapter Three presents the findings of this study's tourism methodology and presents peak season tourism estimates for each of Florida's 67 counties (and the state total) for the period 1980 through 1985. It will be found that tourism significantly impacts the State of Florida, although the peak tourist season differs throughout the state. For some Florida counties (for example, Monroe County) tourism surpasses 15 percent of their resident population during their peak tourist months. Three summary maps are also included in Chapter Three.

Chapter Four applies the tourism methodology to the needs of the law enforcement community. Modified crime rates (crime rates accounting for the entire population base, residents and tourists) are discussed. The annual modified crime rates for the State of Florida are found in Table One. Chapter Four closes with the time frame needed to estimate tourism annually. It is expected that the Florida Statistical Analysis Center (SAC) will be providing countywide tourism estimates annually each February.

Four appendices follow the text of this research study. The first lists the 99 sales tax codes for the State of Florida. Appendix Two is a table of the actual crime rates and modified crime rates (utilizing the population influx methodology) for each of the 67 Florida counties. Appendix Three summarizes this story's findings in tabular form. For each of Florida's 67 counties (and the state total), annual resident population data, along with the population influx estimates and the total population base are listed for the period 1980 through 1985. Appendix Four contains a set of two summary graphs for each Florida county. The first graph depicts each county's estimated population influx relative to the resident population. The second graph shows the scalar amounts of each county's population influx and their respective resident populations.

CHAPTER TWO

POPULATION INFLUX METHODOLOGY

A. Definitional Issues and Existing Tourism Methodologies

The development of a methodology to capture Florida's nonresident population influx has evolved from both data base constraints and the intended applications of the law enforcement community. All research studies are molded by the availability of data. The greatest barrier to objectively capturing tourism is the lack of a unified tourism data base. Tourism is not defined in the Gross National Product (GNP) Accounts which necessitates building a tourism data base from scratch. The needs of the criminal justice community have further impacted our choice of methodology. We wish to disaggregate our analysis to the county level and capture the seasonality of tourism in each of the 67 Florida counties. In addition, it is desireable to be able to reproduce the methodology annually on a timely basis. For example, the Uniform Crime Report (UCR) Section of the Florida Department of Law Enforcement would need prior year tourism figures by the beginning of February if they are to utilize the methodology in future UCR publications. Other tourist states may also wish to more objectively reflect their crime statistics by normalizing their resident population base with tourism figures; it would, therefore, be beneficial if the population influx methodology could be easily adapted for use in other states.

Because tourism is not isolated in the GNP accounts, it can never be measured directly from federal government data. Compounding the difficulties in the measurement of tourism is the lack of a uniform tourism accounting standard that is embraced by governmental and private sector entities throughout the United States. In addition, there is no universally acceptable definition of tourism.[1] The tourism literature highlights three distinct methodologies to

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[1]The first empirical studies of tourism focused on the international traveler. Nearly fifty years ago, the League of Nations defined an international tourist as "any person visiting a country other than that in which he usually resides for a period of at least twenty-four hours". Day visitors were defined as excursionists and were excluded from their definitional base (Organization for Economic Cooperation and Development: 1980).

Although the definition of international tourism has become fairly well gelled over the years, there remains much disagreement over the measurement of domestic tourism. The National Tourism Resources Review Commission defined a domestic tourist (National Tourism Resources Review Commission: 1973) as "one who travels away from his home for a distance of at least fifty miles (one way) for business, pleasure, personal affairs or any other purpose except to commute to work, whether he stays overnight or returns the same day". The U.S. Census Bureau defines a tourist trip as each time a person goes to a place at least 100 miles away from home and returns. The Bureau of Labor Statistics bases their definition of domestic tourism (Ibid) on the consumption of food and lodging outside of their home city and not on a minimum travel distance.

The current study does not have to muddle in the definitional dispute over whether domestic tourism should include only overnight travelers and/or a minimum distance travelled. The law enforcement community is interested in the broadest possible measurement of tourism to better utilize local agency personnel and more objectively reflect the modified crime rate (crimes per

empirically capture tourism: surveys, econometric models, and measuring tourism expenditures through tax collections.

Many states are currently generating tourism data through sampling techniques. Typically, subsets of the air and automobile tourist populations are surveyed which provide estimates of their respective population parameters through statistical inference. Although tourist surveys may offer the greatest intuitive appeal, they are limited in regard to their focus and reliability. The sampling process itself dictates a gargantuan commitment of economic resources and personnel needed to capture the relevant number of tourists statewide.

Even if economic resources are available for disaggregating the sampling effort to a countywide basis, the logistics of sampling prohibit the unique identification of tourists by county. Capturing tourism on a countywide level necessitates sampling virtually every intercounty highway in the state for automobile travelers, and greatly expanding the exit surveys of air travelers at major airports. Sampling bias is also a constant concern of all sampling studies. The changing composition of the tourist population over time, coupled with improvements in sampling methods typically necessitate changing sampling methods. Changes in sampling methodologies give rise to discrete breaks in the data and severely limit time series analysis on the resultant data. Sampling methodologies used to capture tourism are inappropriate for the needs of the law enforcement community, largely due to their inability to uniquely identify tourism by county.

Econometric models are also utilized in various tourist studies, particularly those which project tourist activity. The supply and demand characteristics of the tourist industry are identified by a set of simultaneous equations, each of which contains a stochastic term. The greatest asset of econometric forecasts is their implied causality. A structural relationship is embedded within each regression which permits the model builder to simulate various scenarios (e.g., the effects of an oil price shock or economic recession on the tourist industry). Impact multiplier policy simulations provide state governments with a valuable decision making tool.[2]

Econometric tourism models fall into the same data trap as sampling

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100,000 population) which is utilized in national (Bureau of Justice Statistics) reports.
   All nonresident individuals who are present in a given Florida county will be captured daily in this study. This will include traditional measures of domestic and international tourism (e.g., the recreational, business, and the family visitor) along with untraditional measures of tourism (e.g., individuals with dual residences, intrastate tourists, and transients). Due to this broader tourist base, for definitional rigor, we will be measuring nonresident population influx and not tourism. For the sake of readability, however, throughout this study nonresident population influx and tourism will be interchanged.

[2]The Bureau of Economic and Business Research (BEBR), University of Florida, has analyzed the expected effects of the new tax reform legislation on the growth of the Florida economy and tourism (Bureau of Economic and Business Research: 1986:2).

methodologies; although data are readily available for many of the explanatory variables (the exogenous vector), no consistent data are available which actually measures tourism. Econometric model builders have typically skirted the definitional issue by limiting their analysis to studies of the highly visible traveler, such as the business traveler. Business travelers leave a distinct trail at motels, airports, eateries and convention centers which can be identified through hotel and motel association and sales tax data. Impact multipliers (the reduced form coefficients of the econometric model) are then utilized to forecast the effects of tourism on employment, income and revenue.

Until a unified tourism data base is available, tourism estimates generated from econometric models will fall short of the needs of the law enforcement community. Law enforcement is impacted by the broadest definition of population influx. Florida's climate is a magnet for winter visitors, many of which escape the more traditional estimates of tourism. The greatest proportion of tourists will not be picked up by hotel and motel association data because they stay with relatives and friends (U.S. Bureau of Census: 1967). Another large population influx segment may also be missed by the data, because they set up part-time residences in Florida with full kitchen facilities. Lastly, transients are of particular concern to the law enforcement community. Although their population will always be difficult to quantify, their numbers completely escape the data net of an econometric tourist modeling effort.

A third methodology, frequently seen in the literature, is the estimation of tourist expenditures by tax collection data. This methodology utilizes sampling techniques to generate tourist expenditure figures from tax base data (typically sales tax data). Surveys are undertaken to determine what proportion of the tourist dollar is spent in major expenditure categories. State sales tax data are typically broken down into kind codes (or categories of taxable sales). Florida, for example, partitions sales tax data into 99 kind codes (see Appendix One). Once the proportion of tourist dollars for a given expenditure kind code (e.g., hotel expenditures picked up by their respective sales tax kind codes) has been determined, total tourist expenditures can easily be computed by dividing the sales tax data by the proportion of expenditures (determined by survey).

Tax collection methodologies offer promise for the measurement of tourism, because they circumvent the need for building a tourism data base from scratch. The fact that an objective data base currently exists is a major advantage. Florida currently has no state income tax; sales tax revenues are the driving force of the state budget. The Department of Revenue (DOR) maintains, audits, and updates the data base in a timely manner. Moreover, tax collection data are disaggregated into a countywide level. In its current form, however, tax collection tourism studies fall short of the needs of the law enforcement community because much of the tourist population is not captured in the available kind code categories. Great care must also be taken in the sampling effort so as not to bias the analysis. The methodology we have chosen to capture tourism in this study will be built upon tax collection data.

B. Alternative Tourism Estimates

Tourism is the fulcrum of the Florida economy and the primary reason why the State of Florida does not have a state income tax. Tourist data, especially the

impact of tourism on state revenues, are of obvious importance to the state. Prior to developing our tourist methodology and presenting the results on a countywide level, we will first examine alternative tourism estimates which are currently available for the State of Florida by the Division of Tourism and the Division of Economic Development (DED).

The Florida Department of Commerce, Division of Tourism is mandated by the Florida Legislature to promote Florida as a preferred travel destination for tourism activities. Their responsibilities include the dissemination of tourism data and the Office of Marketing Research (one of the five units which comprise the Division of Tourism) has been publishing the **Florida Visitor Study** annually since 1976. The publication has been expanded in recent years and includes a wealth of pertinent data for the travel related private sector. In terms of the actual measurement of tourists in the state, the **Florida Visitor Study** includes quarterly tourist estimates for the State of Florida. Tourism is defined as the sum of domestic (including Canadian) air, automobile, and other (rail and bus) tourists plus international tourists.

The **Florida Visitor Study** is a repository of tourism data. The international tourism data are taken from the United States Department of Commerce Publication, **Air Travel Statistics**. Automobile visitor estimates are generated from random samples taken from all major highways entering Florida. From visual sightings, the proportion of visitor traffic (out of state license plates) to the total traffic is determined from the random sample data (the visual sightings also include the number of automobile passengers). The total number of visitors is then computed as the product of the resultant tourist proportion and the Department of Transportation's (DOT) vehicular telemetry for that quarter (DOT computes the actual automobile traffic count on all major highways that border the State of Florida). The DED has recently (starting in 1984) embraced a new automobile sampling methodology which has increased the rigor of their domestic automobile tourism estimates[3].

Statewide air tourism numbers are estimated quarterly from exit surveys at major Florida airports. The Division of Tourism, Office of Marketing Research (Department of Commerce) retains a private research firm to administer the exit

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[3]The sampling process of DED's new automobile methodology is more objective than that of the Office of Marketing Research. The Florida Legislature mandated a specific alpha level and a tolerable risk level (95% confidence interval plus or minus 10%) for the new automobile methodology, which the DED has met (95% plus or minus 5% to 7%). There are two basic differences between the two automobile methodologies: The DED's new automobile methodology generates a more random sample, and it has provisions for eliminating out of state commuters in the visitor count.

The old automobile methodology selected a different major interstate highway each quarter and derived their sample from 7:00 am to 3:00 pm on Saturdays. The new automobile methodology greatly increases the time strata. Samples are randomly selected and taken 7 days a week, 21 hours a day from 27 highways (the old automobile methodology sampled only 5 highways). Bordering county automobiles are assumed to be commuters and are not included in the sample. Four proportions are computed (day, night, weekday, and weekend). The number of automobile visitors is the product of the respective visitor proportions and DOT's highway telemetries.

survey questionnaires. Of particular interest to the present study are the daily tourist expenditure estimates which are also derived from the airport exit survey.[4] Eight major Florida airports generate the questionnaire data for the Department of Marketing Research. Total air visitors are calculated as the product of the proportion of air visitors to total air travelers (the proportions have not been updated since a dated 1974 study) and the total number of air passengers in the state.

Estimates of visitors to the State of Florida by other modes (bus and rail) were included in the **Florida Visitor Study** through 1984. However, in the Division of Tourism's 1985 study, the data were no longer included because of methodological difficulties. The significance of the impact of visitors by other modes was never questioned. Visitors from other mode estimates for 1984, for example, were 1,440,600 (Florida Department of Commerce: 1984). Presently, the Division of Tourism does not have a methodology to capture this significant tourism component.

Although the Florida visitor data generated by the Division of Tourism is extremely informative, it is of little use to the law enforcement community. The statewide estimate is not disaggregated to countywide levels. The estimates are quarterly and not monthly, and will not adequately capture the tourism seasonality faced by local law enforcement agencies. Because international tourism estimates are taken from federal data (U.S. Department of Transportation), an eight month time lag presently exists before the data are released which precludes the use of the data in law enforcement reports. Moreover, there are serious questions pertaining to the reliability of the data. Air visitor estimates are currently generated from 12 year old proportion estimates which do not adequately reflect the changing structure of the 1980's visitor. An acceptable methodology for capturing bus and rail tourism does not presently exist. The unreliability of the Division of Tourism estimates is further heightened by the discrete breaks in the historical series. When the DED contracted its new automobile survey methodology, the automobile visitor estimates were lowered by nearly 8 million visitors (or approximately 40%)[5].

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[4]Domestic air and automobile expenditure patterns are estimated from self reported exit survey data. Total daily visitor expenditures for each class of visitor are further partitioned into transportation, gasoline, food (grocery), food (restaurant), lodging, entertainment, gifts, and other.

[5]For example, for calendar year 1984, the old automobile methodology estimated 22.6 million automobile tourists visited the State of Florida, while the new automobile methodology estimated 14.7 million automobile visitors (Florida Department of Commerce, Division of Tourism: 1984). The old automobile methodology overestimated the amount of automobile tourists, because they assumed that Saturday daytime samples were representative of all time strata.

The first quarter, 1986 edition of **The Florida Outlook** (which incorporates the Florida Department of Commerce tourism estimates), reported 39.9 million Florida visitors for calendar year 1984. The next edition of **The Florida Outlook** (second quarter, 1986), revised downward the historical tourist estimates. The visitor estimates for calendar year 1984, for example, were revised downward by 8 million (to 31.7 million).

The Florida Legislature has questioned the rigor and objectivity of the Division of Tourism visitor estimates and has mandated that the DED generate the quarterly automobile and air visitor estimates (which will include international tourism estimates). Because the Florida Legislature is requiring a 95% confidence interval with a plus or minus 10% error for the DED estimates, the rigor of their sampling effort has been increased[6]. The DED has contracted out a new methodology to capture air tourism (the data will be included in the **1986 Florida Visitor Study**) and is investigating a new exit survey methodology which will capture daily tourism expenditures. The rigor of the DED´s initiative is to be applauded, and we eagerly await the release of their daily expenditure tourism figures. Although we do not question the objectivity of the DED´s new sampling methodology, it will not answer the needs of the law enforcement community. Specifically, tourism estimates will not be broken down to the county level, and "untraditional" measures of tourism (mainly transients) will not be captured in their estimates.

C. A Florida Population Influx Methodology

It has been found above that the needs of the law enforcement community to capture tourism data are not presently being met by survey, econometric, or tax collection tourism methodologies. Tax collection data offer promise, however, because the data are: disaggregated by county, reported on a timely basis, and available monthly. The remainder of this chapter will develop a population influx methodology which utilizes sales tax data.

Sales tax data are available monthly from DOR by category (kind code) and by county. Due to the inherent difficulties in isolating the specific expenditure categories for the broad definition of population influx, the aggregate taxable sales data base for each of Florida´s 67 counties (and not the kind code data base) will be utilized. The actual translation of taxable sales into tourism can be accomplished through the pragmatic normalization of the sales tax data for all elements that affect taxable sales other than tourism. Specifically, these data adjustments will include: changes in specific Florida Statutes which affect taxable sales, changes in the resident population over the period in question, changes in the macro economy (for the inflation rate and personal consumption), and changes in the daily expenditure patterns of tourists. Only after the above are normalized can tourism be isolated by scalar and relative countywide estimates.

The total dollar value of taxable sales is a direct function of the resident population. Over the period of our analysis, 1980 through 1985, Florida experienced a 16.6 percent increase in its resident population, the

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[6]The old air visitor methodology determined the proportion of visitors to total deplanants at Florida airports. The new air methodology will take samples from thirteen airports and will stratify each sample by airline and by weekday/weekend. Every fifth person is given a five question survey which takes less than thirty seconds to complete. A small gift, a Florida tie clip, is given to each survey recipient to minimize the nonresponse bias. International visitors will be captured in the new air visitor methodology.

fourth highest rate of increase in the 50 states[7]. The mushrooming growth rate of Florida's resident population is reflected in taxable sales. Tourism estimates would be overestimated (an upward bias) unless the sales tax data base is adjusted for the increase in the resident population.

The mechanics of normalizing taxable sales (by county) for the increase in the resident population translates into a simple index number adjustment. Quarterly population time series for each of Florida's 67 counties were obtained from the BEBR[8]. Each county population time series was then rescaled so that the first observation, the first quarter of 1980, equalled 1.0.

The law enforcement community desires to measure the seasonality of tourism by county; it would, therefore, be desireable to measure tourism at the highest possible frequency. DOR collects monthly taxable sales tax data, but the BEBR's county population estimates are only available quarterly. The quarterly population series were transformed into monthly estimates by first distributing the same quarterly data point for each of the three corresponding months, and then smoothing the series by generating a three month moving average. A new series for each county, taxable sales adjusted for changes in the resident population, was then generated by dividing monthly taxable sales by the monthly, indexed population series[9].

Many legislative changes directly affect the class of products taxable and the amount of taxable sales. Because Florida is one of the few remaining states that does not have a state income tax, sales taxes provide the greatest revenue base for the state[10]. From 1980 through 1985, the Florida Legislature passed 30 bills which impacted taxable sales. Prior to capturing tourism figures, it is imperative that all legislative changes which significantly affected taxable sales be analyzed and normalized.

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[7]While Florida's 16.6% growth rate over the 1980 through 1985 period was the fourth highest in the nation (following Alaska 29.7%, Arizona 17.3%, and Nevada 16.9%), it had the fastest growth rate among the subset of high population states (U.S. Census Bureau: 1985).

[8]The BEBR supplied the Florida SAC with an ASCII formatted demographic tape and a taxable sales tape. The BEBR receives a monthly summary taxable sales tape from the DOR, and they also publish a monthly printout of taxable sales in two formats: (1) by kind category (one kind category for all 67 Florida counties), or (2) by county (all 99 kind categories for a given county).

[9]January 1986 population data were needed to generate three month moving average data for the period 1980:01 through 1985:12. Because 1986 population estimates were unavailable at the time of this study, it was necessary for the Florida SAC to estimate that data point.

[10]Due to the fact Florida does not have a state income tax, for fiscal year 1984-1985, sales and use tax revenue provided the State of Florida with 68% of its total direct revenue (Finance, Taxation and Claims Committee of the Florida Senate: 1986). Other states which do not currently have state income taxes are: Arkansas, Nevada, South Dakota, Texas, Washington, and Wyoming (Advisory Commission on Intergovernmental Relations: 1986).

Impact estimates of fiscal legislation are generated by the Appropriation Committees of the Florida Senate and the House of Representatives (Appropriations Committees of the Senate and House of Representatives: 1985). After examining each of the House and Senate bills which impacted taxable sales from 1980 through 1985, it became apparent that much of the legislation had a minimal impact on taxable sales. Moreover, the affect on taxable sales was not always a direct one, many of the fiscal bills actually reduced the sales tax base. The present study chose to specify a minimal threshold level for all legislation affecting taxable sales; all bills impacting taxable sales over the specified percent were defined to significantly affect the tax base and were adjusted for, while legislation impacting taxable sales below the threshold percent were deemed "insignificant" and left unadjusted[11]. Three bills significantly affected taxable sales by directly increasing its tax base: Session Law 81-221 (HB 20B), Session Law 81-310 (HB 47B), and Session Law 85-174 (HB 1340).

Two options are available for adjusting the sales tax data base (which was first normalized for the increase in the resident population): prior to the date of passage, the historical series could be adjusted upward, or after the date of passage, the data base could be adjusted downward. Both methods of data adjustment will effectively normalize the data for changes in legislation affecting taxable sales. Solely for logistical purposes, we chose the latter method. The Florida SAC is expecting to generate population influx estimates annually, starting February, 1987. It would be less time consuming to make a one time adjustment for each of the bills affecting taxable sales, rather than carrying each legislative adjustment forward every year. After the magnitude of the expected impact on taxable sales was obtained, the growth rate of taxable sales was computed and factored in historically as a monotonic function. Finally, a vector of the proportions of taxable sales for each Florida county to that of the state total was calculated. The impact for each significant bill was then distributed historically to each of the 67 county taxable sales series.

We have traced above the steps necessary to adjust the raw taxable sales data base which was obtained from the DOR for changes in the resident population and for legislation affecting sales tax revenue. The macroeconomic environment is also a major causal factor affecting the gross national product, personal consumption, and taxable sales. Macroeconomic conditions affect taxable sales in two major avenues. The vibrancy of the economy directly impacts the amount of spending (and taxable sales) of each household. The expectations of each economic participant over the stage of the business cycle, particularly to the employment prospects of that stage of the cycle, mold spending patterns. Because market economies experience endogenous business cycles, expectations, spending, and taxable sales are perpetually changing; and the dynamics of the business cycle assures that they will be in constant motion. The second macroeconomic influence on spending patterns and taxable sales is inflation. The erosion of purchasing power will push consumption and taxable sales upward as long as inflation persists. Inflation was particularly rampant during the earlier time frame of our study (the early 1980´s), and much of the increase in taxable sales over that period was attributable to inflation. We wish to

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[11]This study assumes a significant threshold level of 1/4 of 1%. The taxable sales data base was adjusted for any legislation impacting it at or above the threshold level.

transform taxable sales into population influx numbers (and not merely capture inflation and changes in taxable sales due to the employment/unemployment cycle). Therefore, all macroeconomic influences must be identified and adjusted away.

There is no dearth of economic data available from government entities, universities, and time sharing vendors. Two aggregate classes of economic time series most appropriate for the needed economic normalization process are: personal income expenditures (from the demand side of the gross national product accounts) and disposable income (from the supply side of the gross national product accounts). Relevant economic time series were downloaded onto the Florida SAC's microcomputer system by a modem from Data Resources, Incorporated. Upon a closer examination of numerous time series from each class, personal consumption expenditures had a more direct impact (a shorter time lag) on taxable sales than any of the disposable income series. The economic time series selected for the economic normalization process was per capita personal consumption expenditures measured in 1982 dollars. Personal consumption expenditures are closely related to taxable sales, by definition the series has already been adjusted for both increases in population and inflation. We then rescaled the series so that the first data point of 1980 was equal to 1.0. The previously adjusted sales tax data for each county were then divided by the rescaled per capita personal consumption expenditure time series[12].

The intent of the methodological data adjustments outlined above was to normalize the raw taxable sales data base for all external forces other than spending by tourists which impact expenditure patterns. Adjustments were made to factor out the amount of taxable sales due solely to: the increase in Florida's resident population, legislation affecting the class of goods which are taxable, and economic influences on expenditure patterns (specifically inflation and changing expectations due to the business cycle). The resultant taxable sales data base has effectively filtered out exogenous influences (with the exception of tourism) which have an identifiable impact on taxable sales. What remains is to translate fluctuations in the normalized taxable sales figures into tourism data.

Tourist patterns account for the fluctuations in the normalized taxable sales data base. Counties experiencing a high degree of tourist activity will have greater variability in taxable sales; moreover, the exact pattern of tourist activity will be mirrored in the expenditure patterns captured in the normalized taxable sales data base. The final bridge to measuring the amount of population influx for each Florida county on a monthly basis is to convert the deviations in the normalized taxable sales data base into tourism data. The daily expenditure patterns of Florida tourists are all that is needed for the transformation.

Sampling techniques must be used to generate daily tourist expenditure patterns. As mentioned above, the Division of Tourism publishes the average daily expenditure pattern estimates for automobile and air visitors in the **Florida Visitor Study**. In addition, it was noted that the Florida Legislature

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[12]In order to generate real per capita consumption expenditures, real personal consumption expenditures (measured in 1982 dollars) were divided by the national resident population.

mandated DED to generate the annual visitor expenditure estimates, and it is expected that the rigor of the sampling methodology will be strengthened. The present study will utilize the Division of Tourism daily visitor expenditure series because: the daily visitor expenditure series historically have little variability, future estimates should become even more reliable when the DED develops a new sampling methodology, and generating our own sample estimates would be well beyond the dollar and time resources allocated to the present study.

Tourist expenditures vary by visitor classification. The daily expenditures of air visitors are typically double those of automobile visitors[13]. Therefore, the proportions of air and automobile visitors must be identified prior to the determination of the average estimated daily tourist expenditures. Four classes of visitors are identified in the Division of Tourism data (domestic automobile, domestic air, domestic other and international), while only two daily visitor expenditure estimates (air and automobile) are generated. In order to derive a weighted average of the estimated daily visitor expenditures, we will assume that the daily expenditures of international travelers parallel those of domestic air visitors, and the expenditures of other domestic visitors parallel those of domestic automobile visitors. The proportions of the four classes of Florida visitors needed to compute the daily visitor expenditure estimates will be derived from the Division of Tourism estimates; they are used solely to derive the weighted average estimate of daily tourist expenditures (they are not used to forecast the number of tourists).

The weighted average calculations yielded the average daily expenditure for Florida tourists for a given year. The average daily expenditure was then converted into a monthly total (assuming 30 day months) which matched the frequency of the normalized taxable sales data base. One final adjustment, identifying the scalar amount of population influx in the first time period of the data base (for each county) was needed. The present study has chosen to assume that for every year, each Florida county has a low tourist (or nontourist) month, and the adjusted taxable sales for that month include only taxable expenditures by the resident population[14]. Once the minimum tourist month is identified for each year of the study, deviations are taken around the minimum. The magnitude of the adjusted taxable sales data is attributable solely to population influx expenditures. The time series for the number of tourists in a specific county is finally calculated by dividing the adjusted taxable sales deviations by the monthly tourist expenditure.

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[13]During 1985, for example, the average daily per person expenditure estimate for air travelers was $69.93, while that of automobile visitors was but $34.28 (Florida Department of Commerce: 1985). The daily expenditure series had little variability from 1980 through 1985.

[14]This assumption is necessary in order to produce objective tourism estimates which are easily reproducible. The assumption, however, is quite realistic. All counties have a slack tourist season; we are merely assuming tourism during the lowest tourism month of each year is zero. Although some tourism will be missed in the month with the least amount of tourism each year, it is preferable to underestimate, rather than overestimate tourism, especially if the estimates will be utilized in national law enforcement reporting.

Taxable sales, a proxy data base, was utilized in this study to objectively capture tourism on a countywide level; as in all proxy data base studies, care must be taken prior to interpreting the estimates. There are two potential limitations of the methodology: the series used for economic normalization and the assumption of a "nontourist" month. Real per capita personal consumption expenditures on a Florida county level would have been a better series for the economic normalization. However, with the absence of reliable countywide economic data, the national series was used. Should the time lags and magnitudes of the business cycles in individual Florida counties differ substantially from that of the national economy, population influx estimates would be adversely affected.

The assumption of a nontourist month was necessary to compute normalized deviations in the adjusted taxable sales data base which were transformed to tourism estimates. Although this assumption will slightly underestimate tourism, it was found to be necessary to compute monthly population influx estimates for each of Florida's 67 counties. This assumption will, however, underestimate the population influx further for those counties which have two or more months of nearly identical low tourism in a given year. For the handful of county data point estimates where this is evident, either moving averages or quarterly conversions would be appropriate.

CHAPTER THREE

FLORIDA POPULATION INFLUX BY COUNTY 1980 THROUGH 1985:
A PRESENTATION OF THE STUDY´S FINDINGS

This chapter contains a descriptive presentation of the relative and scalar estimates generated by the population influx methodology. Included are monthly data for each of Florida´s 67 counties, along with the state totals, for the six year period from 1980 through 1985. Table One summarizes, by Florida county, the relative and scalar population influx estimates generated by this study for the period 1980 through 1985. Due to space limitations, we have not reproduced the raw monthly data for all 67 Florida counties. The monthly population influx estimates are readily available for all Florida counties. We encourage all interested parties to contact the Florida Statistical Analysis Center for the data. Appendix Three, however, summarizes this studies findings in tabular form annually for the period 1980 through 1985.

The population influx estimates for each Florida county are further summarized by the mapping presentations found on pages 18 through 20. A basic geographical Winter/Summer tourist pattern emerges from Map One. Many of the North Florida counties (e.g., Bay County) experience their peak tourist season during the Summer months, while most of the South Florida counties (e.g., Palm Beach County) experience their peak tourist season during the Winter season.

The resident population base differs widely across Florida´s 67 counties, necessitating both scalar and relative interpretations of each county´s population influx estimates. Smaller counties may have an extremely high population influx (as a percent of their resident population) while the actual average daily number of tourists might be less than one hundred. Larger counties may have a low relative percent of tourism, yet the average daily number might be in the tens of thousands.

Map Two compares the estimated scalar number of tourists across all Florida counties. The peak season is defined as the six highest tourist months for each year of the study. The data, therefore, reflect the average daily population influx for the peak tourist months from 1980 through 1985. Map Three compares each county´s population influx relative to their respective resident population. The same definition of the peak tourist season, defined above, was used.

Detailed relative and scalar tourism estimates for each Florida county are presented in Appendix Four. The relative polygons are normalized as a percent of each county´s resident population. The vertical axis (percent) has a uniform scale (from 0 to 25 percent of the resident population) for each of the 67 Florida counties, permitting a relative comparison across counties over the impact of tourism on each county´s resident population. The seasonality of the population influx (if any) is also apparent from each of the graphs.

The graph which accompanies each of the relative population influx polygons described above, depicts the actual resident population and tourism estimates for each county. Note that the vertical axis for each of the scalar graphs are not uniform. Although the data presents a complete picture of the resident population and tourism estimates within each county, it would be misleading to make comparisons between counties due to the differing vertical scales.

The scalar area graphs also depict the growth patterns in the resident population for each county. There is a wide disparity in the resident population growth rates between counties, and it is illuminating to focus on the actual pattern of growth from 1980 through 1985.

The maps which accompany this chapter and the charts found in Appendix Four, offer a wealth of information on historic demographic and tourism trends for each of Florida's 67 counties. A basic understanding of the short and long term determinants of tourism will aid in the interpretation of the historic series. Erratic intra-year tourism movements across counties are not typically explained by the long run causal factors which influence tourism. Most long run determinants of tourism (such as the national economy) effect all Florida counties equally, while other long run factors (such as the desirability of the tourist destination) change only gradually over time.

Erratic movements in the 1980 through 1985 countywide tourism estimates are more typically explained by the short run determinants of tourism (especially weather). While the impact of the weather conditions at the point of departure would be expected to be spread evenly over all Florida counties, weather conditions at the tourism destination may be localized and not impact all Florida counties equally (e.g., a cold front may stall over Central Florida). Other short run determinants (such as school holidays) are expected to impact all Florida counties equally.

An overview of the population influx estimates will close this chapter. The seasonality and magnitude of the countywide population influx estimates parallel our expectations. For calendar year 1985, the counties with the highest average daily number of nonresidents were: Dade (160,000 January), Broward (159,000 January), Palm Beach (144,000 January), Duval (75,000 January) and Orange (70,000 April). The actual impact of each county's population influx is better captured by the population influx relative to that of the county's resident population base. For calendar year 1985, the Florida counties having the highest ranking by this relative measure were: Monroe (24.1% April), Palm Beach (20.2% January), Collier (19.1% April), Bay (18.1% July), Hamilton (18.1% April) and Broward (14.2% January). The seasonality for the county population influx estimates reinforces our a priori assumptions. For example, the peak population influx period for Volusia County is at Easter, that of the panhandle beach counties during the Summer, and that of South Florida is in the Christmas/January period.

The range of tourism estimates for the State of Florida during calendar year 1985 was from a low of 201,000 (during October) to a peak of 1,190,000 during January. The data represent the average population influx number in the state for each day of the month. The range for the state estimates for 1984 was 188,000 (October) to 990,000 (January). For calendar year 1985, there were slightly under 150 million daily tourists in the State of Florida (e.g., if a tourist spends a week in Florida, she will be counted 7 times).

TABLE ONE

PEAK POPULATION INFLUX SUMMARY: 1980 THROUGH 1985*

County	Scalar	Relative	County	Scalar	Relative
Alachua	7,659	(4.7%)	Lake	4,700	(4.1%)
Baker	424	(2.6)	Lee	22,114	(9.3)
Bay	14,796	(13.6)	Leon	9,645	(6.1)
Bradford	680	(3.1)	Levy	733	(3.4)
Brevard	13,026	(4.2)	Liberty	116	(2.6)
Broward	72,188	(6.7)	Madison	559	(3.7)
Calhoun	395	(4.2)	Manatee	11,245	(7.0)
Charlotte	3,990	(5.7)	Marion	6,746	(4.8)
Citrus	1,916	(2.9)	Martin	5,808	(7.9)
Clay	4,899	(6.4)	Monroe	10,116	(15.1)
Collier	15,211	(14.9)	Nassau	2,291	(6.3)
Columbia	2,651	(7.0)	Okaloosa	10,557	(8.6)
Dade	70,821	(4.1)	Okeechobee	1,053	(4.6)
DeSoto	802	(3.9)	Orange	47,669	(9.3)
Dixie	405	(4.6)	Osceola	5,360	(8.3)
Duval	37,313	(6.3)	Palm Beach	60,819	(9.3)
Escambia	14,568	(5.8)	Pasco	7,972	(3.7)
Flagler	704	(5.1)	Pinellas	37,022	(4.8)
Franklin	414	(5.2)	Polk	18,054	(5.2)
Gadsden	1,539	(3.6)	Putnam	2,322	(4.3)
Gilchrist	206	(3.1)	St. Johns	4,305	(7.1)
Glades	172	(2.7)	St. Lucie	5,146	(4.9)
Gulf	580	(5.3)	Santa Rosa	2,629	(4.4)
Hamilton	749	(8.4)	Sarasota	21,929	(9.9)
Hardee	831	(4.1)	Seminole	11,028	(5.4)
Hendry	1,043	(5.0)	Sumter	580	(2.2)
Hernando	1,748	(3.1)	Suwannee	1,054	(4.4)
Highlands	2,932	(5.5)	Taylor	1,222	(7.1)
Hillsborough	38,173	(5.5)	Union	218	(2.1)
Holmes	481	(3.2)	Volusia	20,023	(7.0)
Indian River	4,497	(6.5)	Wakulla	585	(4.9)
Jackson	1,775	(4.4)	Walton	1,472	(6.3)
Jefferson	441	(4.0)	Washington	540	(3.6)
Lafayette	146	(3.5)			

*Peak Population Influx is defined as the six year average of the top
 six tourist months per year for the period 1980 through 1985. The
 first number listed for each county is the peak influx scalar
 estimate, followed by (in parenthesis) the population influx estimate
 as a percent of the county's resident population.

A comparison of this study's population influx state estimates to that of the Division of Tourism's is blurred by the differing focus of each study. The Division of Tourism estimates the total number of individual tourists in the State of Florida. The focus of this study was to capture the daily number of nonresidents (and residents) in the state and in each county; we were not concerned with the length of stay of each individual tourist, only the average daily nonresident population for a specific locality (state total and county). In order to compare this study's 1985 state daily tourism estimate (150 million) to that of the Division of Tourism (30 million, which does not include international tourists due to the unavailability of the data, **Visitor Study 1985**), the average Florida visit for each of the nonresidents estimated in this study would be 5 days.

MAP ONE
PEAK SEASON POPULATION INFLUX SEASONALITY: 1980 THROUGH 1985
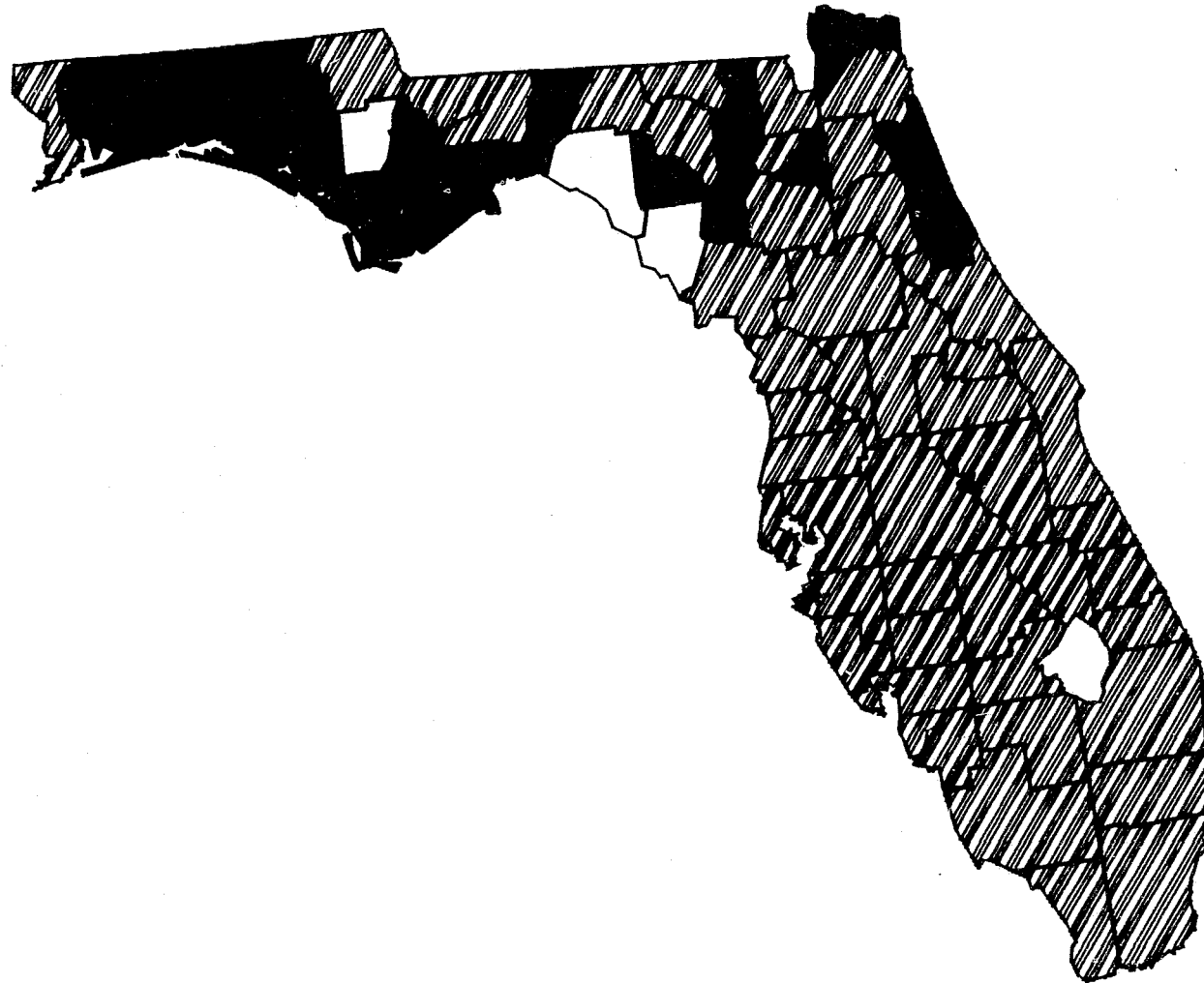
SEASONALITY

☐ NO SEASONALITY
■ SUMMER (MAY THROUGH OCT)
▨ WINTER (NOV THROUGH APR)

MAP TWO
SCALAR POPULATION INFLUX ESTIMATES
PEAK SEASON COUNTY ESTIMATES: 1980 THROUGH 1985
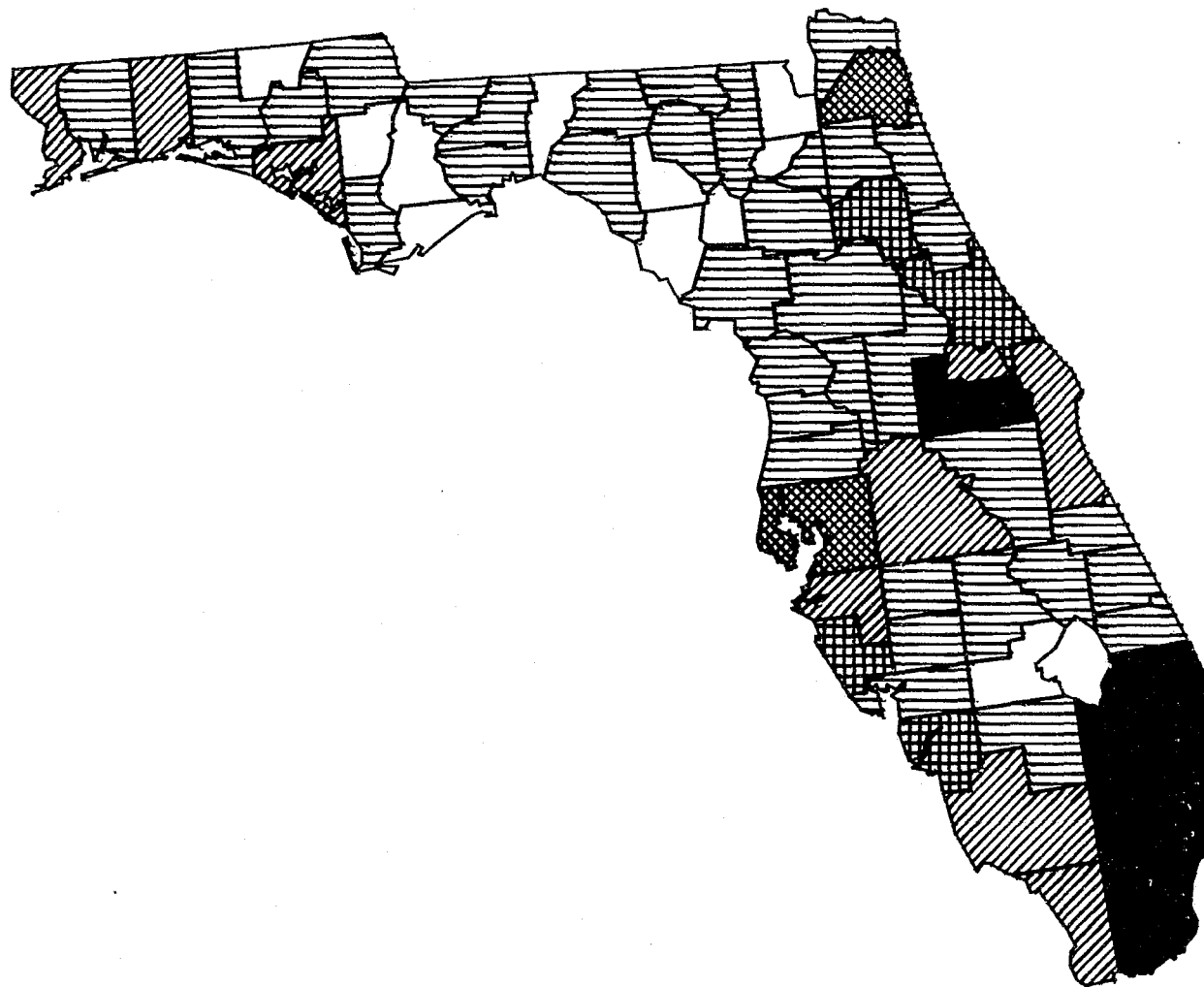
SCALAR

☐ UNDER 500
▤ 500 to 9999
▨ 10000 to 19999
▦ 20000 to 29999
▩ 30000 to 39999
■ 40000 AND ABOVE

MAP THREE
POPULATION INFLUX ESTIMATES AS A PERCENT OF RESIDENT POPULATION
PEAK SEASON COUNTY ESTIMATES: 1980 THROUGH 1985

PERCENT

☐ 0 to 2.9
▤ 3 to 5.9
▨ 6 to 8.9
■ 9 to 16
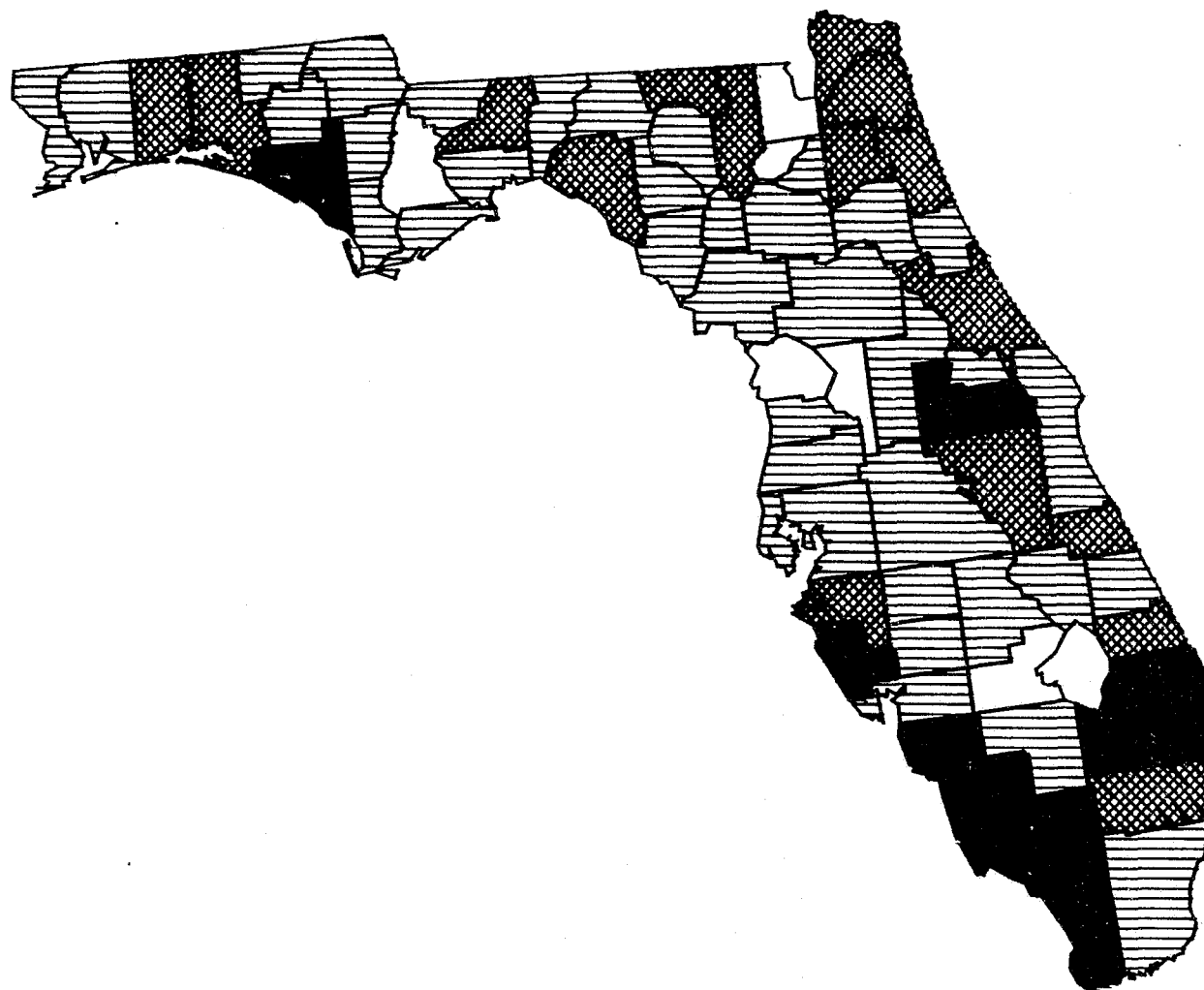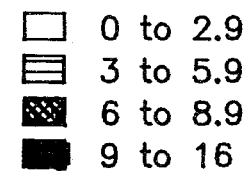
STATE OF FLORIDA TOTALS:
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION
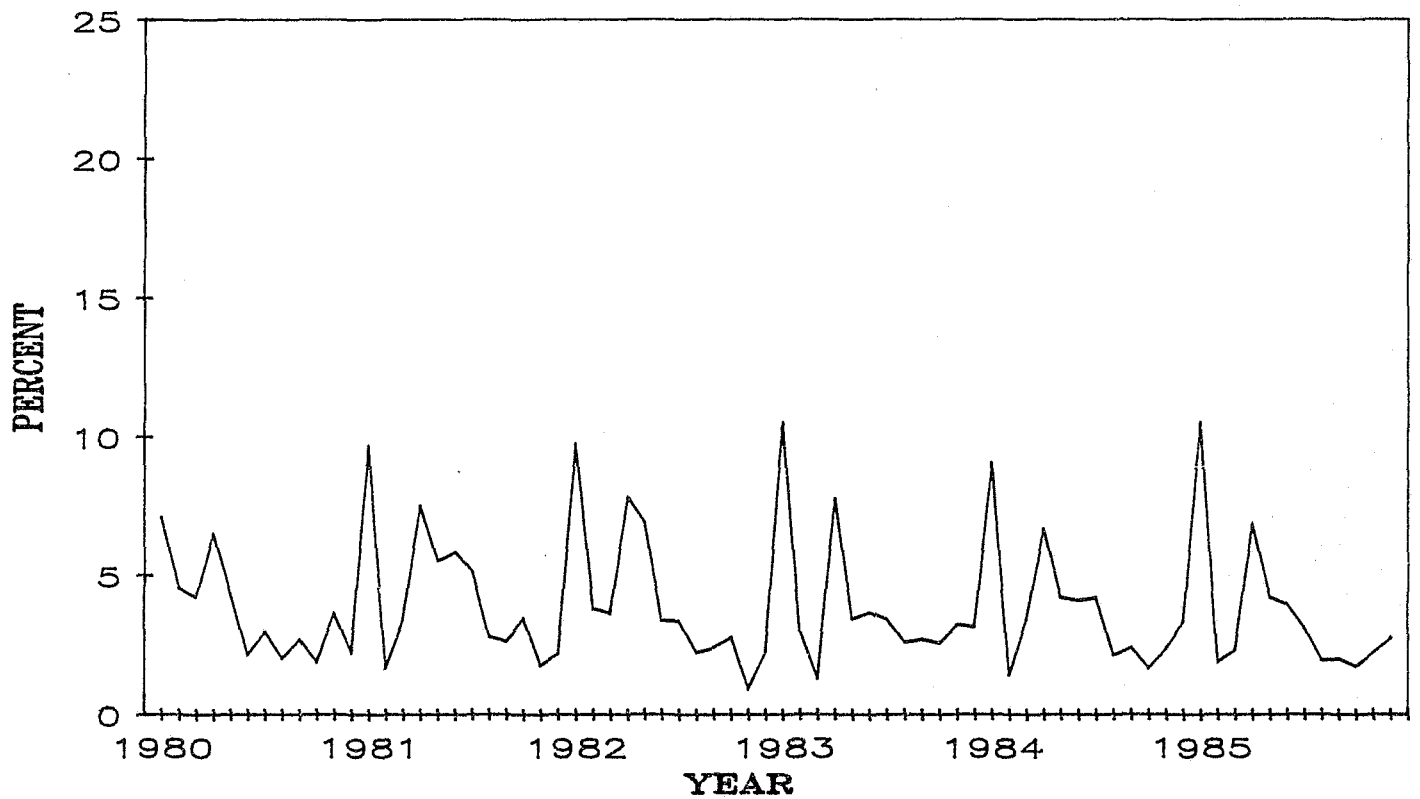
STATE OF FLORIDA TOTALS:
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE
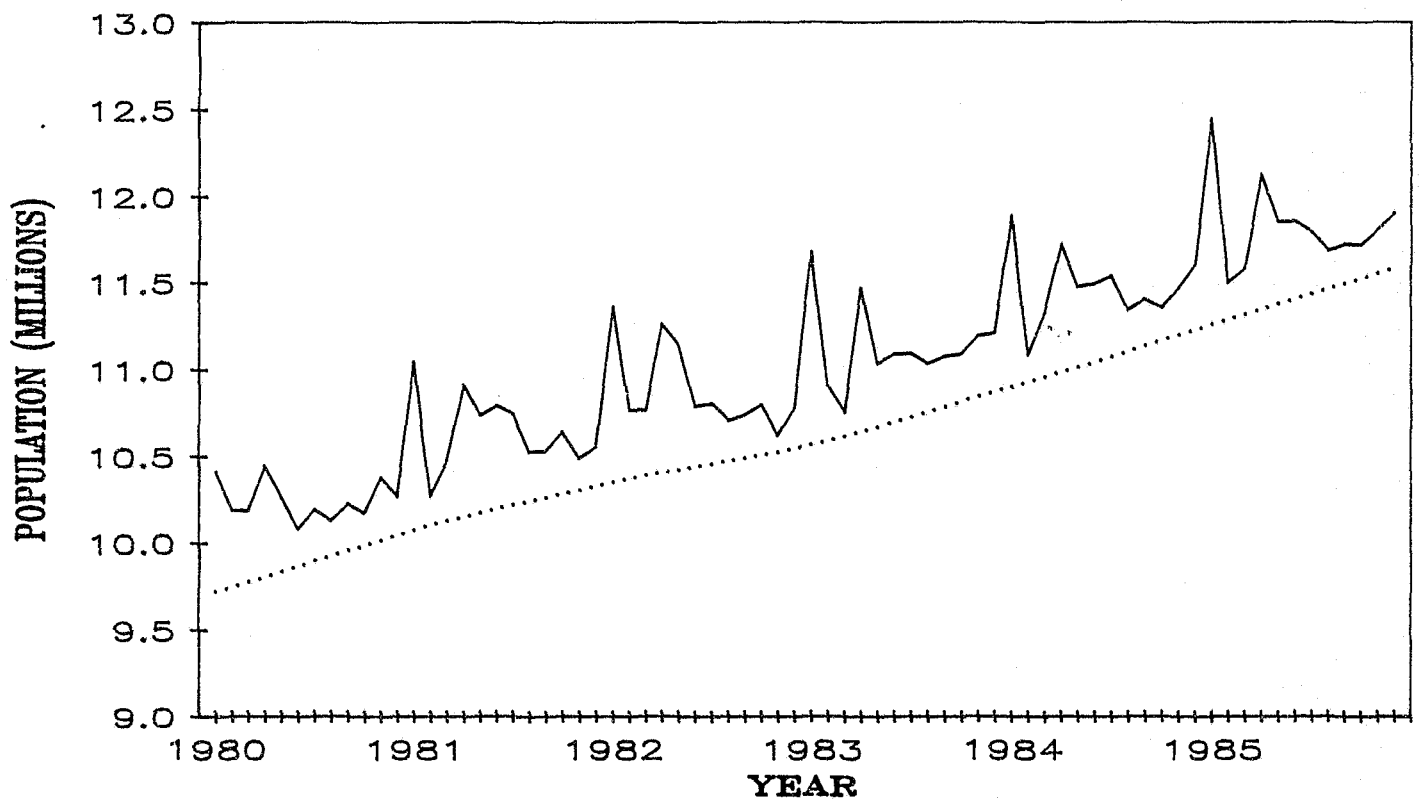
CHAPTER FOUR

POPULATION INFLUX METHODOLOGY:
IMPLICATIONS FOR UNIFORM CRIME REPORTS

A. Modified Crime Rates

Comparisons of crime rates across law enforcement agencies, counties, states, and countries are common in the analysis of the criminal justice system. The differing population bases of the various geographical entities necessitates normalizing the raw crime figures by some population measure. Since the inception of the Uniform Crime Reports (UCR) program in 1930, crimes rates has been expressed relative to the resident population (typically crimes are reported relative to 100,000 residents). Although this procedure may appear statistically sound (the unequal first moments of the population distributions are normalized), a subtle bias of varying tourism patterns between the geographic entities enters all relative studies. In relative comparisons, the UCR reporting standards overestimate the actual crime rate statistics of high tourism states.

The upward bias in the UCR crime rate statistics is particularly acute for the State of Florida. The natural amenities of weather and beaches have long made Florida a favorite tourist destination. New and expanded theme parks have heightened the desirability of Florida in the minds of many potential tourists, and the stellar growth of banking and international commerce in Florida have increased business travel and convention activity. Chapter Three revealed that tourism has more than kept pace with the rapid growth rate in Florida's resident population.

Crime and personnel rates based on fixed populations do not accurately portray the crime and resource problems being experienced by law enforcement agencies in high tourism counties. Legislation and budget decision making are impaired due to incomplete knowledge of the true demographics of that locale. In jurisdictions experiencing high tourism, the crime and personnel rates based solely on resident populations will not accurately depict the crime and resource problems being faced by law enforcement agencies. Biased reported crime rates may further negatively impact high tourist counties through their detrimental effects on potential tourism and commerce.

The Florida Department of Law Enforcement (FDLE) has been acutely aware of the population influx bias ever since Commissioner Robert Dempsey's tenure began in 1982. Attempts were made to develop an objective methodology to capture all visitors entering Florida, but no sound methodology on a state and countywide level had been developed prior to the establishment of the Florida Statistical Analysis Center (SAC) in 1986.

Due to the importance of the population influx on local law enforcement agencies, UCR utilized tourism estimates from the Division of Tourism from 1981 through 1984 to calculate a modified crime rate which attempted to capture tourism on a countywide level. Modified crime rates were computed for the state totals for this period 1980 through 1985. Unfortunately, the Division of Tourism's methodology was not capable of objectively measuring population influx on a countywide level, and the Division of Tourism's population influx estimates

eventually proved unsuitable. Statisticians from the UCR section of the Federal Bureau of Investigation (FBI) in Washington, D.C. expressed concern over the rigor of the population influx estimates. In 1985, the Division of Tourism, realizing the inadequacy of their visitor methodology to capture tourism on a county level, dropped their countywide tourism estimates.

It is the intent of this study to provide an objective, easily reproducible methodology which captures Florida's population influx on a countywide level. The presentation of the population influx estimates in Chapter Three reveals substantial tourism on a statewide level. The population influx estimates were added to the resident population (the denominator) for each of the six years of the study. Table One illustrates that when the total Florida population (residents and visitors) is taken into account, the crime rate is reduced. Victimization rates, if calculated, would also be appreciably lowered. The data in Table One is disaggregated to the county level in Appendix Two. The drop in the crime rate when the true population base is included is, of course, further accentuated in counties experiencing high tourism (e.g. Monroe county).

TABLE ONE
STATE OF FLORIDA CRIME RATES EXPRESSED PER 100,000 POPULATION*

Year	Crime Rate	Crime Rate Including Population Influx
1980	8,388 (9,579,497)	8,079 (9,945,758)
1981	8,085 (10,097,754)	7,747 (10,538,138)
1982	7,494 (10,375,332)	7,196 (10,805,598)
1983	6,838 (10,591,701)	6,575 (11,015,854)
1984	6,855 (10,930,389)	6,603 (11,346,295)
1985	7,634 (11,278,547)	7,362 (11,693,963)

* The number in parentheses following each crime rate are the state figures from which each respective crime rate were generated.

B. Toward Incorporating Population Influx Estimates In Future Crime In Florida Reports

The time frame needed to capture population influx estimates on a countywide basis is of paramount importance to the FDLE. The population influx estimates must be available, at the latest, by the second week in February for inclusion in the prior year's Crime In Florida report. This section will summarize the timetable needed for population influx estimates and examine the feasibility of their incorporation in the modified crime rates in the annual Crime In Florida report.

Four basic data inputs are needed to generate population influx estimates: countywide estimates of the resident population in each of Florida's 67 counties, the raw monthly taxable sales tax data, a statewide estimate of average daily tourist expenditures, and estimates of the proportions of each class of Florida visitor (domestic automobile, domestic air, domestic other, and international) to the total.

University of Florida's Bureau of Economic and Business Research (BEBR) generates countywide, quarterly resident population estimates. The population influx methodology needs the first quarterly data point following the completion of a given calendar year to increase the frequency of the data to a monthly time series (using three month moving averages). The resident population countywide estimates will typically be available; at worst, the Florida SAC would have to estimate one data point.

The Florida Department of Revenue (DOR) releases taxable sales data for each of Florida's 67 counties with a one month time lag. The DOR also supplies the BEBR, University of Florida, a monthly computer tape which the Florida SAC could access. The availability of the data would meet the FDLE's Crime In Florida publication deadline.

The Florida Department of Commerce, Division of Tourism, currently estimates the daily tourism expenditure data which this methodology uses to transform the adjusted taxable sales data to tourism data. The quarterly estimates are typically available with up to a three month time lag, so the Florida SAC may need to estimate the fourth quarter data point. However, the data has little variability, is easily estimated, and would not hinder the publication timetable. As mentioned above (Chapter Two), the Division of Economic Development (DED) is currently investigating a methodology to generate the daily expenditure data. Should the DED eventually estimate the daily tourist expenditure series, it is expected that the time lag will be shortened and the need for the Florida SAC to estimate tourism expenditures for the fourth quarter would be eliminated.

The proportions of air and automobile visitors for a given calendar year are also needed for the population influx methodology. Unfortunately, international air travel data for the State of Florida are not available from the U.S. Department of Transportation until the August following the end of the calendar year. Other international economic and foreign exchange data are readily available, however, and the Florida SAC could easily estimate the number well within the FDLE's time deadline. As mentioned above, the DED will be generating the international visitor estimates in the future (with an expected one month time lag).

The current study utilizes taxable sales data to estimate tourism. However, another tax data base, taxes collected, may also provide promise. A case can be made that businesses may more carefully report sales taxes collected than in reporting taxable sales.[15]

Although the Florida SAC would have to initially estimate a few of the needed data inputs for the population influx methodology, this task would be reduced as the DED expands its forecasting role (which is already mandated by the Florida legislature). Once the raw taxable sales data are received at the end of January, the Florida SAC would be able to generate population influx estimates, by county, for the prior calendar year within ten working days.

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[15]The initial taxable sales data base was adjusted for probable data entry errors on the part of the DOR. Forty of the 4824 raw taxable sales data points, the great majority of which were from the smaller Florida counties, were adjusted. It is unknown whether the errors were due to the DOR's data entry errors, or due to faulty reporting by business entities. The sales tax collected data base may reduce the errors due to faulty business reporting.

APPENDIX ONE
FLORIDA SALES TAX KIND CODE CLASSIFICATIONS

01 Grocery Store
02 Meat Markets, Poultry
03 Seafood Dealers
04 Vegetable and Fruit Markets, Fruit Juice Stands
05 Bakeries
06 Delicatessens
07 Candy, Confectionery, Sundries, Concession Stands
08 Restaurants, Lunchrooms, Catering Services
09 Taverns, Night Clubs, Bars, Liquor Stores
10 Clothing Stores, Alterations
11 Shoe Stores
12 Hat Shops
13 Department Stores
14 Variety Stores
15 Drug Stores
16 Jewelry, Leather, Sporting Goods, Trophies, Golf Carts, Pro Shops, Bait & Tackle, Lapidary
17 Feed, Seed, Fertilizer Stores
18 Hardware, Paints, Light Machinery, Bicycle Shops, Alarms (fire, etc.)
19 Farm Implements and Supplies
20 General Merchandise Stores, Survival Kits, Mail Order
21 Second-Hand Stores, Antique Shops, Trading Posts, Flea Markets
22 Dry Goods Stores
23 Motor Vehicle Dealers, Trailers, Campers (sales and rentals)
24 Auto Accessories, Tires, Parts, Auto Air-Conditioners
25 Filling and Service Stations, Car Wash
26 Garages, Auto Paint and Body Shops
27 Aircraft Dealers, Parts and Supplies and Rentals
28 Motorboats, Yachts, Marine Parts, Accessories
29 Furniture Stores, New and Used
30 Household Appliances, Dinnerware, etc.
31 Store and Office Equipment
32 Music Stores, Radios, Television, Record Shops, Electronic Supplies
33 Building Contractors (roads and realty), Elevator Installation
34 Heating, Air Conditioning, Insulation
35 Electrical and Plumbing, Well Drilling, Pipes
36 Decorating, Painting and Papering, Drapery Installation
37 Roofing and Sheet Metal
38 Lumber and Building Materials, Pre-Fab Buildings, Fall-Out Shelters
39 Hotels, Rooming Houses, Apartments, Tourist Courts, Trailer Parks
40 Manufacturer's Agents, Commission Dealers, Auctioneers
41 Barber and Beauty Shops, Cosmetics, Reducing Salons and Equipment
42 Book Stores
43 Cigar Stands, Tobacco Shops
44 Florists
45 Fuel Dealers, L.P. Gas Dealers
46 Funeral Directors, Monuments, Supplies, Cemeteries
47 Scrap Metal, Junk Yards, Salvaged Material, House Wrecking
48 Itinerant Vendors

49	Laundry, Linen, Cleaning Services, Alterations
50	Machine Shops, Foundries, Iron Works (ornamental), Welding Shops
51	Horse, Cattle and Pet Dealers, Equipment and Supplies
52	Photographers, Photo and Art Equipment and Supplies, Art Galleries
53	Shoe Repair Shops, Shoe Shine Parlors
54	Storage and Warehousing
55	Gift, Card, Novelty, Hobby, Stationery and Toy Stores, Taxidermy
56	News Stands, Magazines, Subscriptions, Periodicals, Post Cards, Brochures, Tip Sheets (races)
57	Social, Fraternal, Commercial Clubs and Associations (all dues)
58	Industrial Machinery, Equipment, Supplies, Electric Motors, Communication Equipment, Hotel, Motel and Restaurant Equipment
59	Admissions (pool rooms, rides, theaters, dances, ball games, golf courses, etc.)
60	Holiday Season Vendors, Christmas Trees
61	Rental of Tangible Personal Property (amusement machines), House Boats, Riding Academy
62	Fabrication and Sales of Cabinets, Windows, Doors, Awnings, Septic Tanks, Neon Signs, Plastics, etc.
63	Manufacturing, Processing, Mining, Electroplating, Foam Rubber Products, pre-cast
64	Bottlers (beer and soft drinks)
65	Pawn Shops
66	Communications, Telephone, Telegraph, Radio and Television Stations
67	Transportation: Railroads, Airlines, Bus & Trucking Lines, Ships & Barges, Pipelines Operations
68	Graphic Arts: Printing, Publishing, Engraving, Binding, Letter Services, Blueprinting
69	Insurance, Banking, Savings & Loan, Research, Information Services, Income Tax Reports
70	Sanitary and Industrial Supplies, Chemical Companies
71	Packaging Materials: Paper, Box Bag Dealers, Containers
72	Repair of Tangible Personal Property, Upholstery, Electric Motors
73	Advertising: Outdoor Signs and Billboards, Posters
74	Top Soil, Clay, Sand, Fill Dirt
75	Trade Stamp Dealers (redemption centers)
76	Nurseries and Landscaping, Supplies, Tree Experts, Grove Service, Retail Rocks
77	Vending Machines (tangible property sales, amusement machines under 61)
78	Importing and Exporting
79	Medical, Dental, Surgical, Optical, Hospital Supplies
80	Wholesale Dealers
81	Schools and Colleges
82	Lease or Rental of Office Space and Commercial Rentals
83	Privately Operated Parking Lots, Boat Docking and Storage (marines)
84	Utilities: Electricity or Gas
85*	Hotels, Rooming Houses, Apartments, etc.
86	Dual User: Fuel
88	Public Works, Governmental Contractor
89*	Hotels, Rooming Houses, Apartments, etc.
90	Flea Market
91	Fairs, Concessions, Carnivals
98	Commercial Fisherman
99	Miscellaneous, Water Conditioners, Swimming Pool Supplies,

APPENDIX TWO
A COMPARISON OF FLORIDA COUNTY CRIME RATES VERSUS
MODIFIED CRIME RATES EXPRESSED PER 100,000 POPULATION

COUNTY	1980	1981	1982	1983	1984	1985
Alachua						
Crime Rate	10,254	9,688	8,860	7,486	7,314	7,769
Mod Crime Rate	10,026	9,398	8,586	7,105	7,108	7,540
Baker						
Crime Rate	1,996	2,089	3,010	2,027	1,860	2,149
Mod Crime Rate	1,964	2,041	2,940	2,001	1,832	2,122
Bay						
Crime Rate	6,414	6,292	6,728	5,586	6,056	5,924
Mod Crime Rate	6,031	5,748	6,196	5,059	5,542	5,482
Bradford						
Crime Rate	3,312	3,092	3,456	3,003	3,005	3,868
Mod Crime Rate	3,259	3,016	3,350	2,943	2,941	3,814
Brevard						
Crime Rate	7,091	6,923	5,934	5,903	5,697	6,292
Mod Crime Rate	6,963	6,757	5,799	5,643	5,553	6,107
Broward						
Crime Rate	9,285	9,094	8,278	7,039	6,966	7,940
Mod Crime Rate	8,887	9,067	7,907	6,837	6,743	7,593
Calhoun						
Crime Rate	1,285	1,588	1,305	1,201	954	736
Mod Crime Rate	1,256	1,522	1,269	1,174	926	720
Charlotte						
Crime Rate	3,353	2,415	2,567	1,711	2,256	3,469
Mod Crime Rate	3,208	2,306	2,477	1,657	2,201	3,382
Citrus						
Crime Rate	4,415	4,478	4,126	3,687	3,491	4,080
Mod Crime Rate	4,309	4,378	4,059	3,617	3,421	4,021
Clay						
Crime Rate	3,388	3,689	4,132	3,779	3,782	3,897
Mod Crime Rate	3,326	3,431	3,962	3,569	3,607	3,769
Collier						
Crime Rate	7,884	6,596	5,921	5,364	5,158	5,639
Mod Crime Rate	7,184	5,985	5,415	4,948	4,711	5,245
Columbia						
Crime Rate	5,230	5,928	6,136	5,815	5,486	4,375
Mod Crime Rate	5,012	5,604	5,707	5,550	5,268	4,189

COUNTY	1980	1981	1982	1983	1984	1985
Dade						
Crime Rate	11,571	10,523	10,190	9,608	10,196	11,325
Mod Crime Rate	11,318	10,228	9,890	9,382	9,973	11,125
DeSoto						
Crime Rate	3,913	4,857	4,858	4,055	4,767	5,233
Mod Crime Rate	3,855	4,663	4,696	3,979	4,657	5,144
Dixie						
Crime Rate	2,227	1,584	1,422	1,896	2,049	2,314
Mod Crime Rate	2,151	1,542	1,354	1,854	1,987	2,261
Duval						
Crime Rate	7,951	8,293	8,194	7,639	7,480	8,467
Mod Crime Rate	7,726	7,822	7,942	7,232	7,106	8,106
Escambia						
Crime Rate	8,696	7,948	7,415	6,778	6,092	6,270
Mod Crime Rate	8,501	7,605	7,093	6,440	5,842	6,038
Flagler						
Crime Rate	4,401	6,688	4,970	4,156	3,869	4,375
Mod Crime Rate	4,130	6,388	4,832	4,053	3,772	4,280
Franklin						
Crime Rate	3,240	3,557	3,712	2,424	1,405	1,499
Mod Crime Rate	3,129	3,411	3,611	2,340	1,352	1,461
Gadsden						
Crime Rate	3,927	3,906	3,627	3,166	3,496	3,691
Mod Crime Rate	3,856	3,764	3,564	3,095	3,422	3,633
Gilchrist						
Crime Rate	1,570	2,234	3,134	2,632	2,389	2,868
Mod Crime Rate	1,538	2,186	3,080	2,587	2,334	2,806
Glades						
Crime Rate	4,714	3,010	3,079	3,130	2,625	3,135
Mod Crime Rate	4,632	2,942	3,033	3,091	2,583	3,087
Gulf						
Crime Rate	2,976	2,959	3,239	3,103	3,007	2,795
Mod Crime Rate	2,849	2,855	3,090	3,009	2,951	2,724
Hamilton						
Crime Rate	3,119	3,389	2,294	3,251	1,616	3,449
Mod Crime Rate	3,042	3,309	2,180	3,047	1,513	3,275
Hardee						
Crime Rate	3,217	3,963	4,282	4,125	3,807	3,377
Mod Crime Rate	3,147	3,841	4,192	3,984	3,704	3,306

COUNTY	1980	1981	1982	1983	1984	1985
Hendry						
Crime Rate	5,100	6,492	6,261	5,823	4,647	4,435
Mod Crime Rate	4,929	6,305	6,045	5,663	4,515	4,300
Hernando						
Crime Rate	4,744	4,456	4,727	4,329	4,067	4,545
Mod Crime Rate	4,641	4,330	4,612	4,233	4,008	4,489
Highlands						
Crime Rate	4,096	4,735	4,068	3,703	3,976	4,110
Mod Crime Rate	3,931	4,562	3,898	3,630	3,873	3,989
Hillsborough						
Crime Rate	10,364	10,417	9,510	8,346	8,203	9,528
Mod Crime Rate	9,733	10,012	9,197	7,968	7,986	9,367
Holmes						
Crime Rate	1,683	1,144	1,462	1,317	1,244	1,955
Mod Crime Rate	1,647	1,120	1,424	1,292	1,219	1,909
Indian River						
Crime Rate	7,049	5,754	5,177	5,016	4,965	5,171
Mod Crime Rate	6,756	5,470	4,980	4,836	4,750	5,008
Jackson						
Crime Rate	1,759	1,814	2,214	1,776	1,818	2,193
Mod Crime Rate	1,723	1,747	2,155	1,718	1,746	2,127
Jefferson						
Crime Rate	1,184	2,029	2,392	1,523	1,562	1,568
Mod Crime Rate	1,153	1,977	2,328	1,478	1,528	1,533
Lafayette						
Crime Rate	901	723	98	576	620	845
Mod Crime Rate	875	700	95	563	613	836
Lake						
Crime Rate	5,261	5,433	4,754	4,479	4,363	4,105
Mod Crime Rate	5,100	5,246	4,654	4,378	4,254	4,040
Lee						
Crime Rate	5,301	5,084	4,035	3,478	3,706	4,473
Mod Crime Rate	4,970	4,841	3,799	3,293	3,516	4,256
Leon						
Crime Rate	9,669	8,999	7,068	6,141	6,755	8,120
Mod Crime Rate	9,373	8,533	6,858	5,840	6,445	7,805
Levy						
Crime Rate	4,357	4,279	4,273	3,107	2,972	3,010
Mod Crime Rate	4,277	4,131	4,165	3,040	2,918	2,936

COUNTY	1980	1981	1982	1983	1984	1985
Liberty						
Crime Rate	663	1,025	1,126	480	1,347	2,141
Mod Crime Rate	641	1,005	1,106	473	1,336	2,114
Madison						
Crime Rate	2,556	2,452	2,538	2,536	3,105	2,752
Mod Crime Rate	2,473	2,389	2,467	2,500	3,026	2,701
Manatee						
Crime Rate	6,857	6,353	6,199	6,110	6,876	8,107
Mod Crime Rate	6,568	6,075	5,932	5,907	6,598	7,721
Marion						
Crime Rate	7,512	7,601	6,797	6,129	5,870	6,455
Mod Crime Rate	7,348	7,375	6,597	5,866	5,689	6,272
Martin						
Crime Rate	6,694	6,728	5,903	4,819	4,841	5,400
Mod Crime Rate	6,371	6,403	5,570	4,659	4,610	5,129
Monroe						
Crime Rate	10,817	9,659	10,810	9,358	9,241	10,082
Mod Crime Rate	9,813	8,867	9,848	8,521	8,463	9,135
Nassau						
Crime Rate	3,915	3,728	3,884	3,866	3,478	3,953
Mod Crime Rate	3,804	3,554	3,702	3,714	3,335	3,788
Okaloosa						
Crime Rate	3,203	3,345	3,301	3,679	3,437	3,898
Mod Crime Rate	3,068	3,157	3,121	3,437	3,283	3,683
Okeechobee						
Crime Rate	5,102	4,593	4,101	3,862	4,020	4,763
Mod Crime Rate	4,977	4,433	3,986	3,749	3,906	4,656
Orange						
Crime Rate	10,423	10,264	8,918	7,477	6,984	7,651
Mod Crime Rate	10,046	9,605	8,377	7,009	6,548	7,142
Osceola						
Crime Rate	9,452	9,701	8,092	6,534	5,990	6,125
Mod Crime Rate	8,742	9,230	7,582	6,204	5,690	5,888
Palm Beach						
Crime Rate	9,800	9,306	8,362	8,061	8,192	9,375
Mod Crime Rate	9,175	8,811	7,870	7,667	7,742	8,858
Pasco						
Crime Rate	4,254	4,132	4,117	3,879	3,965	4,789
Mod Crime Rate	4,161	4,028	4,007	3,811	3,865	4,683

COUNTY	1980	1981	1982	1983	1984	1985
Pinellas						
Crime Rate	7,011	6,741	6,285	5,960	5,908	6,568
Mod Crime Rate	6,835	6,516	6,108	5,822	5,740	6,384
Polk						
Crime Rate	7,258	7,233	6,733	6,634	6,730	7,408
Mod Crime Rate	7,028	6,918	6,507	6,469	6,553	7,174
Putnam						
Crime Rate	5,495	5,432	5,074	5,111	4,966	5,030
Mod Crime Rate	5,386	5,244	4,959	4,904	4,818	4,919
St. Johns						
Crime Rate	6,554	6,225	6,403	5,450	5,910	5,950
Mod Crime Rate	6,243	5,930	6,114	5,180	5,629	5,719
St. Lucie						
Crime Rate	9,206	9,568	8,133	7,481	7,742	8,561
Mod Crime Rate	8,944	9,234	7,856	7,339	7,425	8,365
Santa Rosa						
Crime Rate	4,325	4,648	4,917	4,535	3,802	4,028
Mod Crime Rate	4,231	4,520	4,703	4,384	3,701	3,919
Sarasota						
Crime Rate	6,574	6,302	5,945	5,406	5,802	6,769
Mod Crime Rate	6,181	5,896	5,567	5,090	5,520	6,389
Seminole						
Crime Rate	7,135	7,055	6,369	5,586	5,280	5,551
Mod Crime Rate	7,029	6,773	6,134	5,306	5,071	5,353
Sumter						
Crime Rate	4,932	5,856	5,804	5,744	4,792	4,608
Mod Crime Rate	4,900	5,772	5,705	5,641	4,729	4,548
Suwannee						
Crime Rate	1,551	1,146	963	1,224	955	1,093
Mod Crime Rate	1,512	1,107	940	1,180	931	1,062
Taylor						
Crime Rate	3,177	3,250	4,297	5,085	4,402	5,749
Mod Crime Rate	3,057	3,034	4,140	4,770	4,241	5,509
Union						
Crime Rate	746	1,001	310	719	515	562
Mod Crime Rate	737	986	306	709	507	556
Volusia						
Crime Rate	9,107	8,299	7,298	6,949	6,743	7,274
Mod Crime Rate	8,564	7,886	6,884	6,719	6,447	7,003

COUNTY	1980	1981	1982	1983	1984	1985
Wakulla						
Crime Rate	1,113	1,627	1,804	1,662	1,568	1,535
Mod Crime Rate	1,056	1,575	1,758	1,632	1,529	1,477
Walton						
Crime Rate	2,435	3,479	2,810	2,690	2,246	2,362
Mod Crime Rate	1,220	3,316	2,669	2,621	2,154	2,252
Washington						
Crime Rate	1,842	1,673	1,791	1,511	1,258	1,287
Mod Crime Rate	1,805	1,636	1,736	1,470	1,235	1,258

APPENDIX THREE
AVERAGE DAILY POPULATION INFLUX ESTIMATES BY COUNTY

COUNTY	1980	1981	1982	1983	1984	1985
Alachua						
Resident Pop.	146,534	154,305	159,248	162,404	168,243	172,900
Pop Influx Est.	3,332	4,753	5,081	8,718	4,875	5,232
Total Pop.	149,866	159,058	164,329	171,122	173,118	178,132
Baker						
Resident Pop.	15,278	15,801	16,081	16,525	17,048	17,310
Pop Influx Est.	253	365	383	218	252	219
Total Pop.	15,531	16,166	16,464	16,743	17,300	17,529
Bay						
Resident Pop.	97,159	99,995	104,477	107,633	112,949	119,503
Pop Influx Est.	6,182	9,463	8,961	11,206	10,466	9,638
Total Pop.	103,341	109,458	113,438	118,839	123,415	129,141
Bradford						
Resident Pop.	20,047	20,118	20,689	21,247	22,996	23,400
Pop Influx Est.	328	506	657	434	503	328
Total Pop.	20,375	20,624	21,346	21,681	23,499	23,728
Brevard						
Resident Pop.	269,466	281,496	298,111	308,571	323,055	339,473
Pop Influx Est.	4,926	6,927	6,948	14,224	8,333	10,253
Total Pop.	274,392	288,423	305,059	322,795	331,388	349,726
Broward						
Resident Pop.	1,005,315	1,047,313	1,067,044	1,080,363	1,100,777	1,124,136
Pop Influx Est.	45,076	41,267	50,031	31,970	36,404	51,475
Total Pop.	1,050,391	1,088,580	1,117,075	1,112,333	1,137,181	1,175,611
Calhoun						
Resident Pop.	9,183	9,384	9,270	9,244	9,325	9,506
Pop Influx Est.	213	407	265	208	285	218
Total Pop.	9,396	9,791	9,535	9,452	9,610	9,724
Charlotte						
Resident Pop.	57,980	61,566	66,430	69,895	74,060	78,475
Pop Influx Est.	2,626	2,925	2,414	2,268	1,850	2,019
Total Pop.	60,606	64,491	68,844	72,163	75,910	80,494
Citrus						
Resident Pop.	53,136	59,240	62,307	65,502	68,683	72,278
Pop Influx Est.	1,184	1,356	1,029	1,262	1,411	1,060
Total Pop.	54,320	60,596	63,336	66,764	70,094	73,338

Clay						
Resident Pop.	67,089	69,745	72,050	74,524	79,886	85,358
Pop Influx Est.	1,256	5,245	3,089	4,373	3,864	2,879
Total Pop.	68,345	74,990	75,139	78,897	83,750	88,237

Collier						
Resident Pop.	84,837	91,090	98,094	102,520	109,219	115,221
Pop Influx Est.	8,220	9,295	9,172	8,614	10,372	8,648
Total Pop.	92,607	100,385	107,266	111,134	119,591	123,869

Columbia						
Resident Pop.	34,625	35,816	36,995	37,920	38,592	39,358
Pop Influx Est.	1,507	2,068	2,781	1,808	1,597	1,748
Total Pop.	36,132	37,884	39,776	39,728	40,189	41,106

Dade						
Resident Pop.	1,574,285	1,718,516	1,729,069	1,738,532	1,744,113	1,758,135
Pop Influx Est.	35,211	49,648	52,405	41,995	38,956	31,533
Total Pop.	1,609,496	1,768,164	1,781,474	1,780,527	1,783,069	1,789,668

DeSoto						
Resident Pop.	19,040	19,373	20,153	20,594	21,125	21,574
Pop Influx Est.	248	805	693	392	498	374
Total Pop.	19,324	20,178	20,846	20,986	21,623	21,948

Dixie						
Resident Pop.	7,680	8,145	8,792	8,863	9,125	9,206
Pop Influx Est.	268	219	438	200	286	216
Total Pop.	7,948	8,364	9,230	9,063	9,411	9,422

Duval						
Resident Pop.	571,441	575,884	580,737	587,076	605,680	615,815
Pop Influx Est.	16,654	34,690	18,479	33,098	31,850	27,443
Total Pop.	588,095	610,574	599,216	620,174	637,530	643,259

Escambia						
Resident Pop.	228,657	239,391	245,517	250,134	256,715	264,715
Pop Influx Est.	5,250	10,809	11,119	13,144	10,973	10,180
Total Pop.	233,907	250,200	256,636	263,278	267,688	274,895

Flagler						
Resident Pop.	10,565	12,141	12,959	13,786	14,811	16,040
Pop Influx Est.	695	571	369	353	378	356
Total Pop.	11,260	12,712	13,328	14,139	15,189	16,402

Franklin						
Resident Pop.	7,530	7,732	7,894	7,921	8,254	8,406
Pop Influx Est.	269	329	220	283	328	216
Total Pop.	7,799	8,061	8,114	8,204	8,582	8,622

Gadsden						
Resident Pop.	40,009	42,062	42,707	42,991	43,851	44,920
Pop Influx Est.	732	1,588	752	986	946	714
Total Pop.	40,741	43,650	43,459	43,977	44,797	45,634

Gilchrist
Resident Pop.	5,733	6,312	7,051	6,763	7,031	7,008
Pop Influx Est.	117	138	125	117	167	155
Total Pop.	5,850	6,450	7,176	6,880	7,198	7,163

Glades
Resident Pop.	6,025	6,147	6,399	6,389	6,590	6,921
Pop Influx Est.	106	142	96	81	107	109
Total Pop.	6,131	6,289	6,495	6,470	6,697	7,030

Gulf
Resident Pop.	10,451	10,647	10,712	10,958	11,073	11,272
Pop Influx Est.	467	386	517	343	212	293
Total Pop.	10,918	11,033	11,229	11,301	11,285	11,565

Hamilton
Resident Pop.	8,561	8,705	8,764	8,890	9,156	9,221
Pop Influx Est.	216	210	458	595	623	488
Total Pop.	8,777	8,915	9,222	9,485	9,779	9,709

Hardee
Resident Pop.	17,130	19,883	19,969	19,782	20,803	21,146
Pop Influx Est.	377	631	425	702	580	450
Total Pop.	17,507	20,514	20,394	20,484	21,383	21,597

Hendry
Resident Pop.	18,588	19,440	20,317	20,694	21,668	22,704
Pop Influx Est.	644	576	726	585	637	716
Total Pop.	19,232	20,016	21,043	21,279	22,305	23,420

Hernando
Resident Pop.	43,841	48,771	52,973	56,671	61,945	67,742
Pop Influx Est.	981	1,416	1,323	1,285	897	848
Total Pop.	44,822	50,187	54,296	57,956	62,842	68,590

Highlands
Resident Pop.	47,313	49,759	52,037	53,661	56,009	58,151
Pop Influx Est.	1,991	1,880	2,269	1,078	1,485	1,764
Total Pop.	49,304	51,639	54,306	54,739	57,494	59,915

Hillsborough
Resident Pop.	640,256	661,243	677,733	693,152	721,990	748,974
Pop Influx Est.	41,459	26,757	23,007	32,911	19,568	12,894
Total Pop.	681,715	688,000	700,740	726,063	741,558	761,868

Holmes
Resident Pop.	14,616	14,953	15,319	15,106	15,356	15,552
Pop Influx Est.	321	311	413	299	309	371
Total Pop.	14,937	15,264	15,732	15,405	15,665	15,923

Indian River
Resident Pop.	57,217	63,100	66,915	69,414	74,162	76,442
Pop Influx Est.	2,482	3,277	2,649	2,593	3,355	2,495
Total Pop.	59,699	66,377	69,564	72,007	77,517	78,937

Jackson
Resident Pop.	38,945	39,686	39,557	39,527	39,938	40,902
Pop Influx Est.	816	1,527	1,087	1,334	1,647	1,276
Total Pop.	39,761	41,213	40,744	40,861	41,585	42,178

Jefferson
Resident Pop.	10,470	10,746	10,993	11,164	11,395	11,543
Pop Influx Est.	287	282	303	337	252	266
Total Pop.	10,757	11,028	11,296	11,501	11,647	11,809

Lafayette
Resident Pop.	3,994	4,013	4,076	4,167	4,356	4,499
Pop Influx Est.	120	128	138	98	52	49
Total Pop.	4,114	4,141	4,214	4,265	4,408	4,548

Lake
Resident Pop.	103,853	108,063	111,559	115,718	119,902	124,278
Pop Influx Est.	3,291	3,841	2,397	2,682	3,067	2,019
Total Pop.	107,144	111,904	113,956	118,400	122,969	126,297

Lee
Resident Pop.	204,277	214,867	227,259	235,465	251,768	264,367
Pop Influx Est.	13,618	10,810	14,070	13,276	13,630	13,444
Total Pop.	217,895	225,677	241,329	248,741	265,398	277,811

Leon
Resident Pop.	146,152	152,096	156,043	158,712	163,286	168,531
Pop Influx Est.	4,618	8,313	4,784	8,182	7,828	6,626
Total Pop.	150,770	160,409	160,827	166,894	171,114	175,157

Levy
Resident Pop.	19,370	20,564	21,531	21,664	21,942	22,460
Pop Influx Est.	364	740	557	476	401	563
Total Pop.	19,734	21,304	22,088	22,140	22,343	23,023

Liberty
Resident Pop.	4,223	4,294	4,353	4,371	4,454	4,530
Pop Influx Est.	143	84	78	71	38	58
Total Pop.	4,366	4,378	4,431	4,442	4,492	4,588

Madison
Resident Pop.	14,631	15,091	15,051	15,261	15,427	15,624
Pop Influx Est.	492	394	431	222	405	297
Total Pop.	15,123	15,485	15,482	15,483	15,832	15,921

Manatee
Resident Pop.	148,385	156,871	161,717	164,300	168,532	174,157
Pop Influx Est.	6,543	7,165	7,275	5,651	7,117	8,708
Total Pop.	154,928	164,036	168,992	169,951	175,649	182,865

Marion
Resident Pop.	118,140	129,320	135,087	141,991	148,864	157,853
Pop Influx Est.	2,638	3,975	4,103	6,376	4,724	4,614
Total Pop.	120,778	133,295	139,190	148,367	153,588	162,467

Martin
Resident Pop.	62,979	67,569	71,635	74,143	77,519	80,909
Pop Influx Est.	3,194	3,427	4,283	2,543	3,899	4,277
Total Pop.	66,173	70,996	75,918	76,686	81,418	85,186

Monroe
Resident Pop.	62,798	64,168	65,748	66,605	68,752	70,729
Pop Influx Est.	6,429	5,729	6,420	6,546	6,315	7,332
Total Pop.	69,227	69,897	72,168	73,151	75,067	78,061

Nassau
Resident Pop.	32,925	33,718	35,458	36,319	37,690	39,822
Pop Influx Est.	962	1,653	1,740	1,481	1,621	1,729
Total Pop.	33,887	35,371	37,198	37,800	39,311	41,551

Okaloosa
Resident Pop.	109,717	112,873	117,177	122,547	128,941	136,366
Pop Influx Est.	4,810	6,751	6,775	8,624	6,052	7,958
Total Pop.	114,527	119,624	123,952	131,171	134,993	144,324

Okeechobee
Resident Pop.	20,324	21,139	22,435	22,867	23,878	24,545
Pop Influx Est.	511	764	644	685	702	561
Total Pop.	20,835	21,903	23,079	23,552	24,580	25,106

Orange
Resident Pop.	467,664	473,711	494,756	507,572	530,424	554,659
Pop Influx Est.	17,565	32,519	31,946	33,897	35,304	39,584
Total Pop.	485,229	506,230	526,702	541,469	565,728	594,243

Osceola
Resident Pop.	49,103	55,332	59,185	63,896	69,955	77,374
Pop Influx Est.	3,985	2,828	3,979	3,396	3,680	3,109
Total Pop.	53,088	58,160	63,164	67,292	73,635	80,483

Palm Beach
Resident Pop.	553,306	615,165	637,940	652,562	682,638	713,253
Pop Influx Est.	37,664	34,552	39,930	33,562	39,664	41,663
Total Pop.	590,970	649,717	677,870	686,124	722,302	754,916

Pasco
Resident Pop.	190,861	204,598	211,852	217,781	225,821	233,272
Pop Influx Est.	4,302	5,261	5,830	3,885	5,808	5,293
Total Pop.	195,163	209,859	217,682	221,666	231,629	238,565

Pinellas
Resident Pop.	721,227	743,301	755,937	766,809	783,265	799,933
Pop Influx Est.	18,507	25,666	21,899	18,125	22,937	22,933
Total Pop.	739,734	768,967	777,836	784,934	806,202	822,926

Polk
Resident Pop.	321,874	330,830	338,865	345,224	355,413	366,268
Pop Influx Est.	10,555	15,044	11,792	8,780	9,613	11,964
Total Pop.	332,429	345,874	350,657	354,004	365,026	378,232

Putnam
Resident Pop.	48,755	51,238	52,901	54,202	55,235	56,823
Pop Influx Est.	981	1,832	1,223	2,288	1,694	1,296
Total Pop.	49,736	53,070	54,124	56,490	56,929	58,119

St. Johns
Resident Pop.	49,601	53,701	57,097	60,108	64,143	68,822
Pop Influx Est.	2,474	2,675	2,703	3,140	3,201	2,787
Total Pop.	52,075	56,376	59,800	63,248	67,344	71,609

St. Lucie
Resident Pop.	86,969	94,727	100,984	105,224	111,165	116,235
Pop Influx Est.	2,543	3,419	3,560	2,032	4,739	2,726
Total Pop.	89,512	98,146	104,544	107,256	115,904	118,961

Santa Rosa
Resident Pop.	55,751	57,205	58,598	60,139	61,842	63,381
Pop Influx Est.	1,227	1,618	2,665	2,068	1,678	1,755
Total Pop.	56,978	58,823	61,263	62,207	63,520	65,136

Sarasota
Resident Pop.	199,330	206,860	212,700	220,626	228,136	234,421
Pop Influx Est.	12,684	14,268	14,427	13,726	11,644	13,969
Total Pop.	212,014	221,128	227,127	234,352	239,780	248,390

Seminole
Resident Pop.	177,779	186,840	195,133	201,906	214,870	229,937
Pop Influx Est.	2,670	7,774	7,465	10,640	8,861	8,491
Total Pop.	180,449	194,614	202,598	212,546	223,731	238,428

Sumter
Resident Pop.	23,784	24,880	25,295	25,904	26,522	27,432
Pop Influx Est.	156	362	436	475	355	363
Total Pop.	23,940	25,242	25,731	26,379	26,877	27,795

Suwannee
Resident Pop.	21,671	23,293	23,883	24,183	24,816	25,355
Pop Influx Est.	551	827	592	909	652	739
Total Pop.	22,222	24,120	24,475	25,092	25,468	26,094

Taylor
Resident Pop.	15,709	16,894	17,150	17,384	17,605	17,864
Pop Influx Est.	613	1,198	652	1,148	668	777
Total Pop.	16,322	18,092	17,802	18,532	18,273	18,641

Union
Resident Pop.	10,186	10,392	11,307	12,096	10,489	10,686
Pop Influx Est.	127	160	149	172	164	110
Total Pop.	10,313	10,552	11,456	12,268	10,653	10,796

Volusia
Resident Pop.	249,434	268,175	276,813	284,593	295,368	307,042
Pop Influx Est.	15,802	14,038	16,671	9,730	13,549	10,531
Total Pop.	265,236	282,213	293,484	294,323	308,917	317,573

Wakulla
Resident Pop.	10,694	10,938	11,084	11,309	12,691	13,159
Pop Influx Est.	570	366	291	214	327	519
Total Pop.	11,264	11,304	11,375	11,523	13,018	13,678

Walton
Resident Pop.	21,148	21,700	22,244	22,748	24,217	25,656
Pop Influx Est.	496	1,068	1,175	599	1,042	1,259
Total Pop.	21,644	22,768	23,419	23,347	25,259	26,915

Washington
Resident Pop.	14,331	14,823	15,016	14,889	14,860	14,992
Pop Influx Est.	297	336	475	414	280	347
Total Pop.	14,628	15,159	15,491	15,303	15,140	15,339

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POPULATION INFLUX AS A PERCENT
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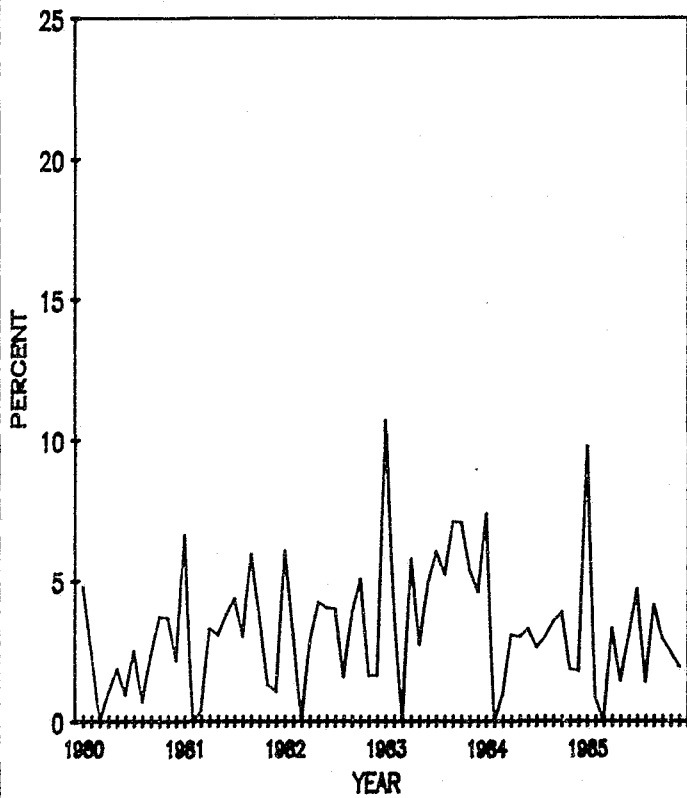
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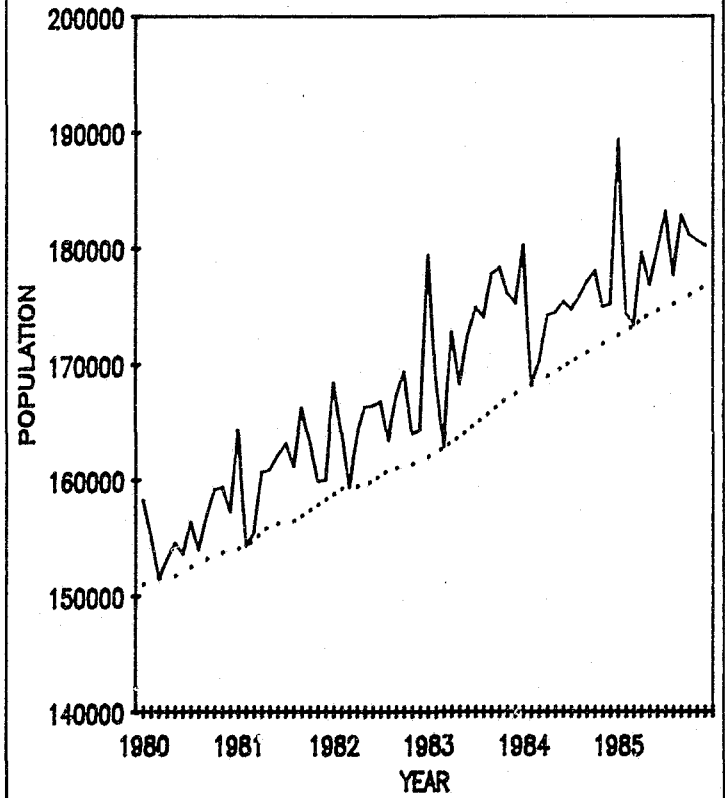
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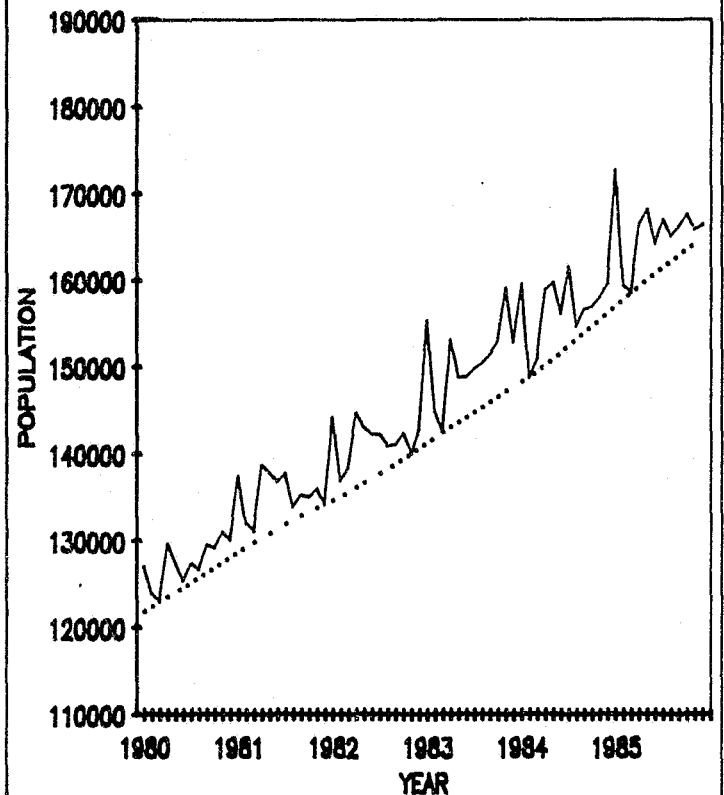POPULATION INFLUX AS A PERCENT
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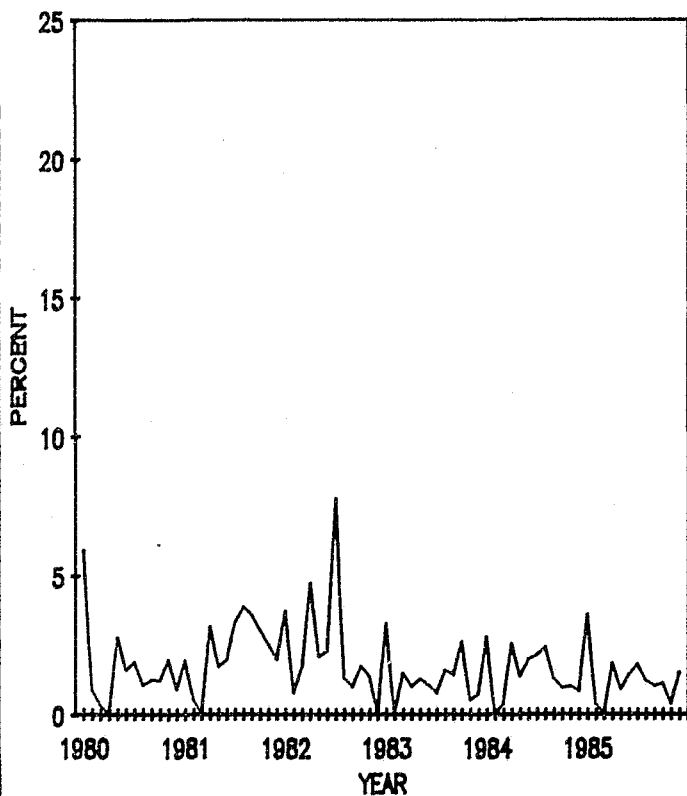
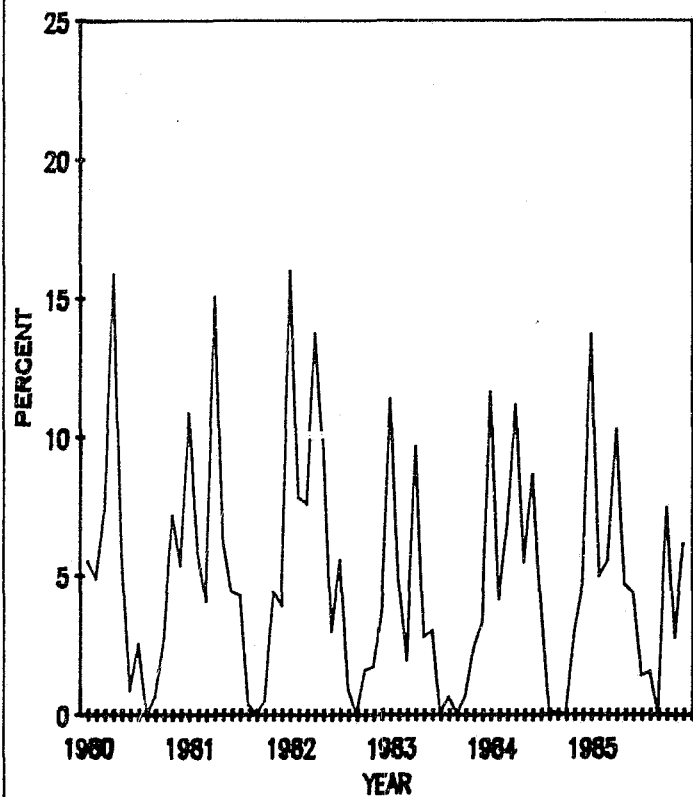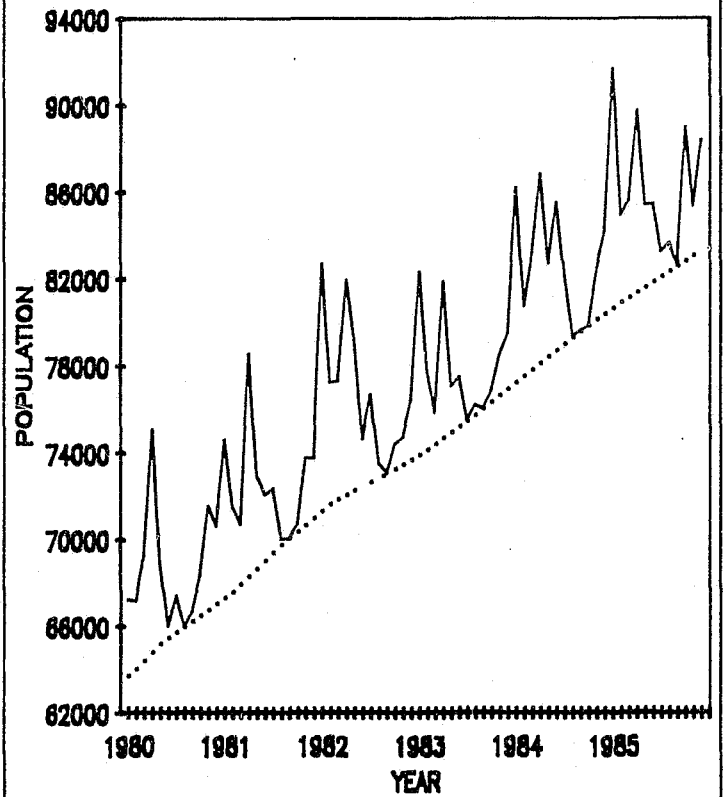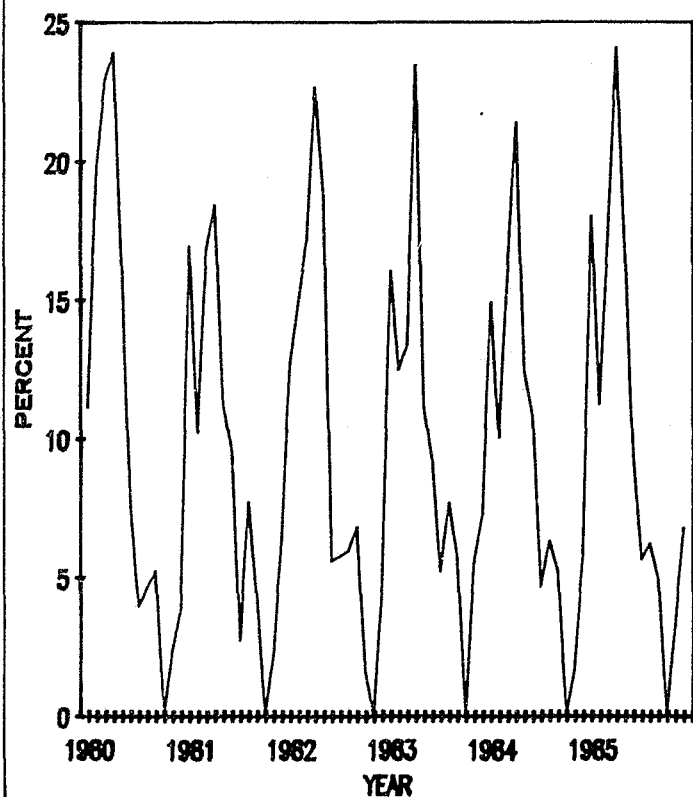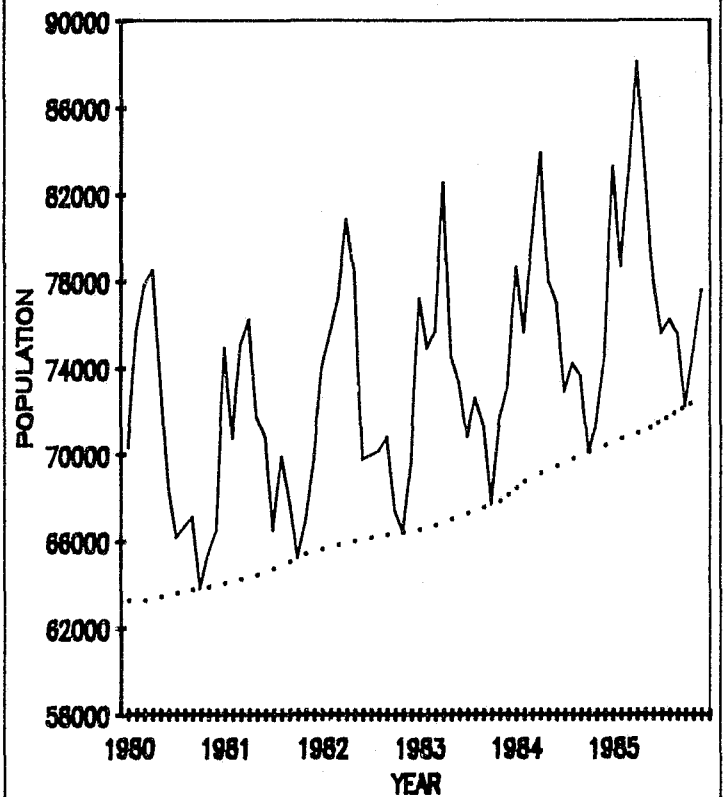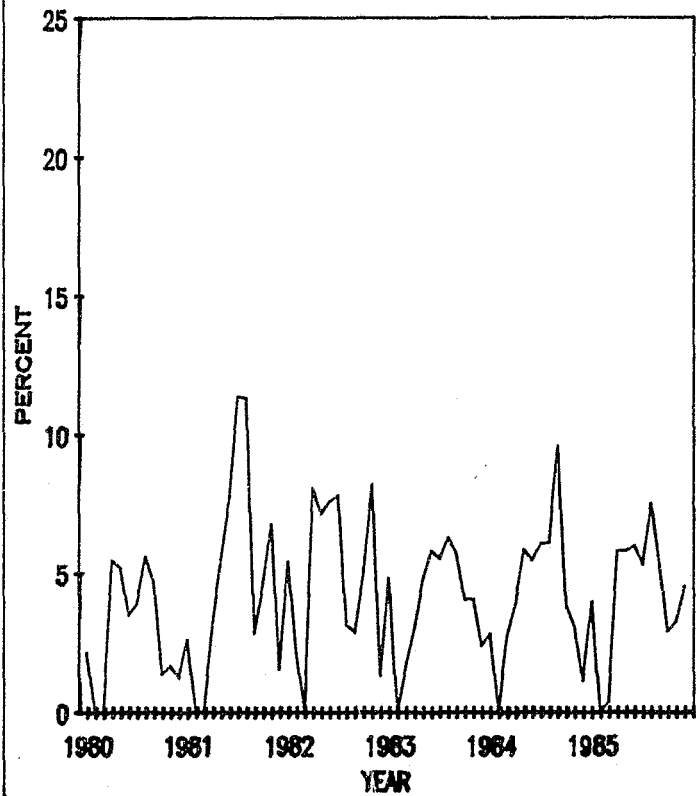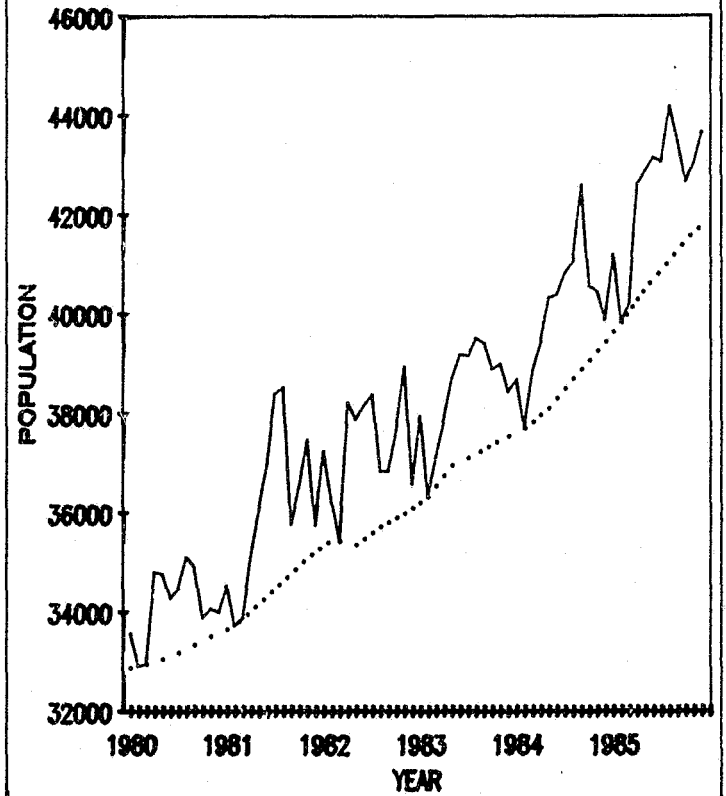BAKER COUNTY
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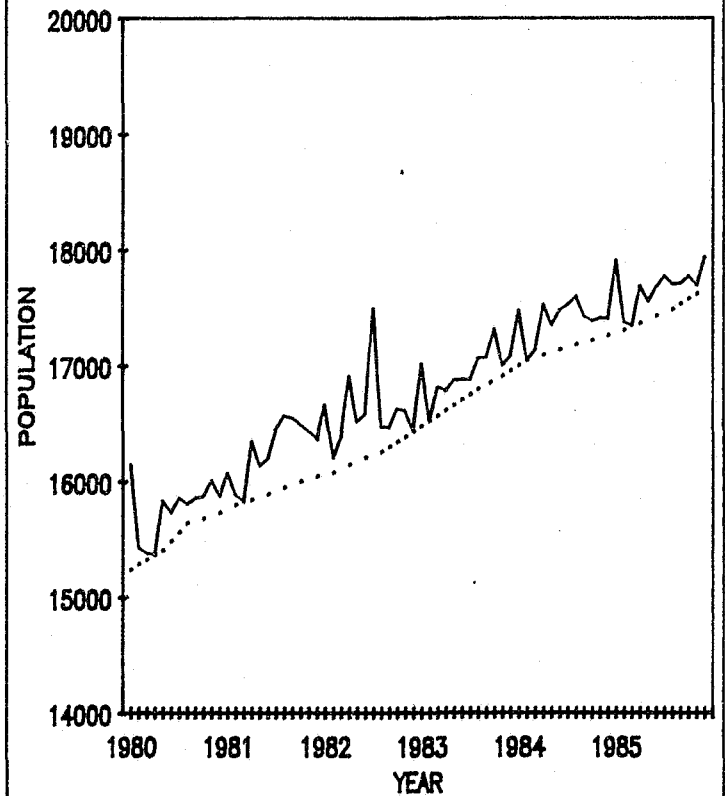
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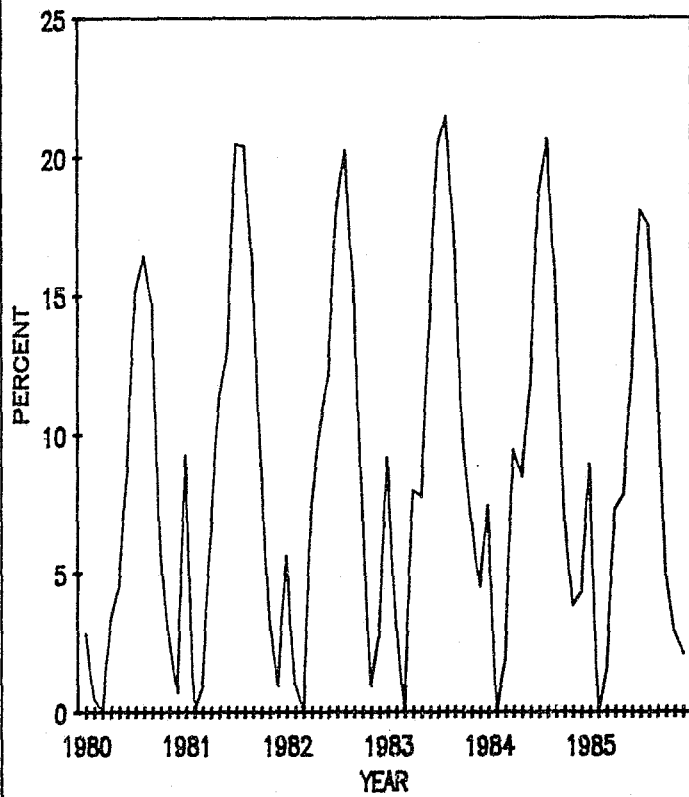
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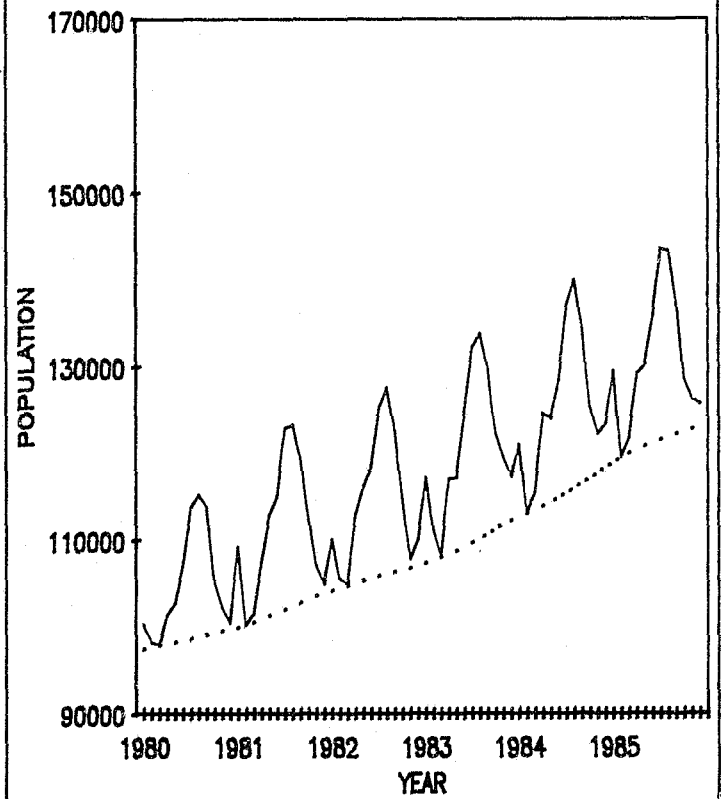
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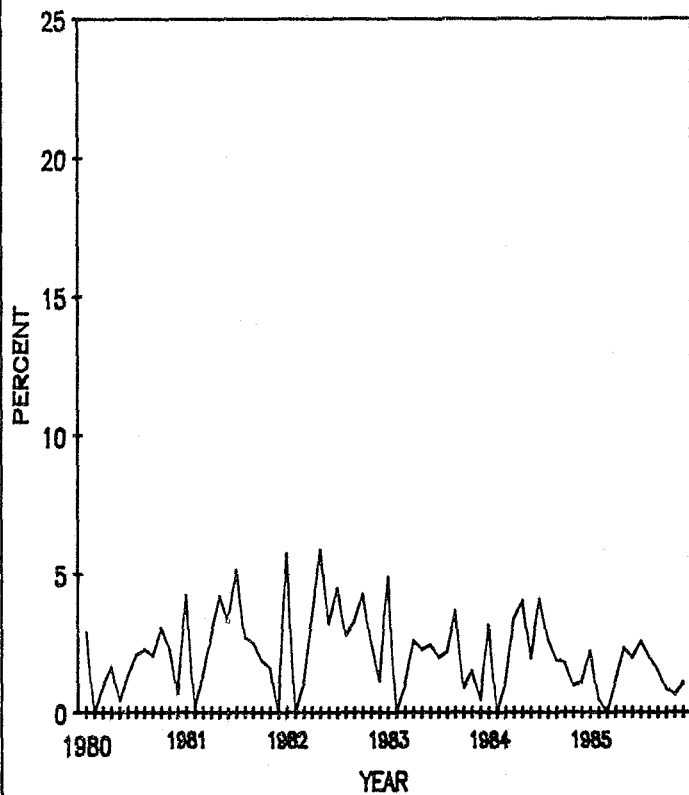
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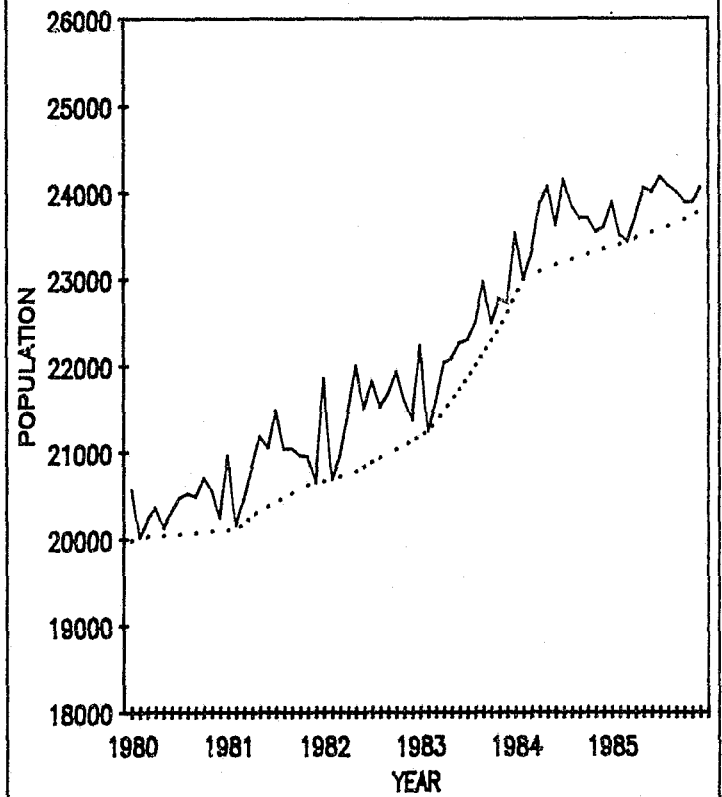
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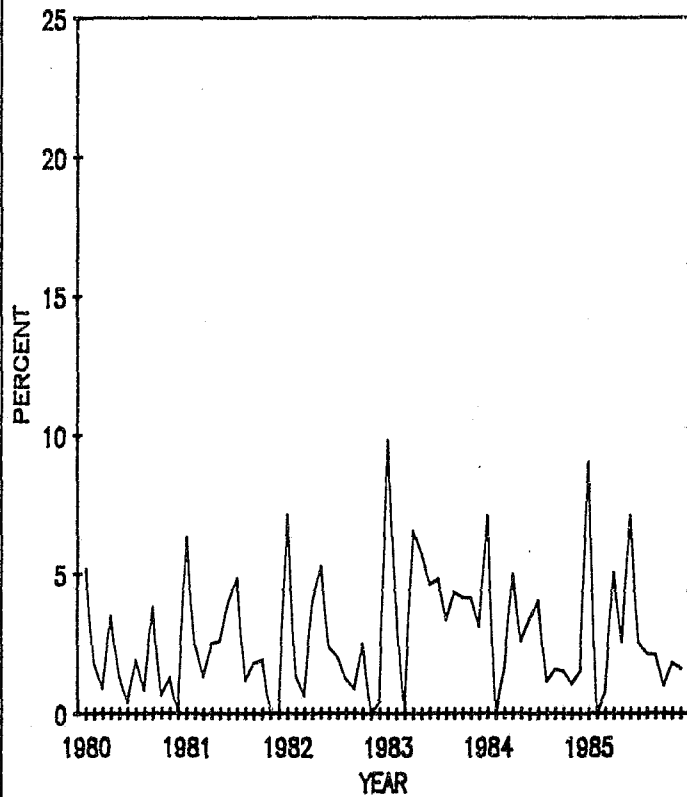
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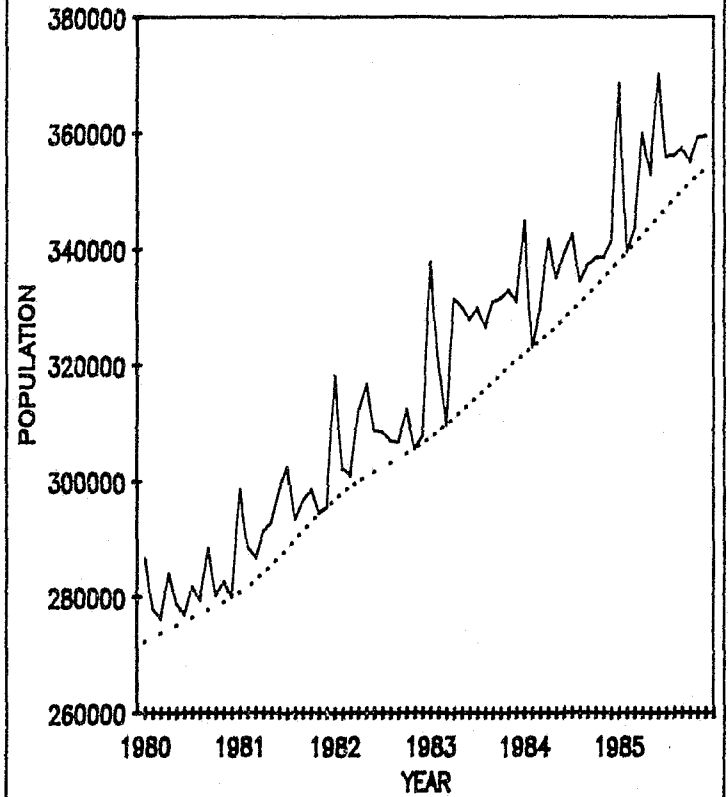
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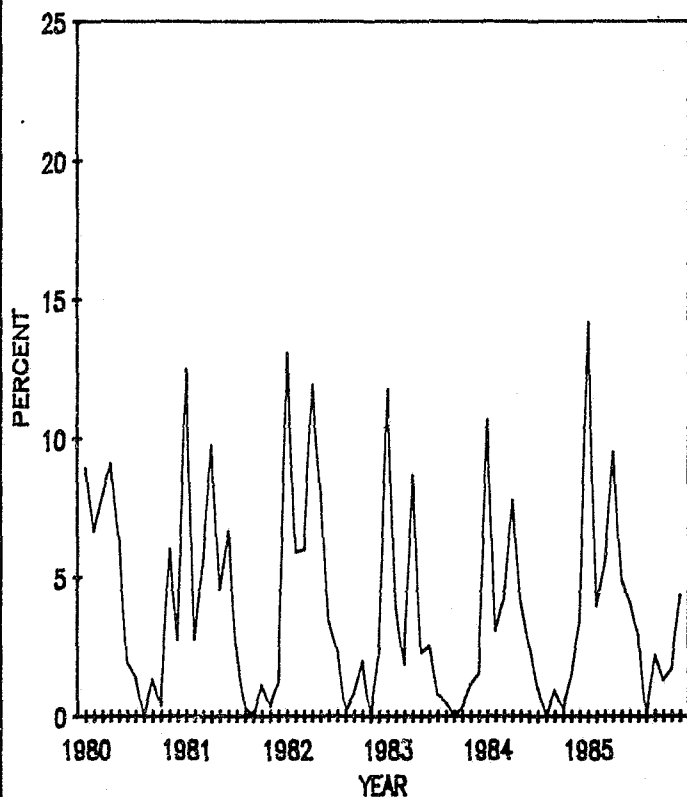
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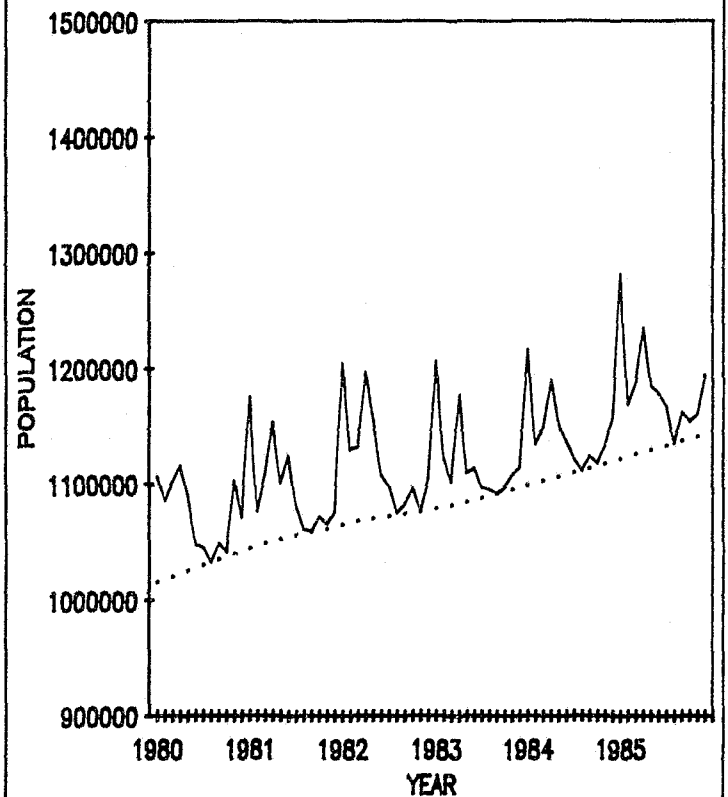
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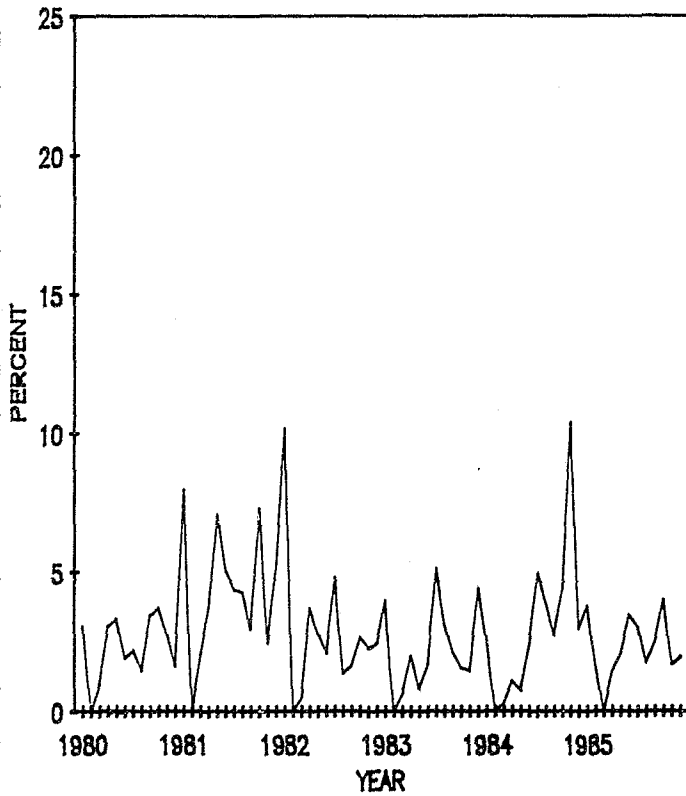
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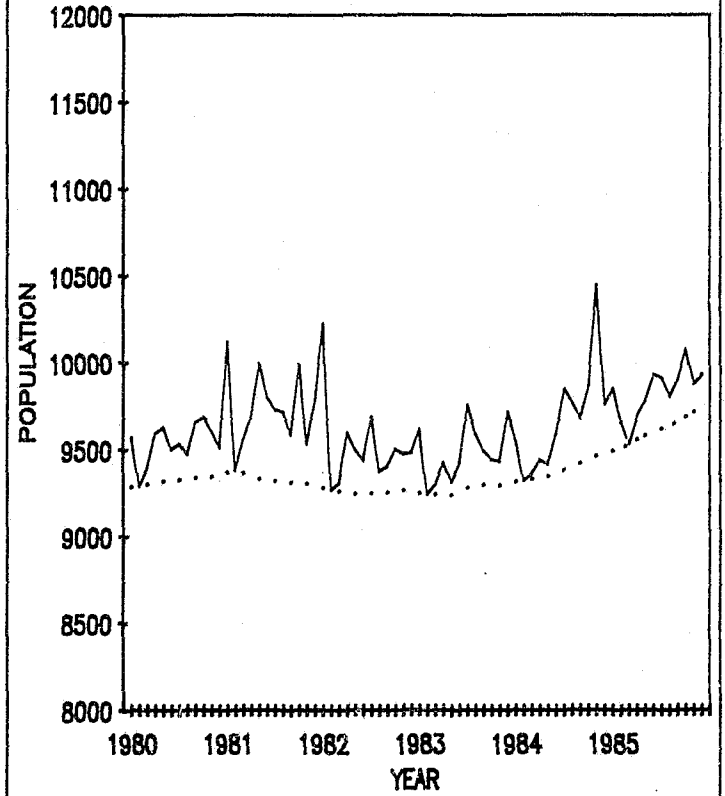
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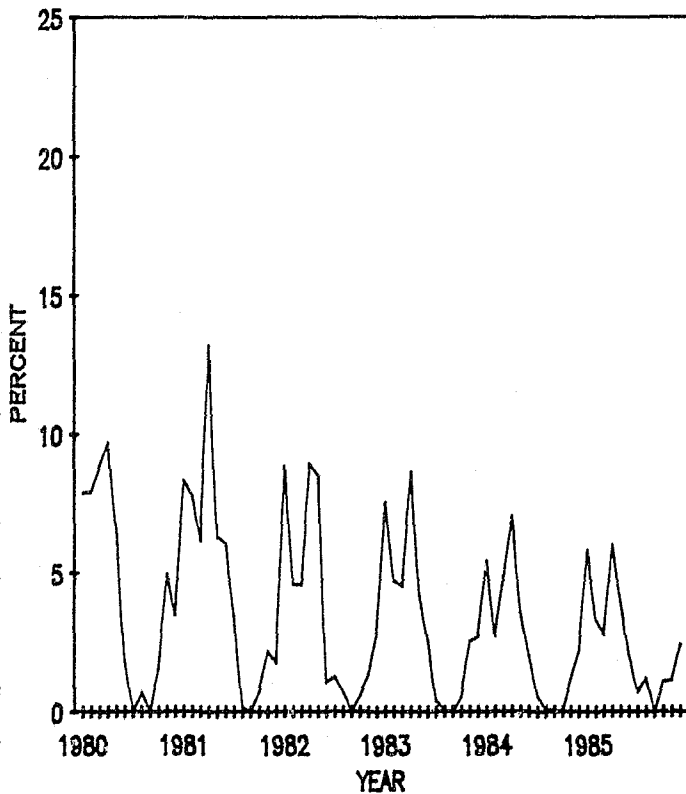
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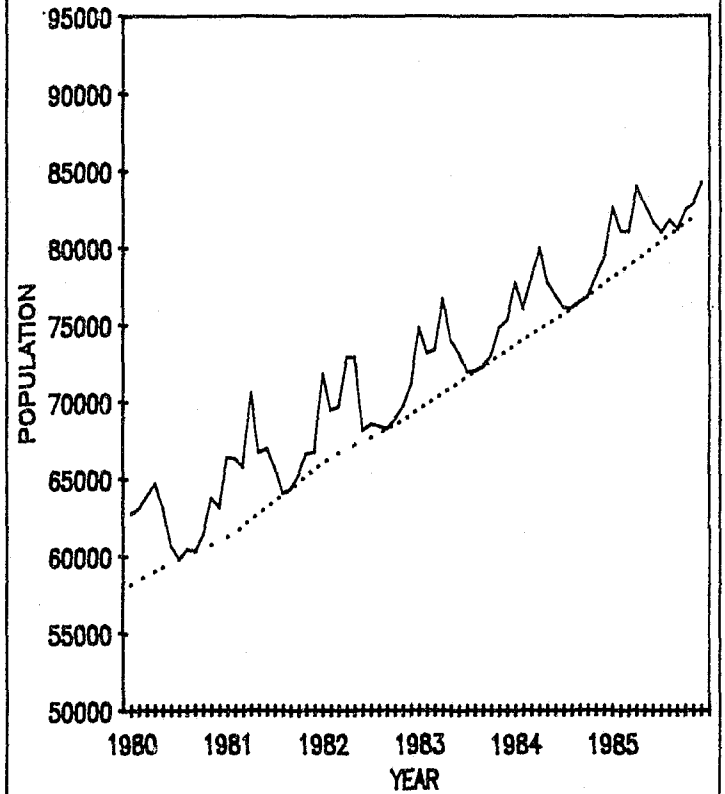
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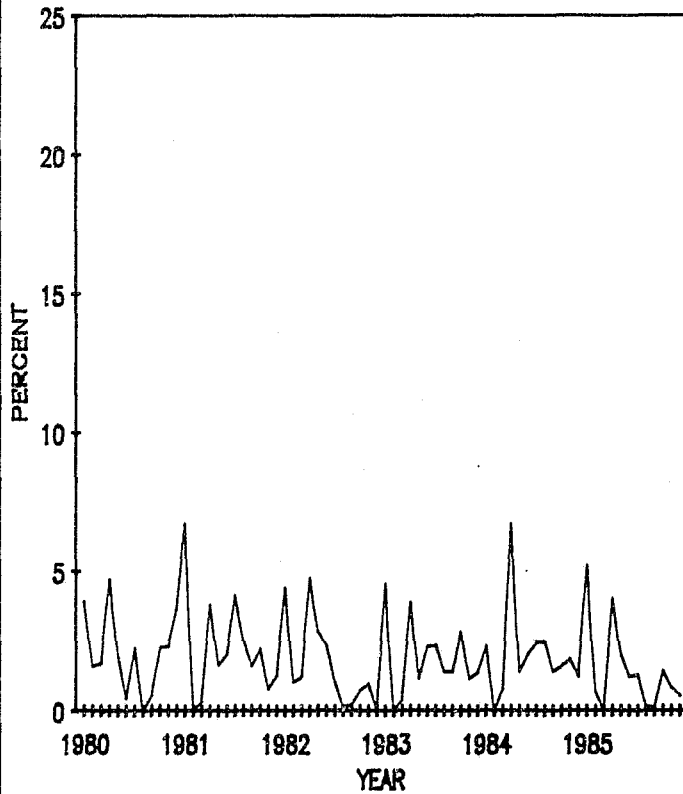
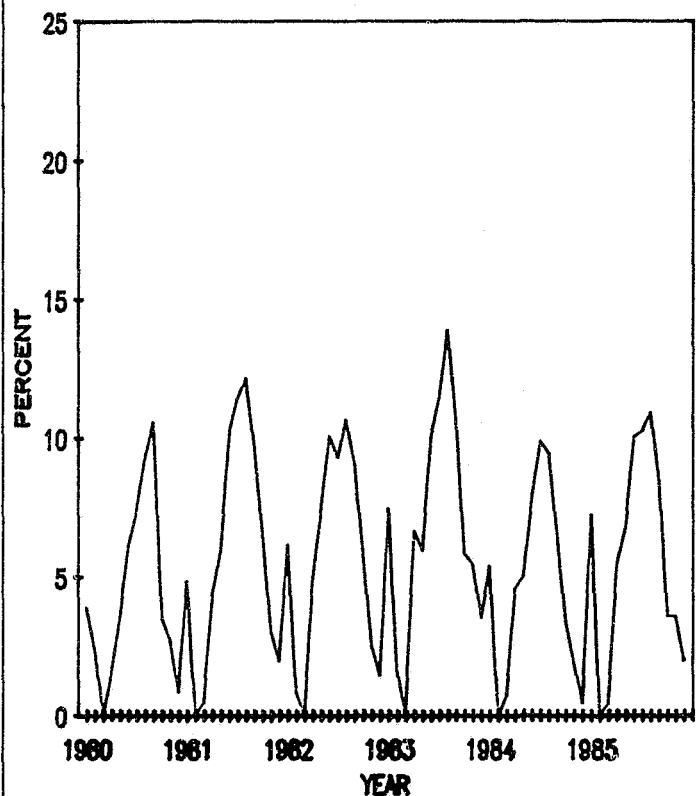**CITRUS COUNTY
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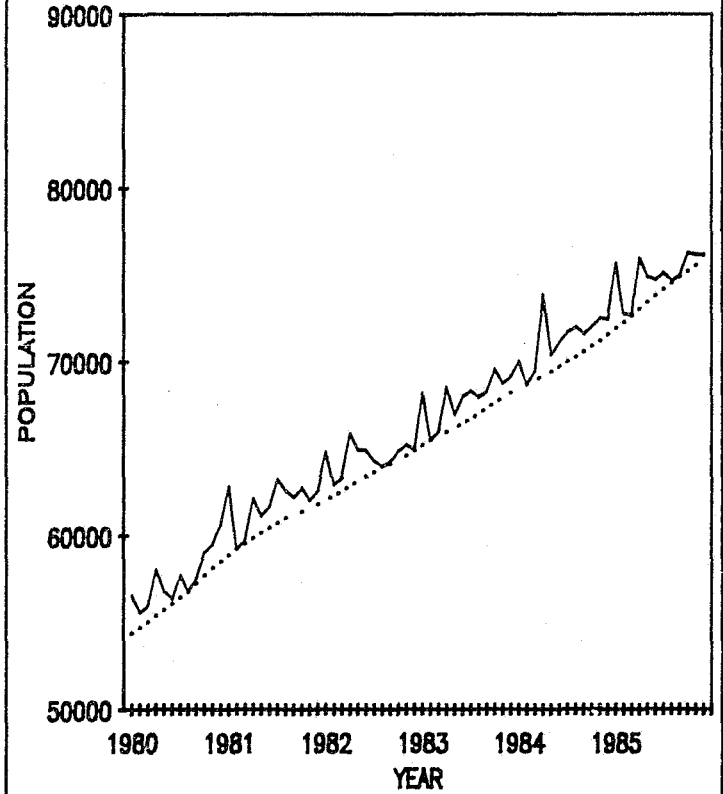
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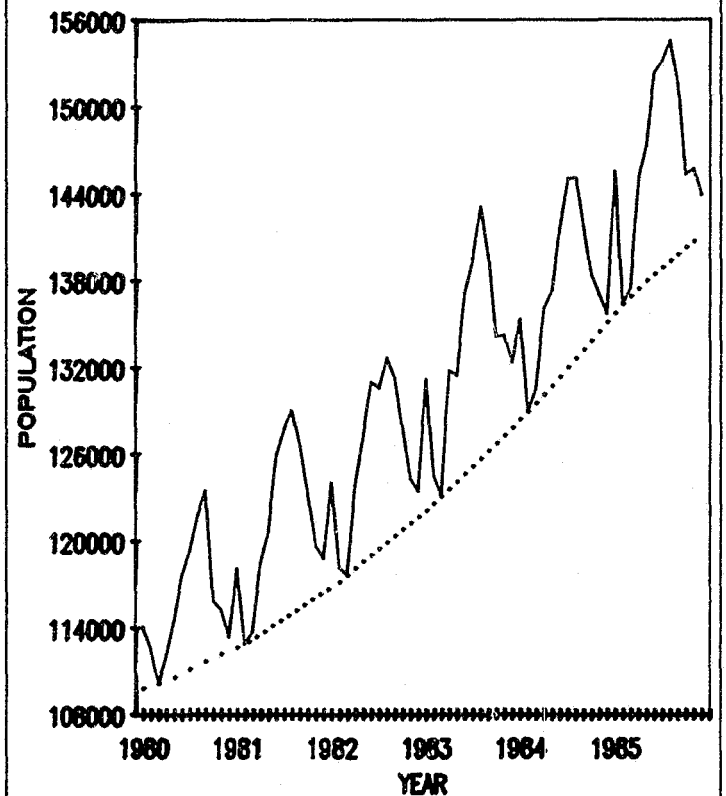POPULATION INFLUX AS A PERCENT
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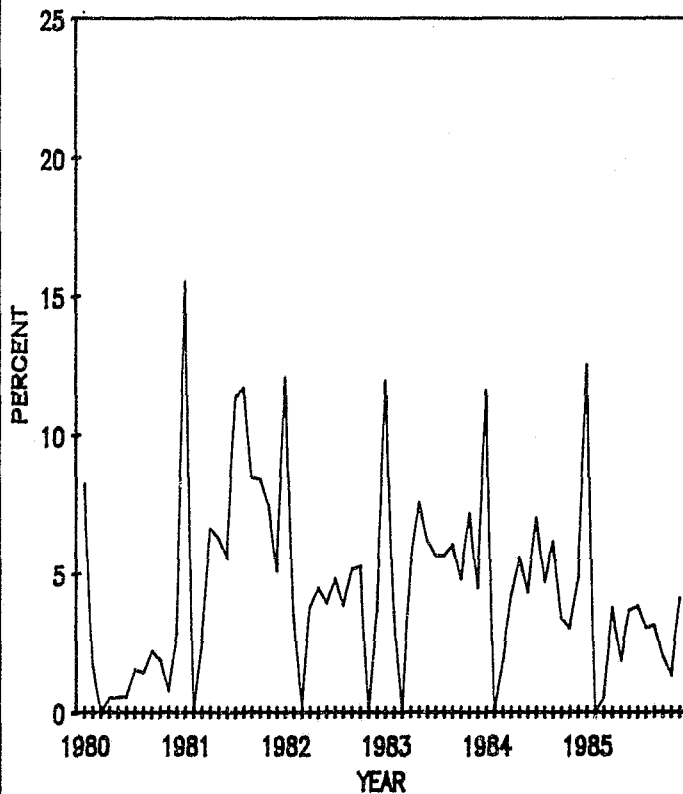
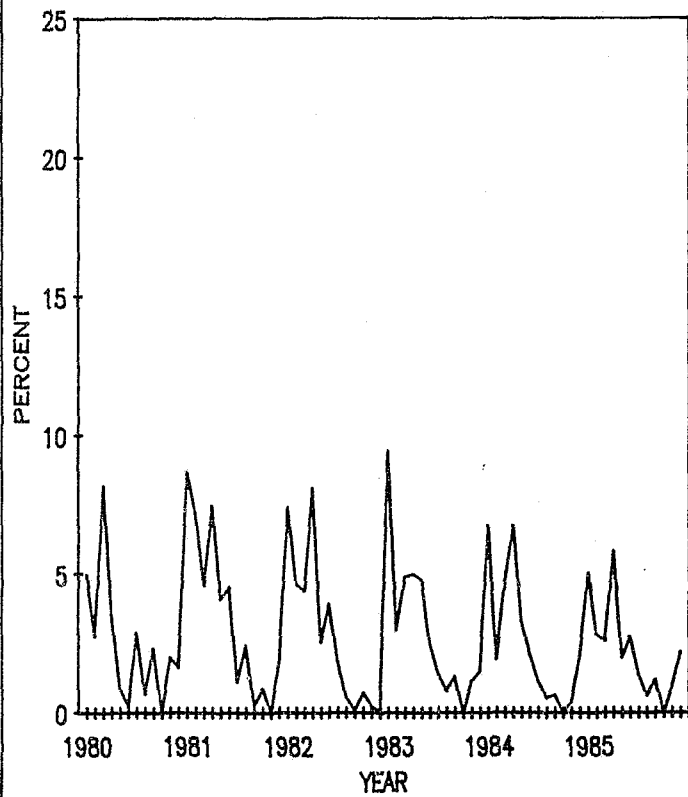**CLAY COUNTY
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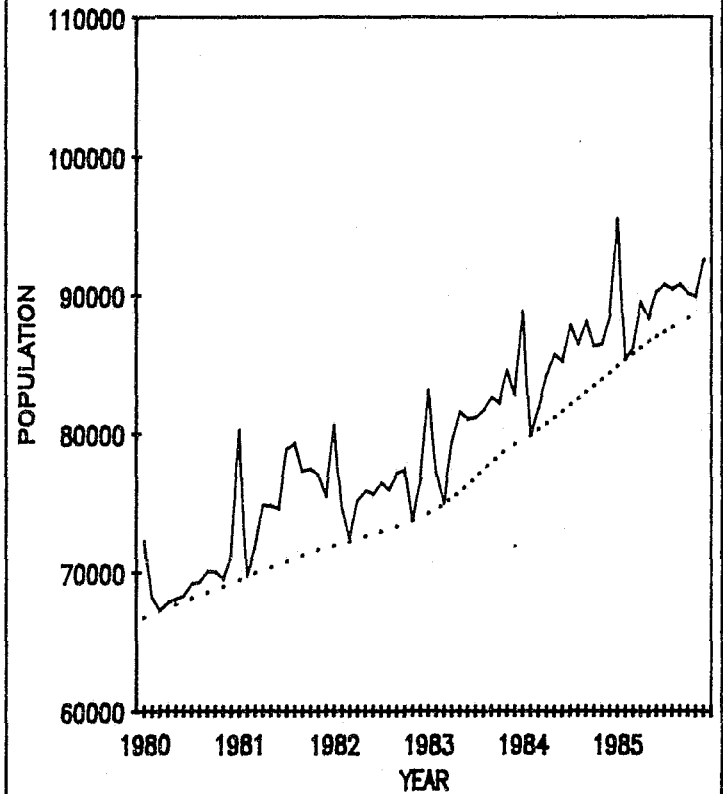
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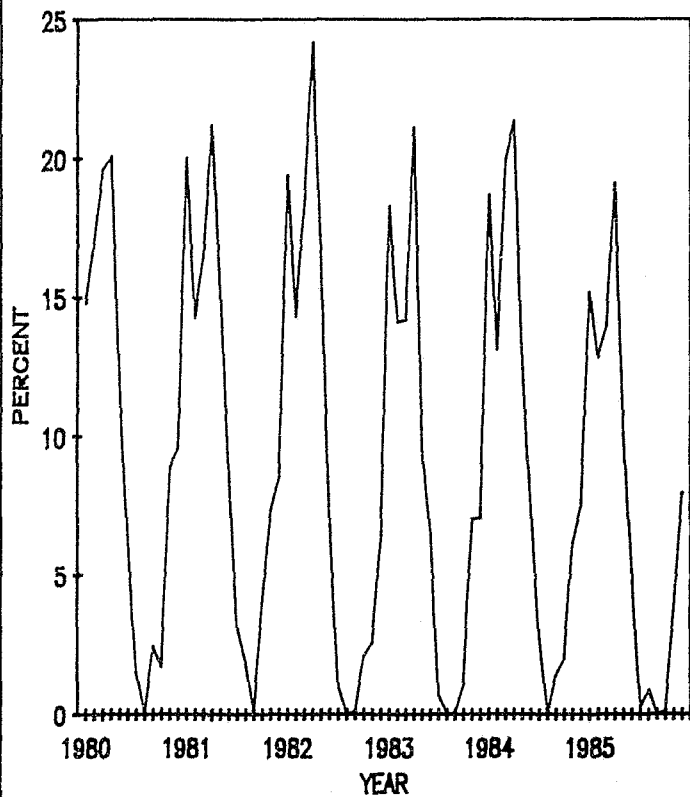
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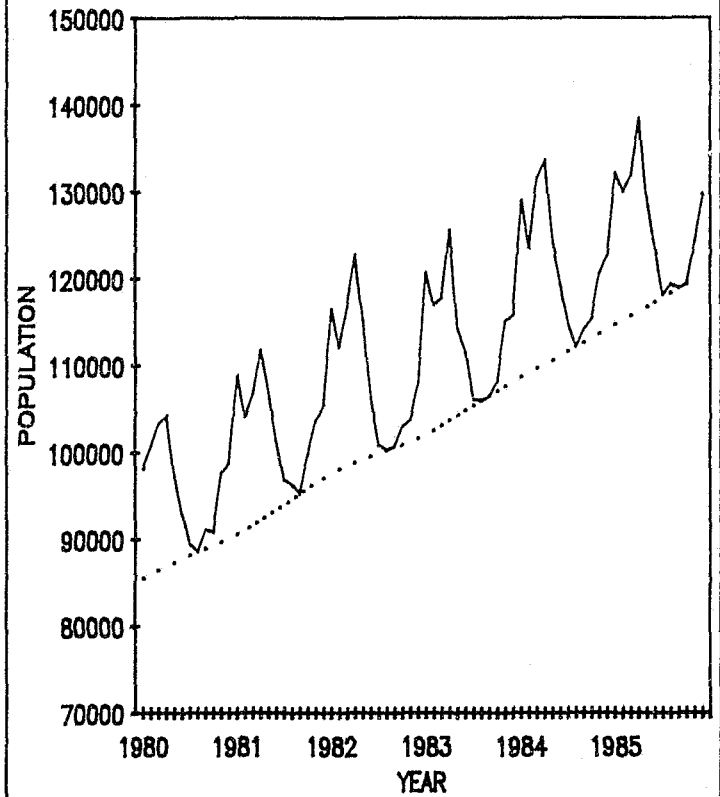
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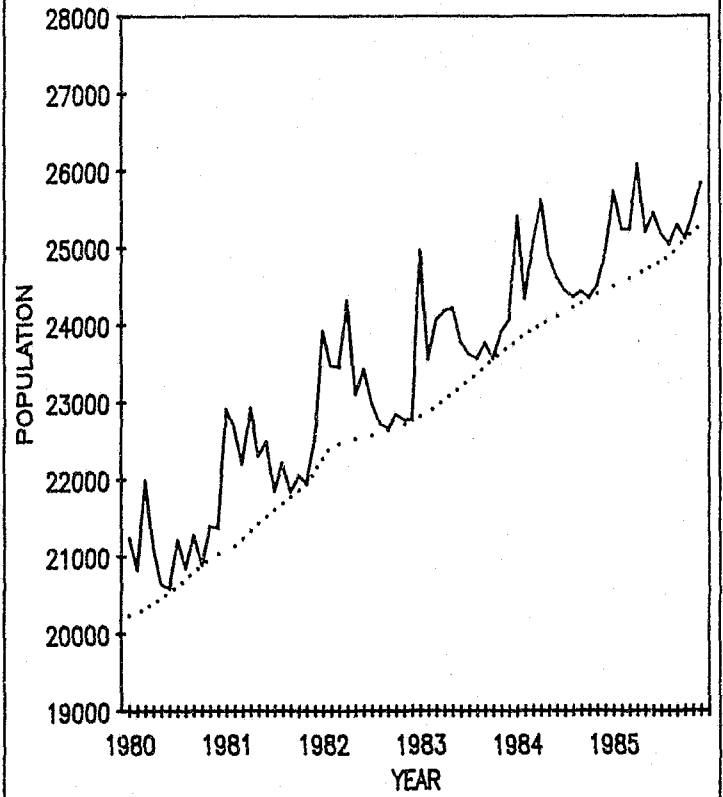POPULATION INFLUX AS A PERCENT
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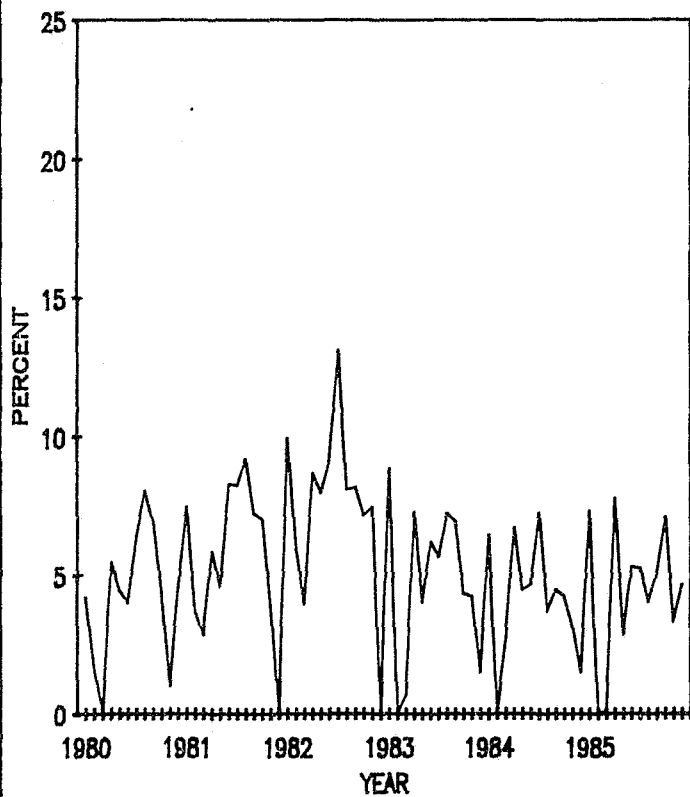
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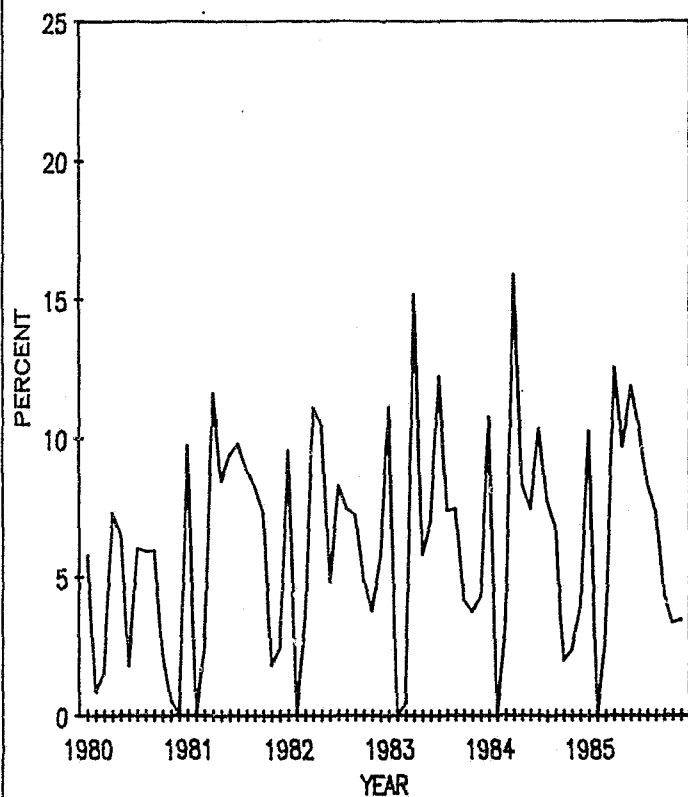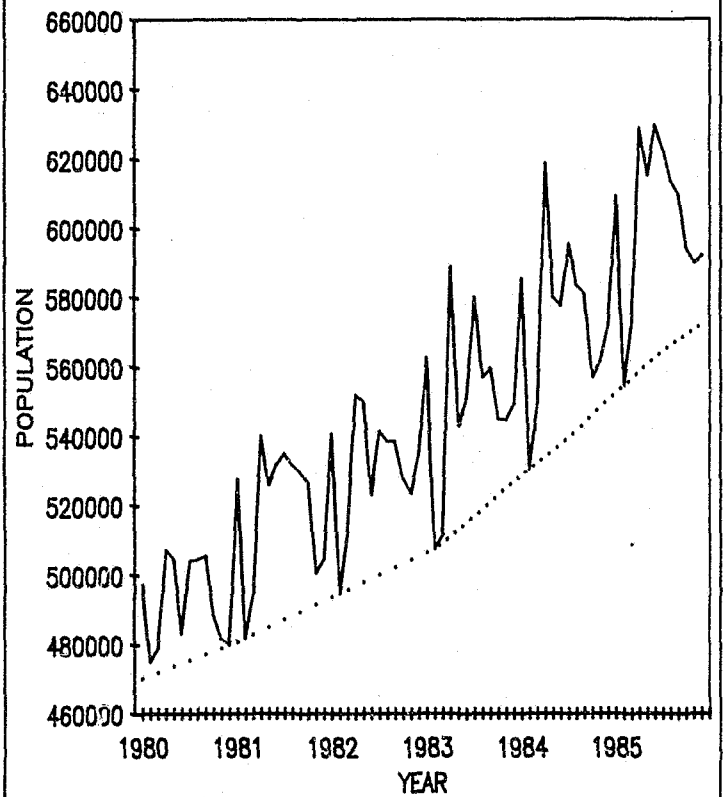RESIDENT POPULATION: DOT
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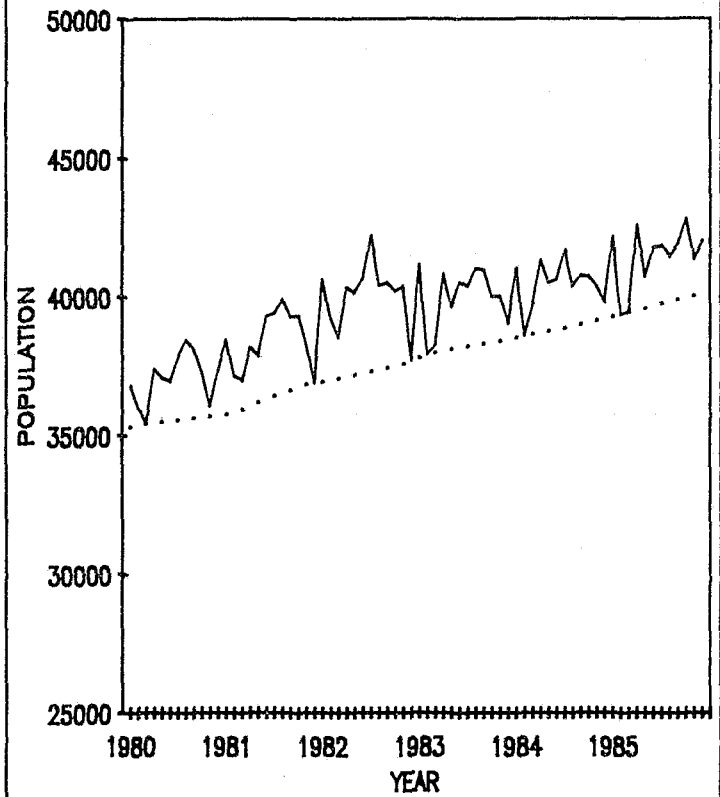
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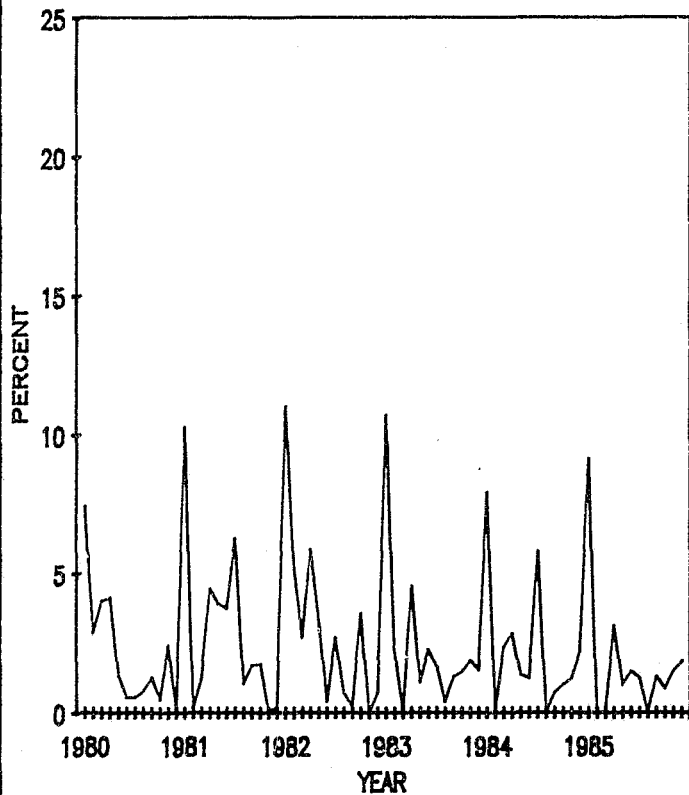
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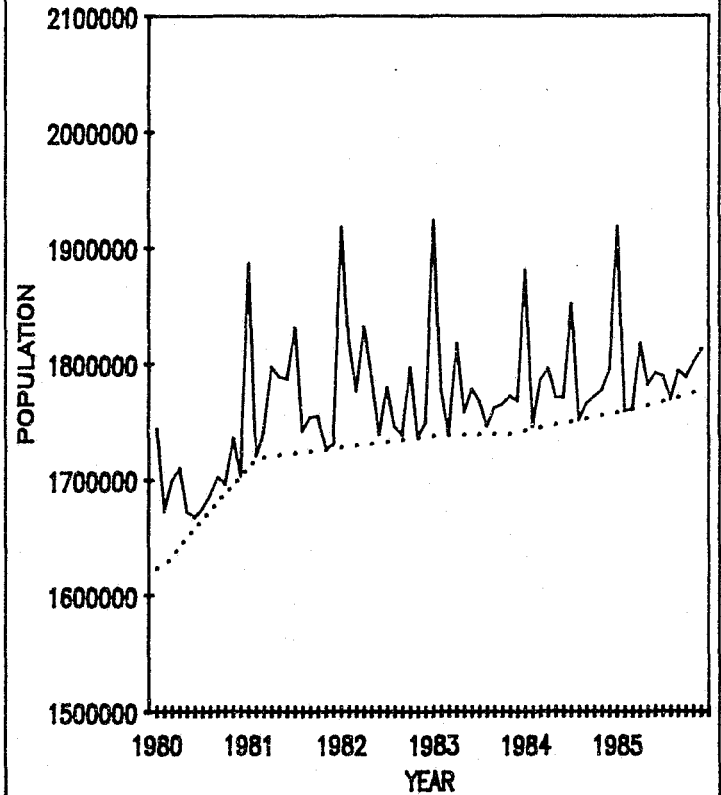
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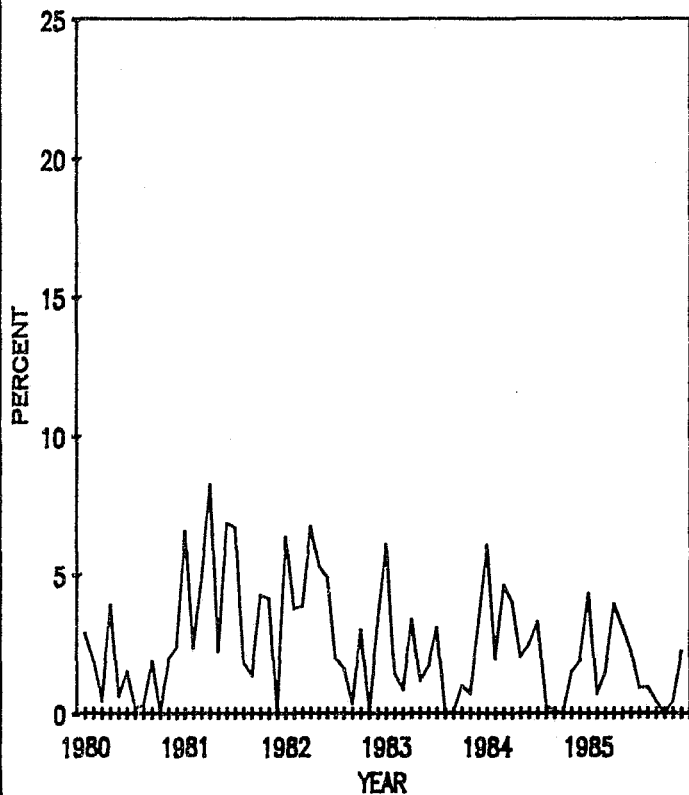
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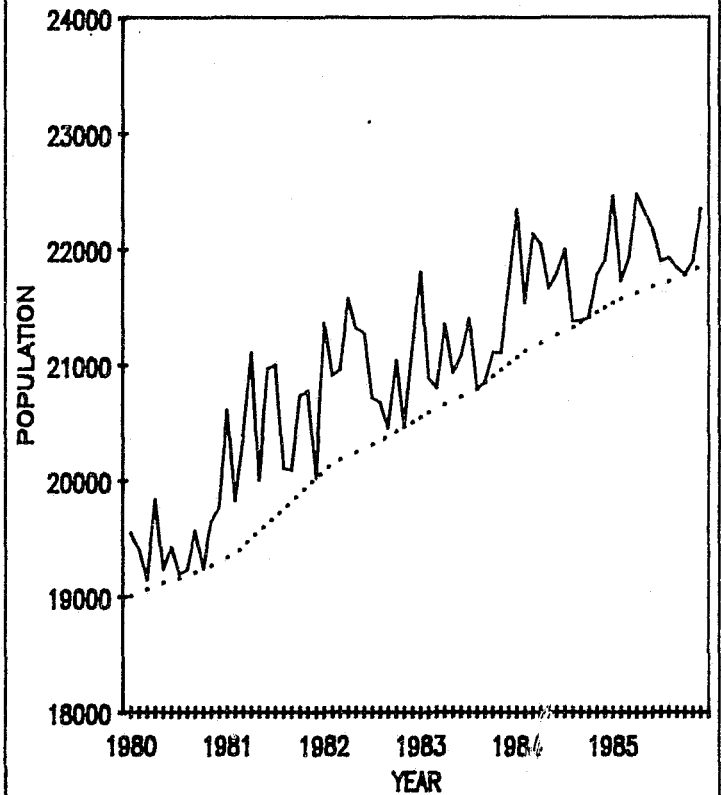
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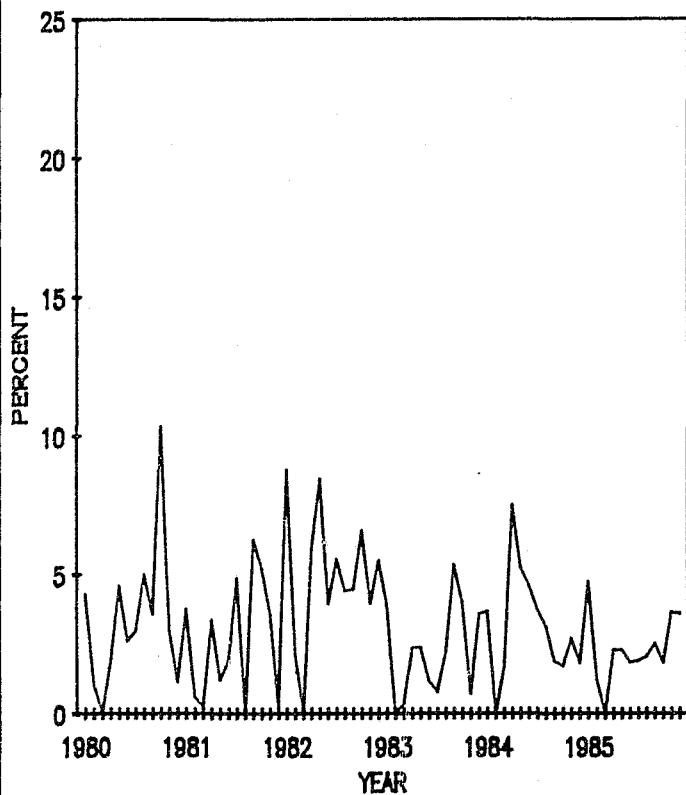
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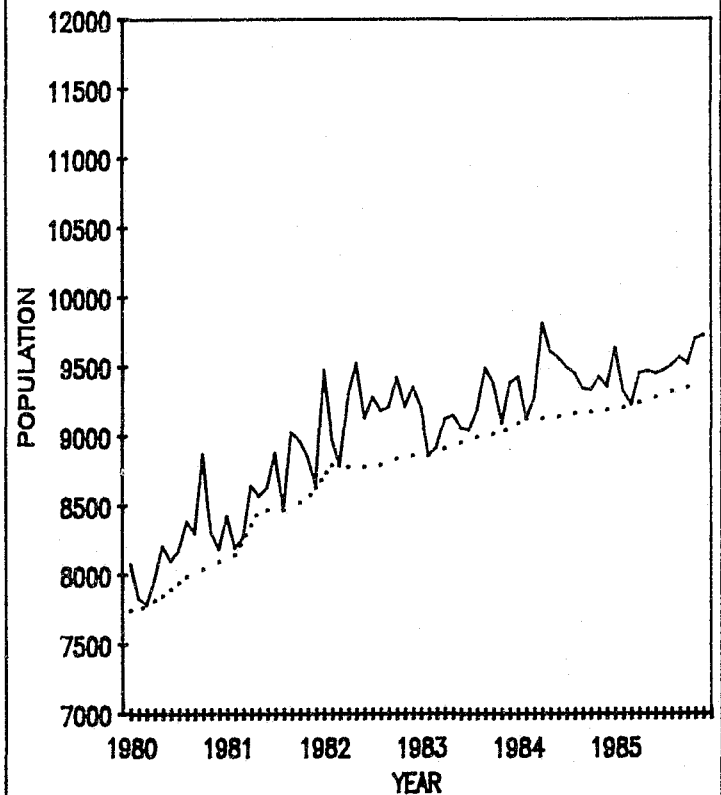
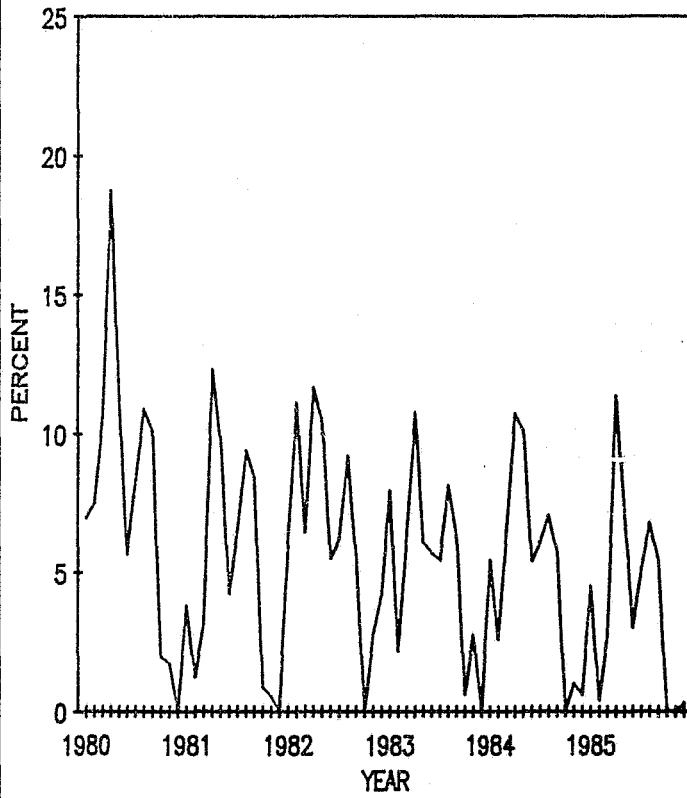DUVAL COUNTY
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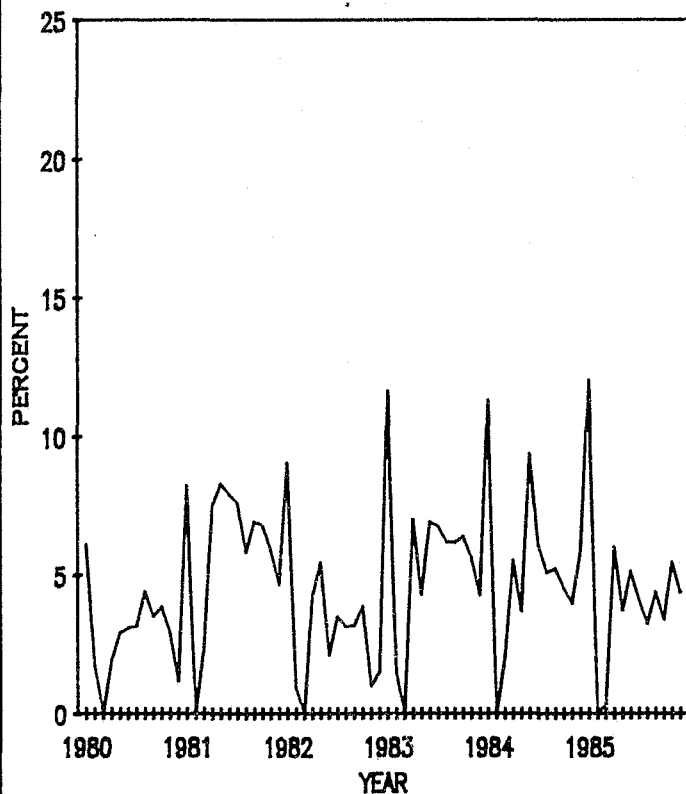
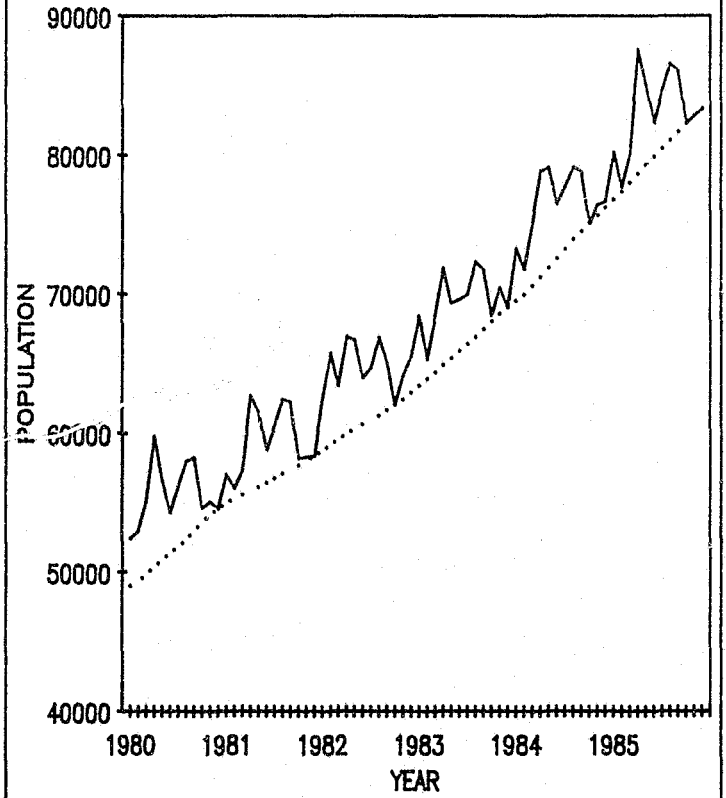DUVAL COUNTY
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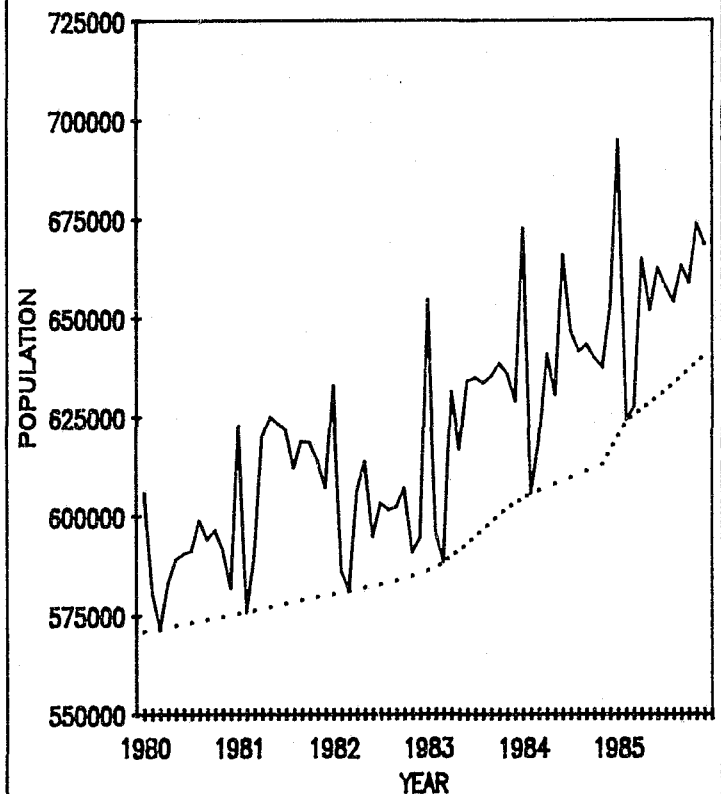
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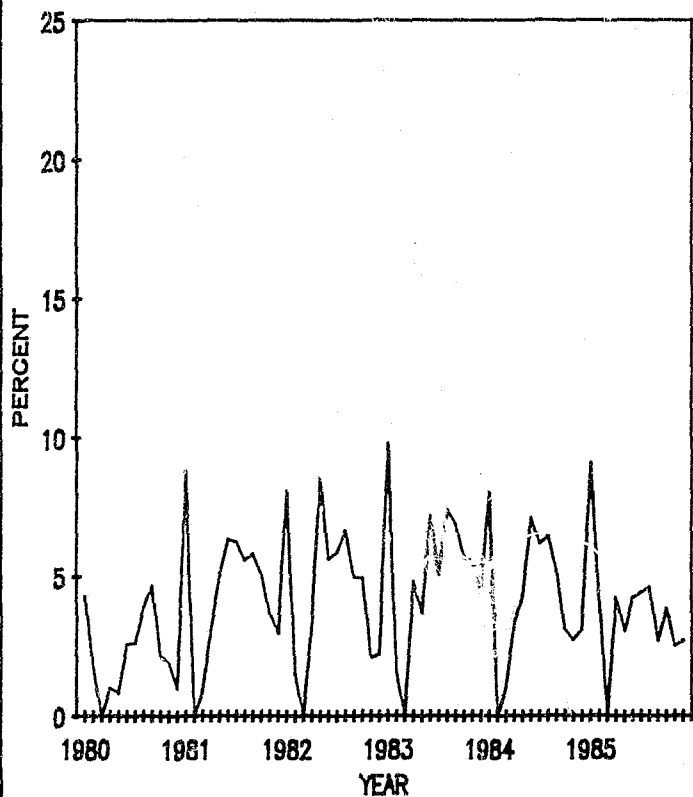
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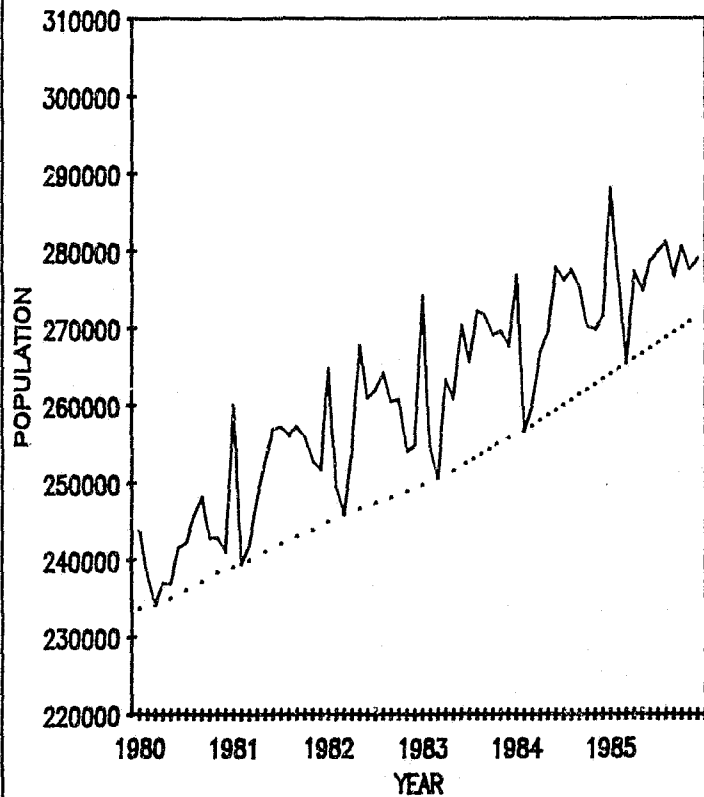
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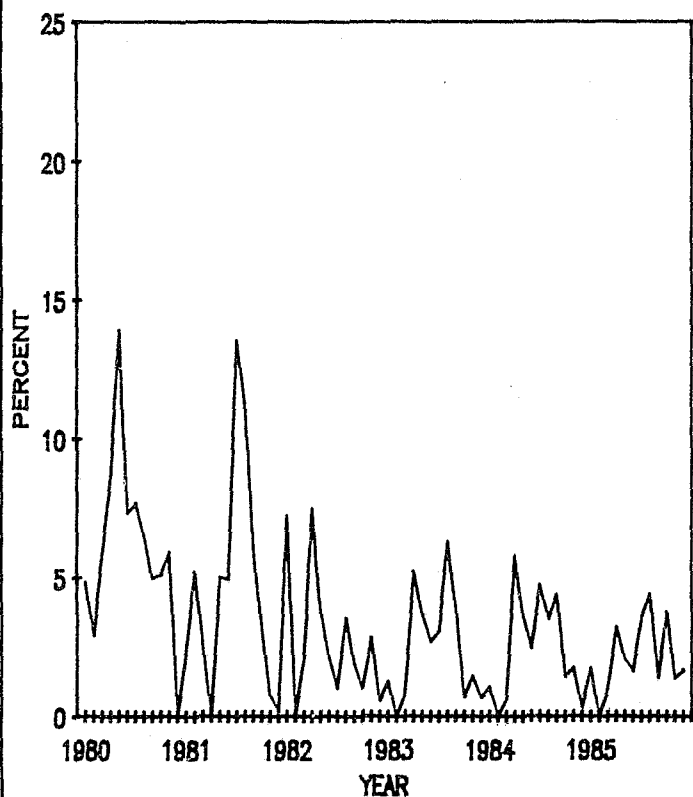
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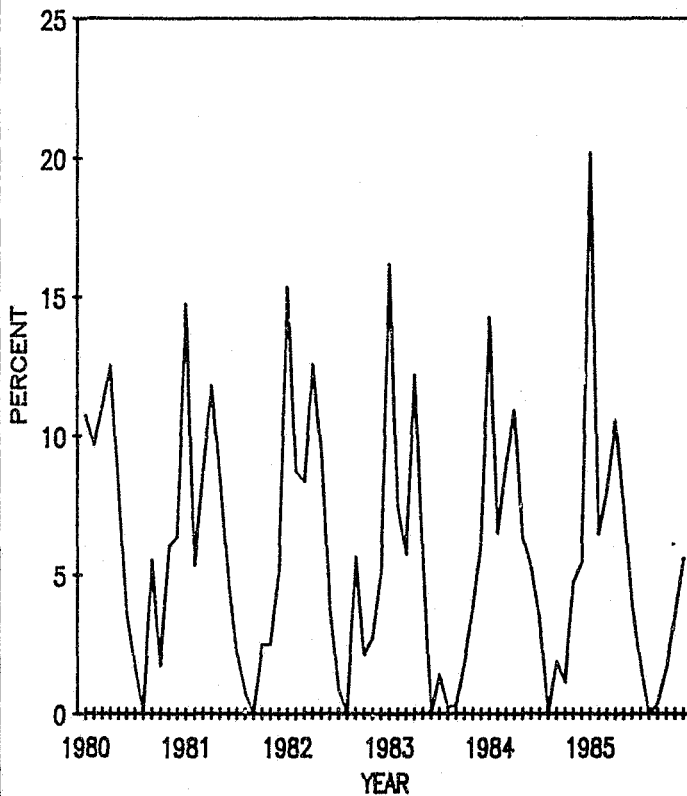RESIDENT POPULATION: DOT
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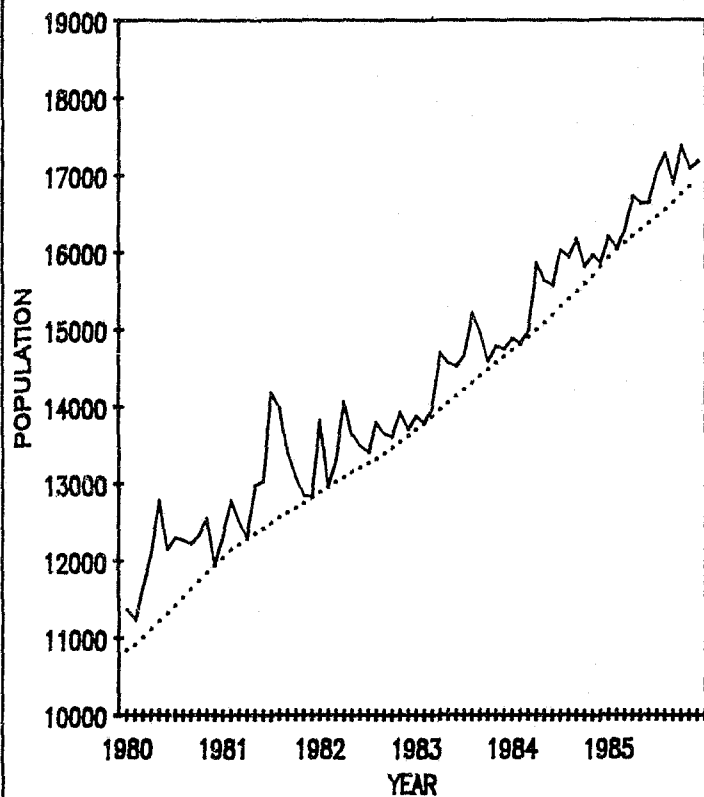
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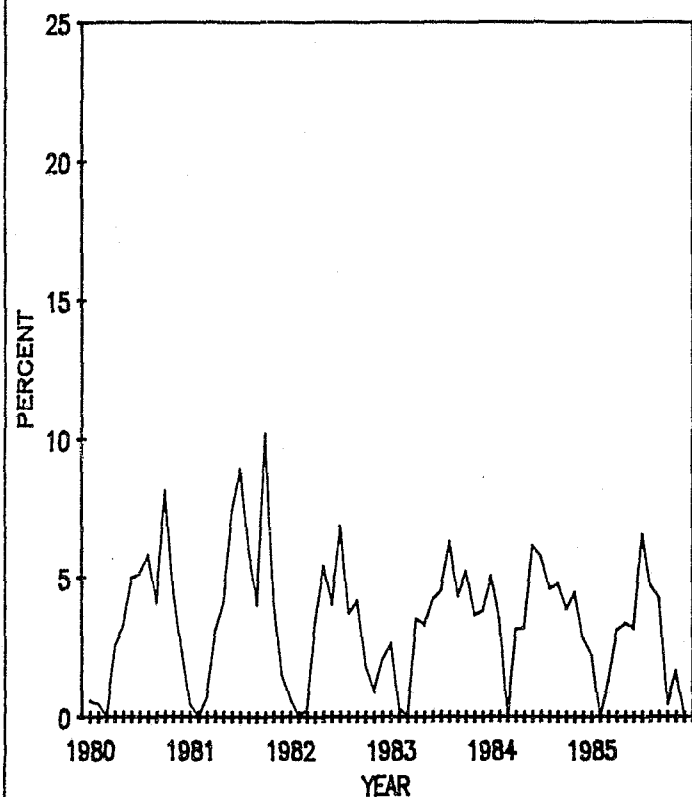
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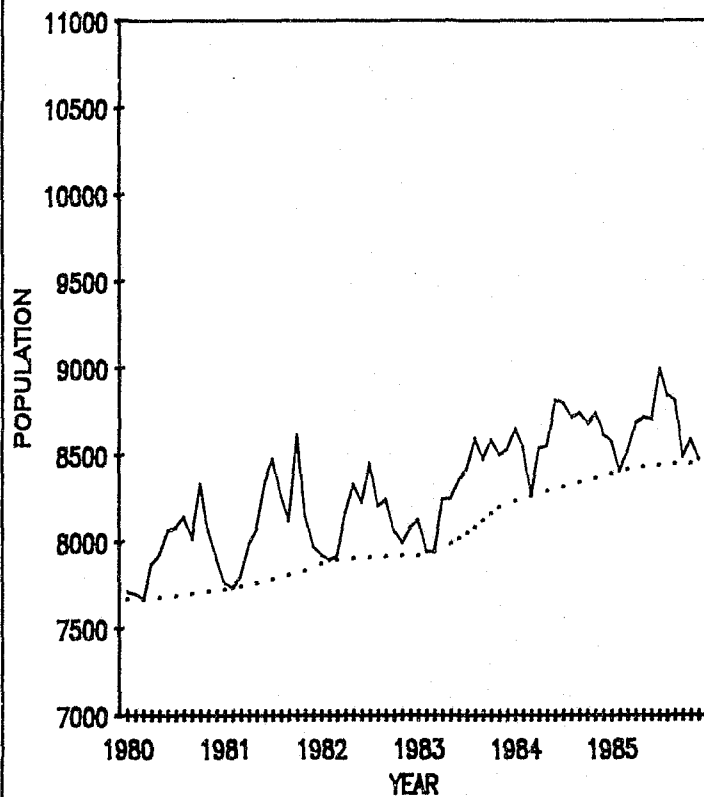
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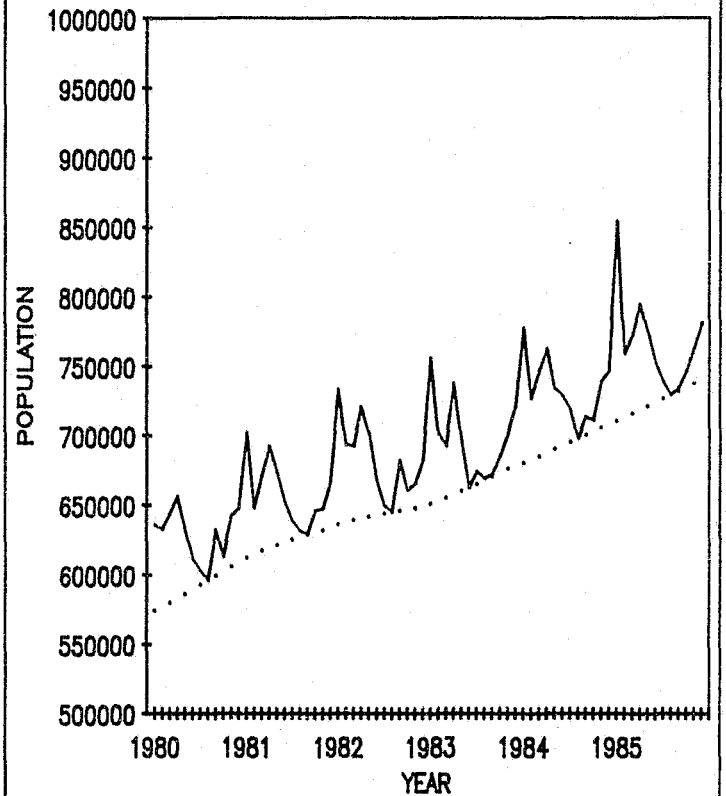POPULATION INFLUX AS A PERCENT
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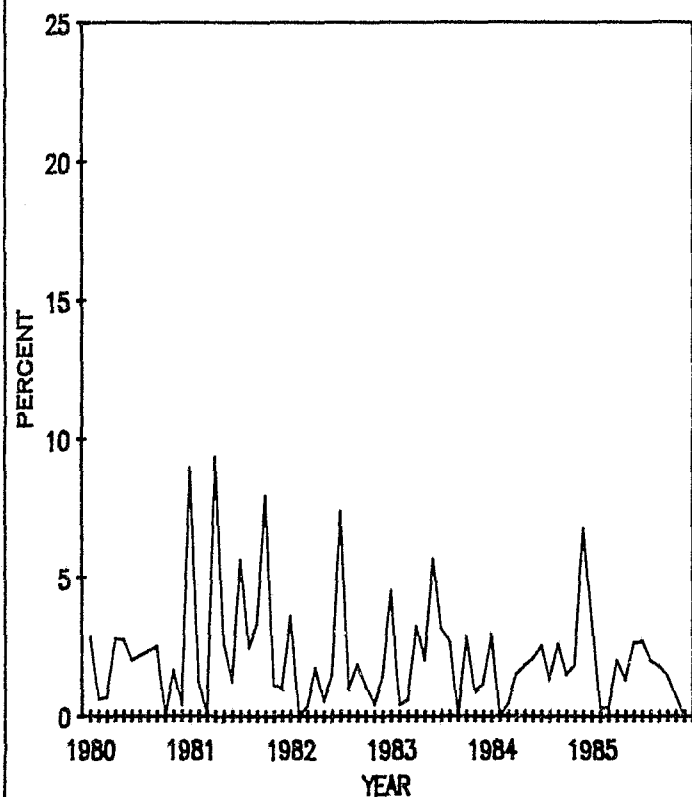
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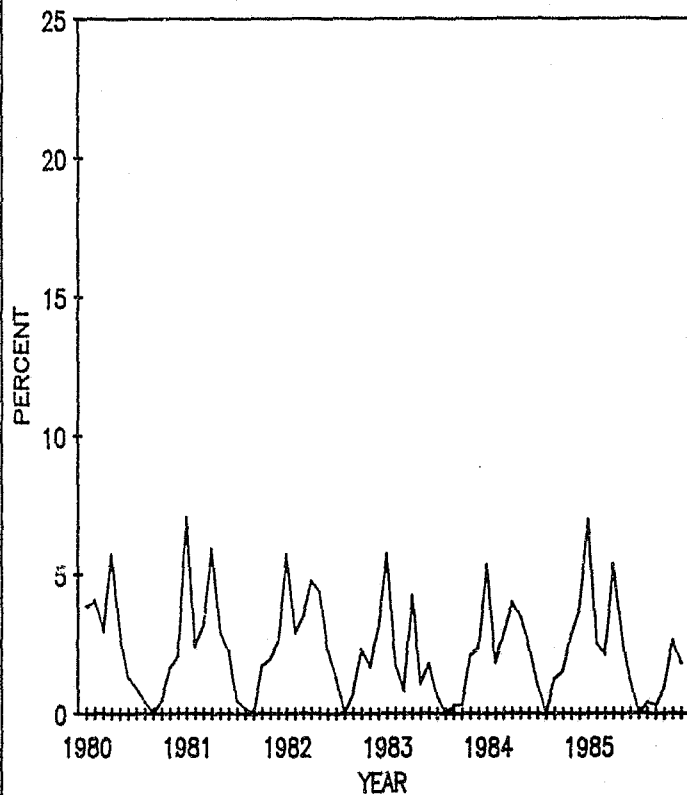RESIDENT POPULATION: DOT
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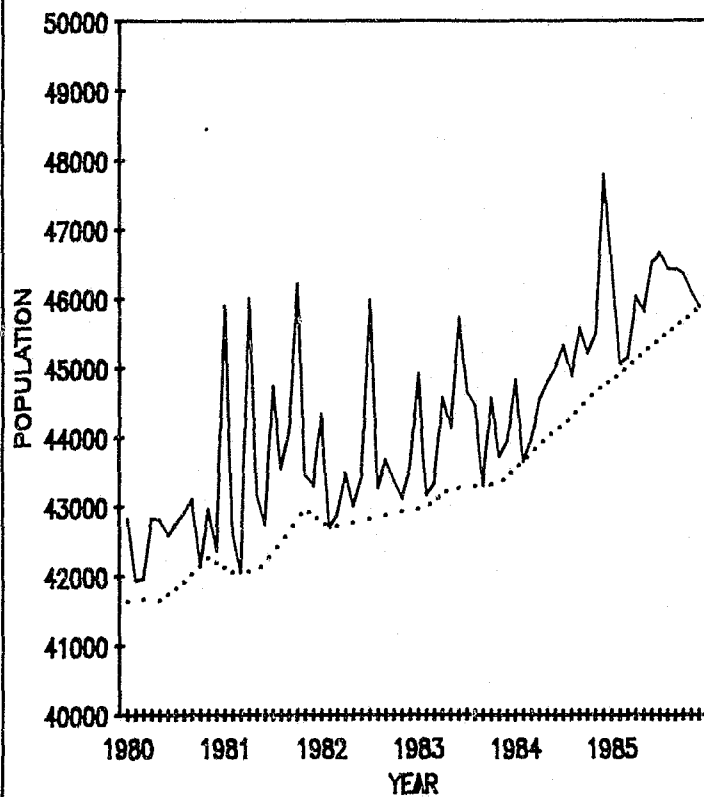
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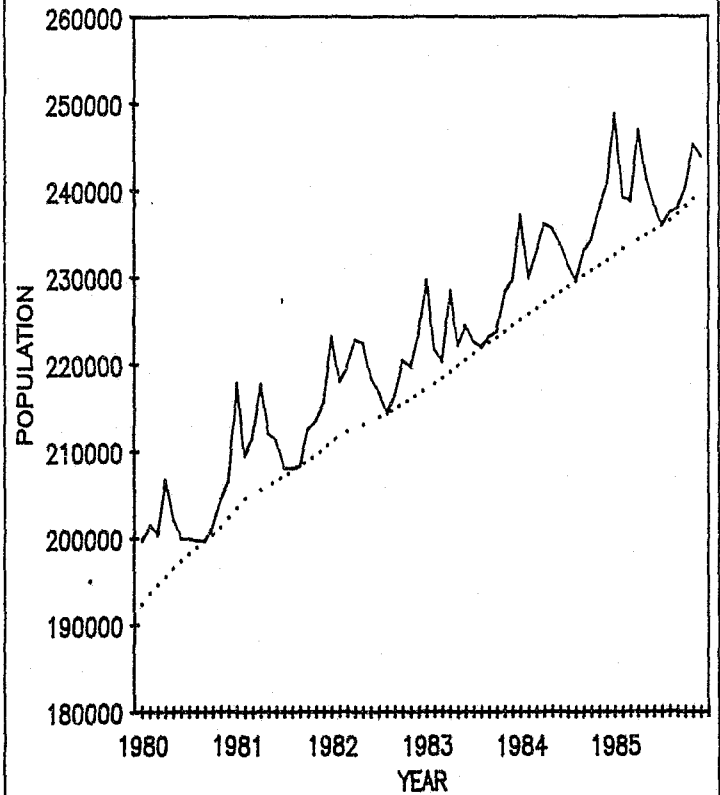POPULATION INFLUX AS A PERCENT
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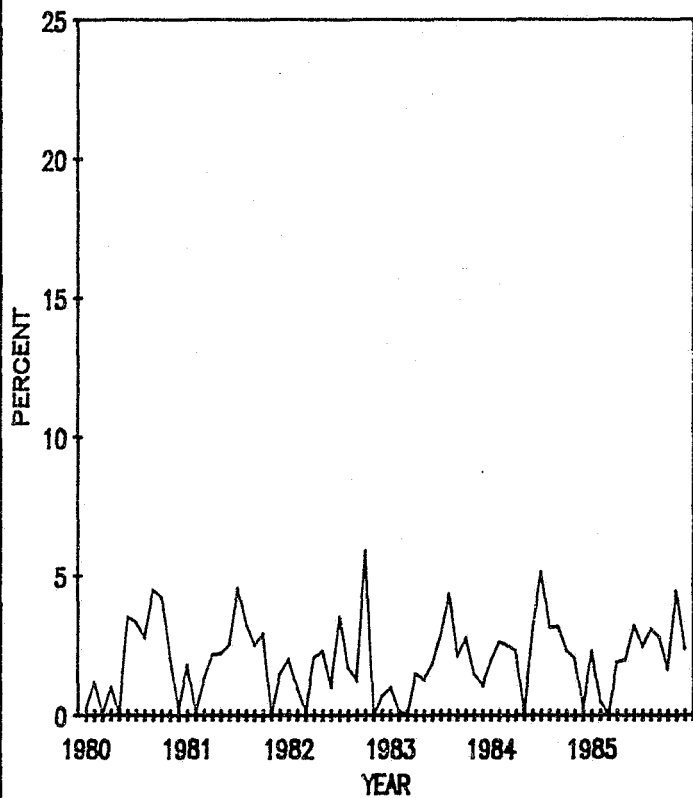
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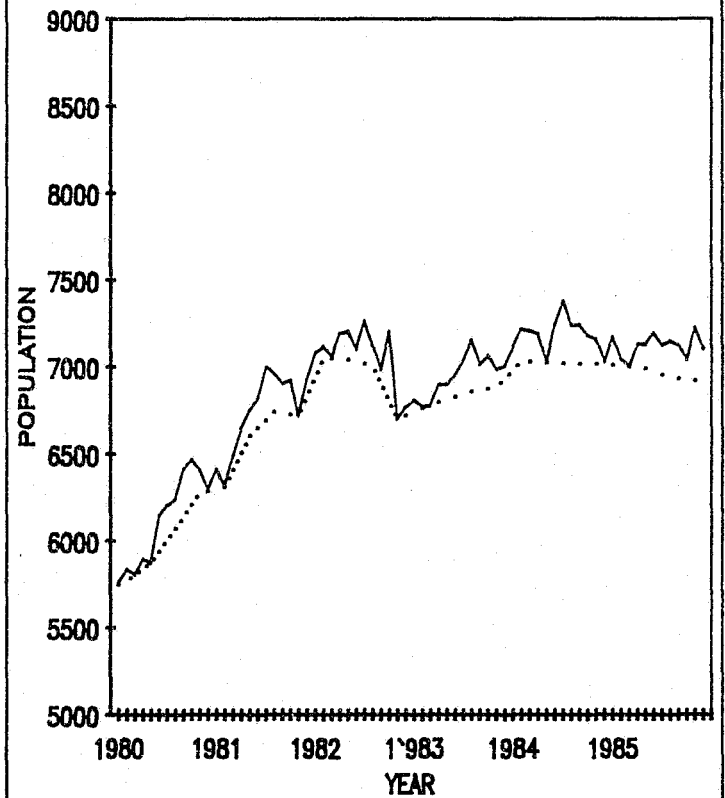
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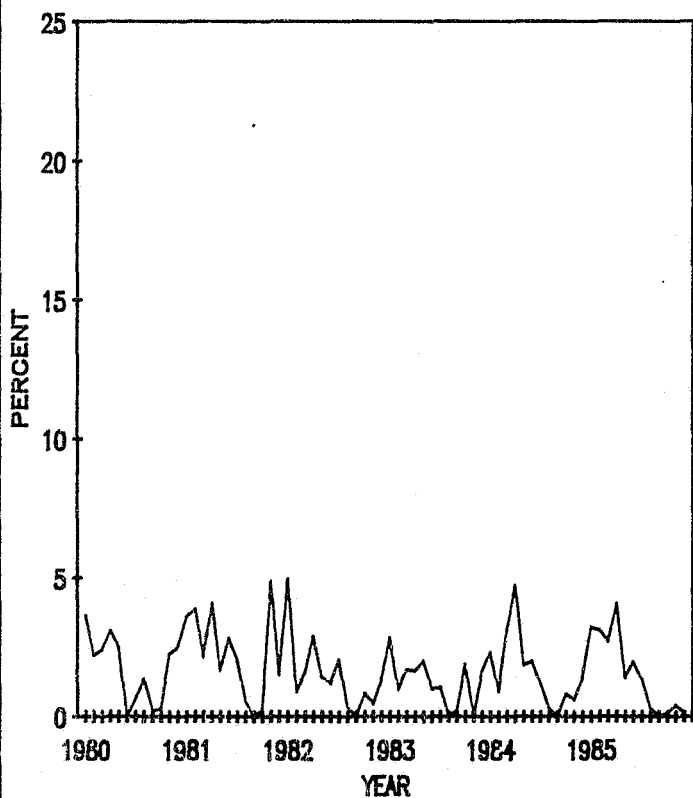
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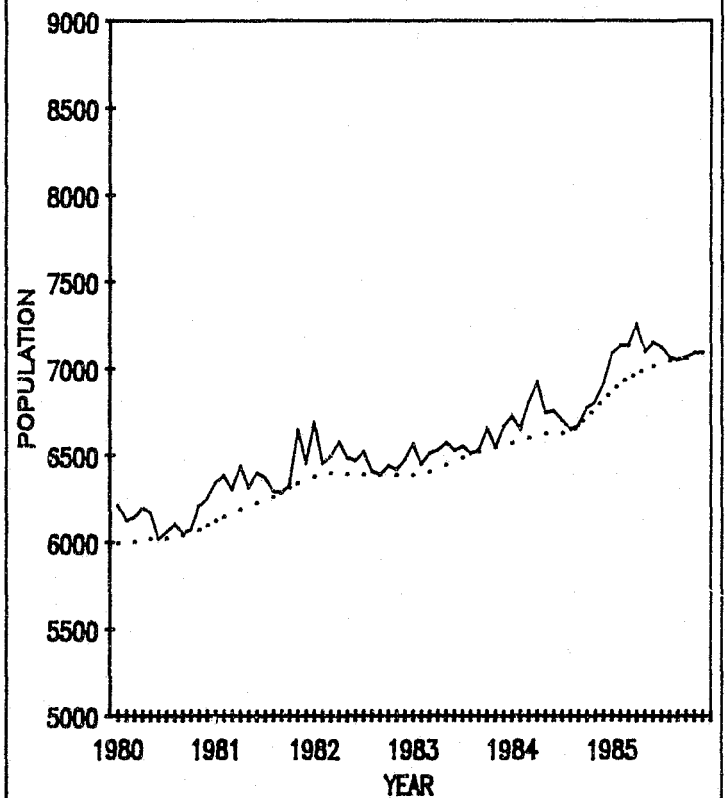
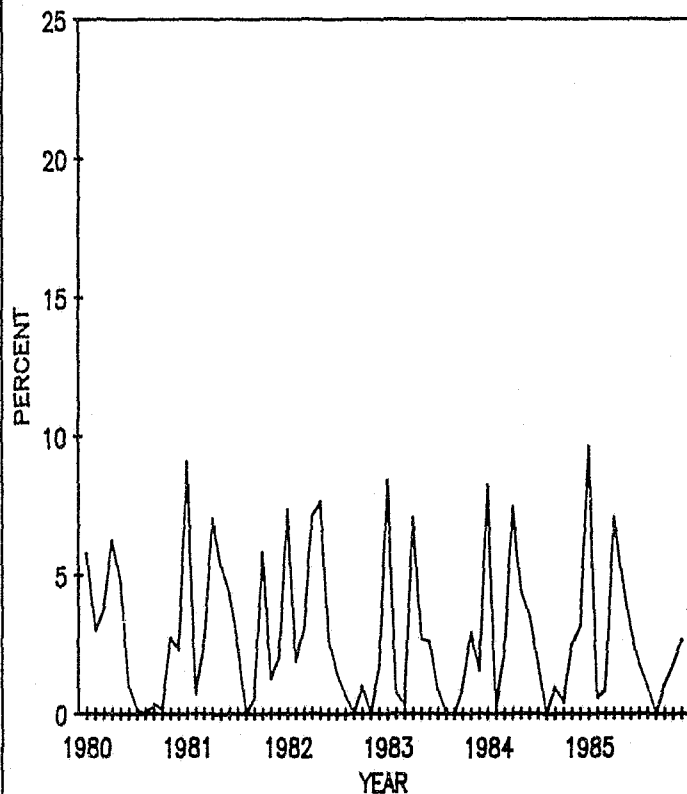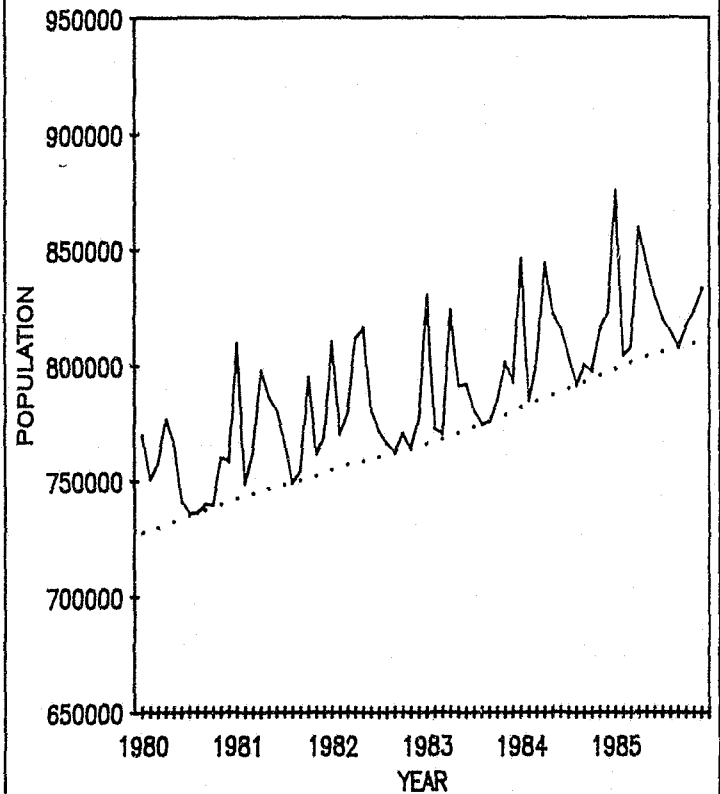## GULF COUNTY
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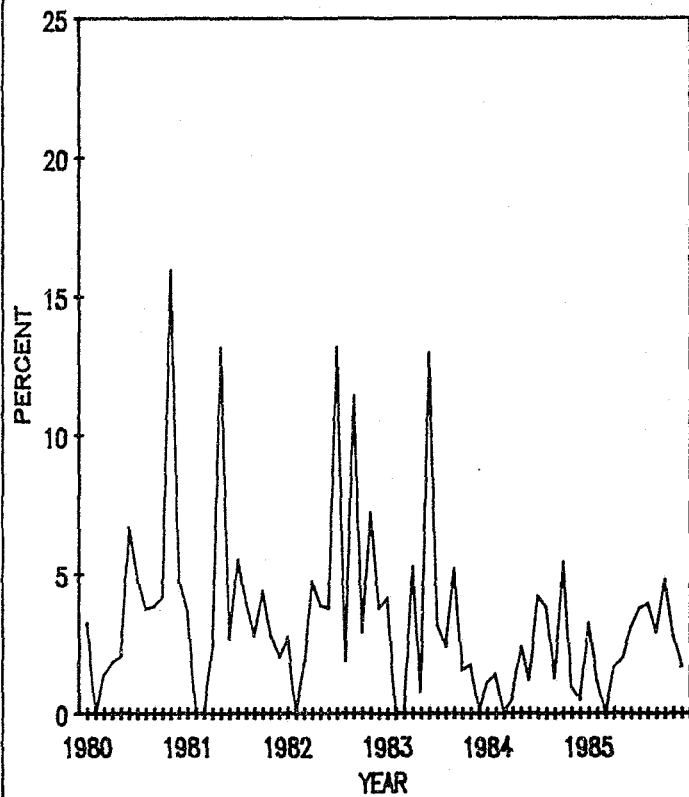
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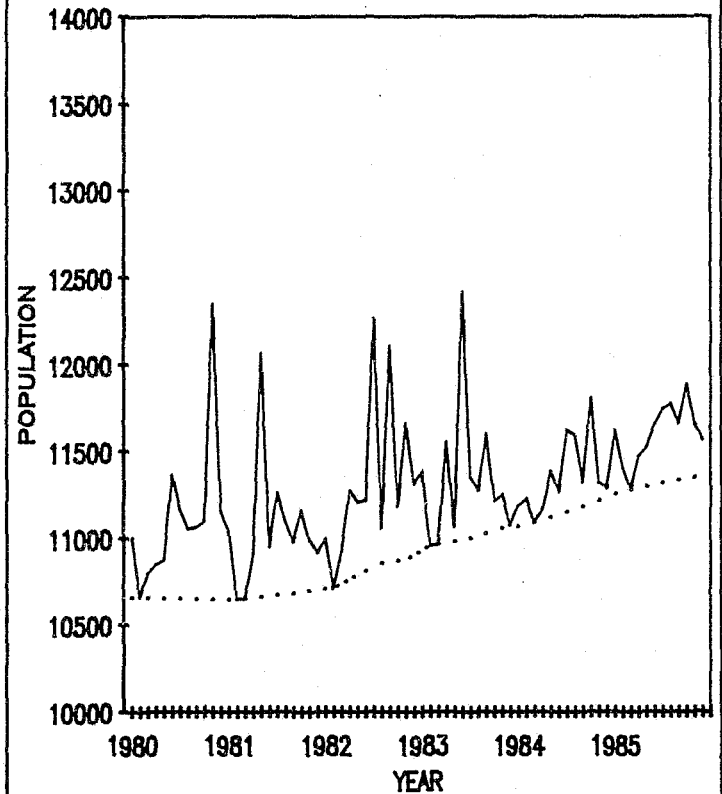
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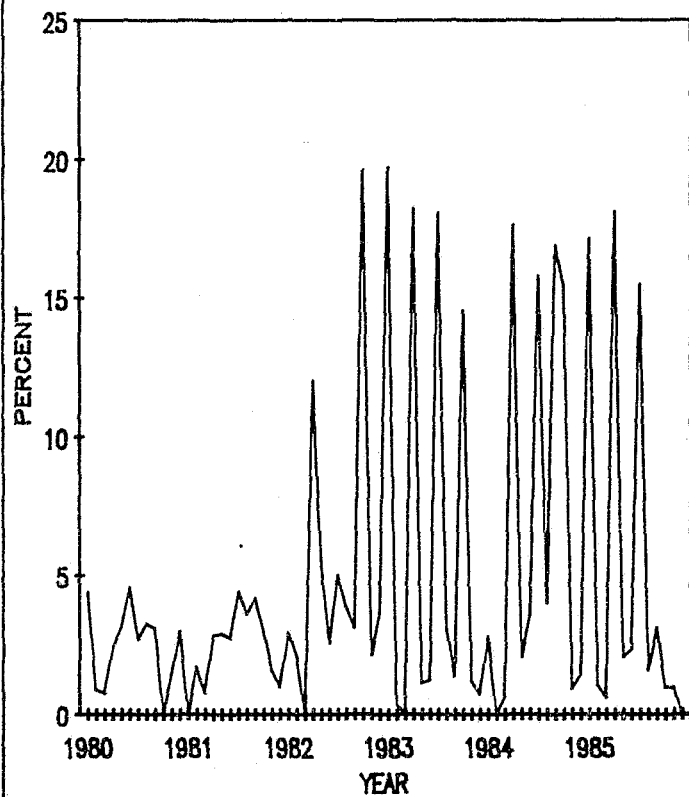
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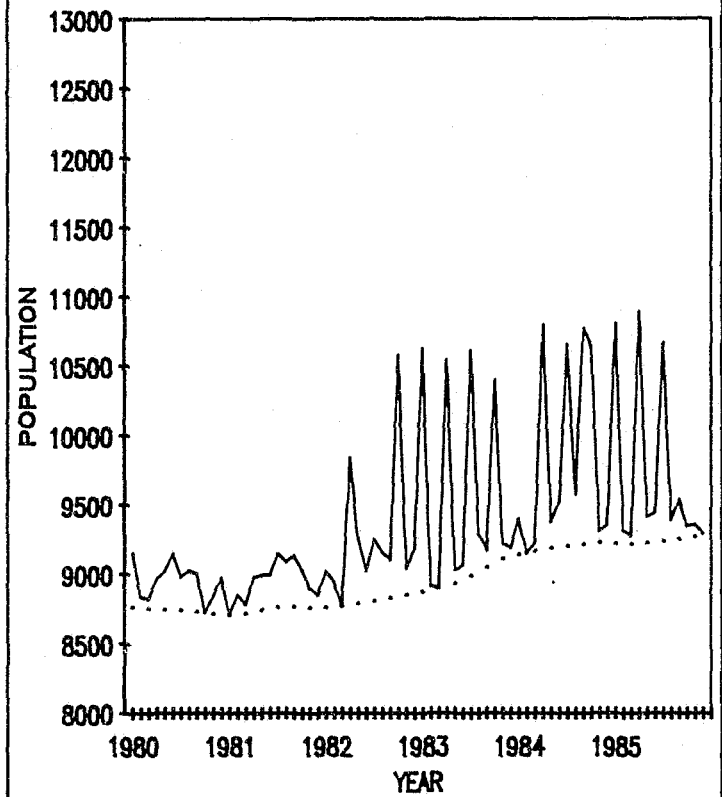
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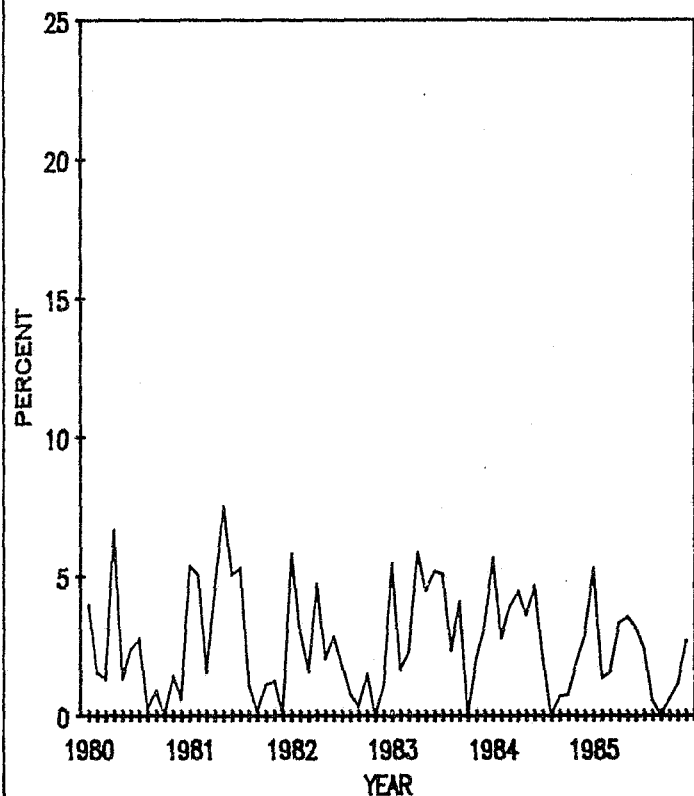
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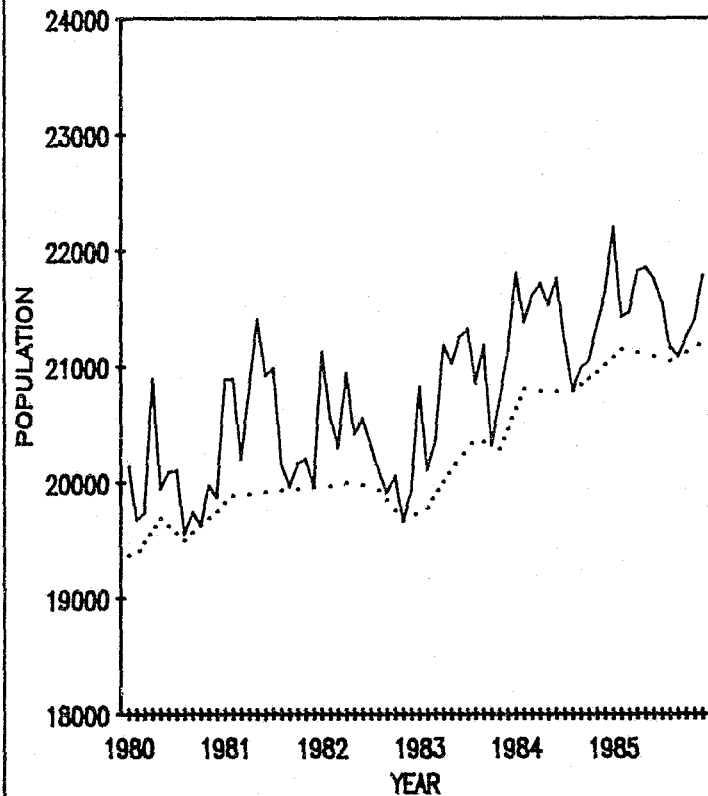
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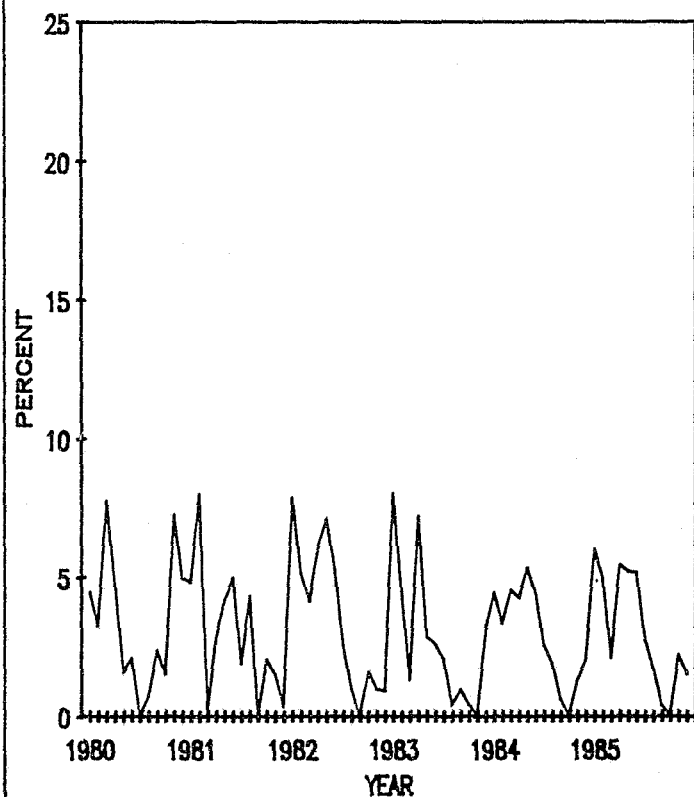
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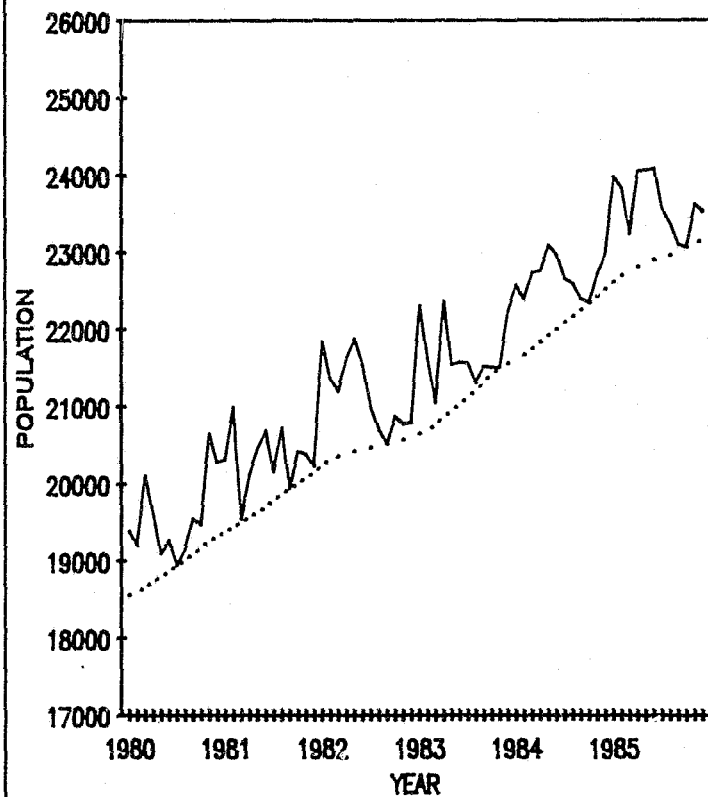
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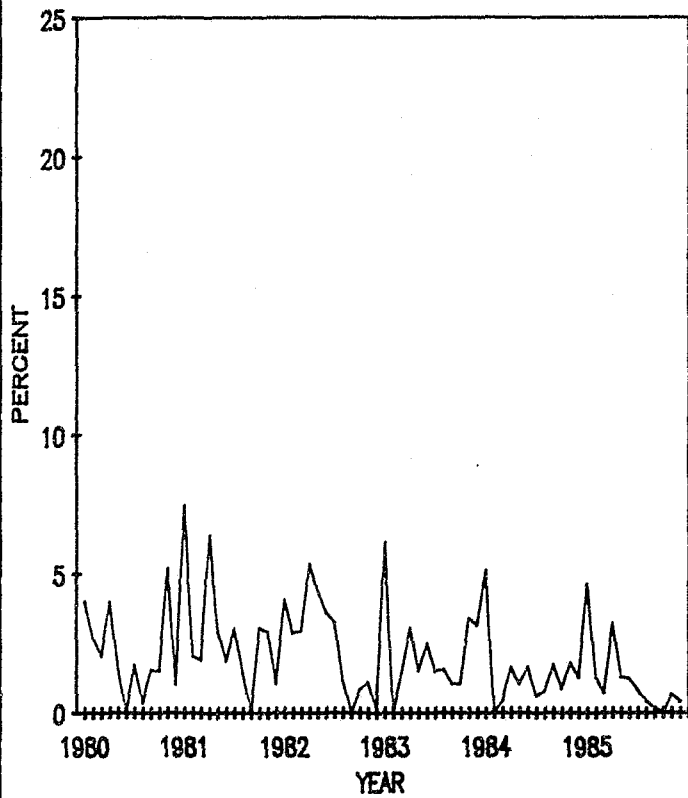
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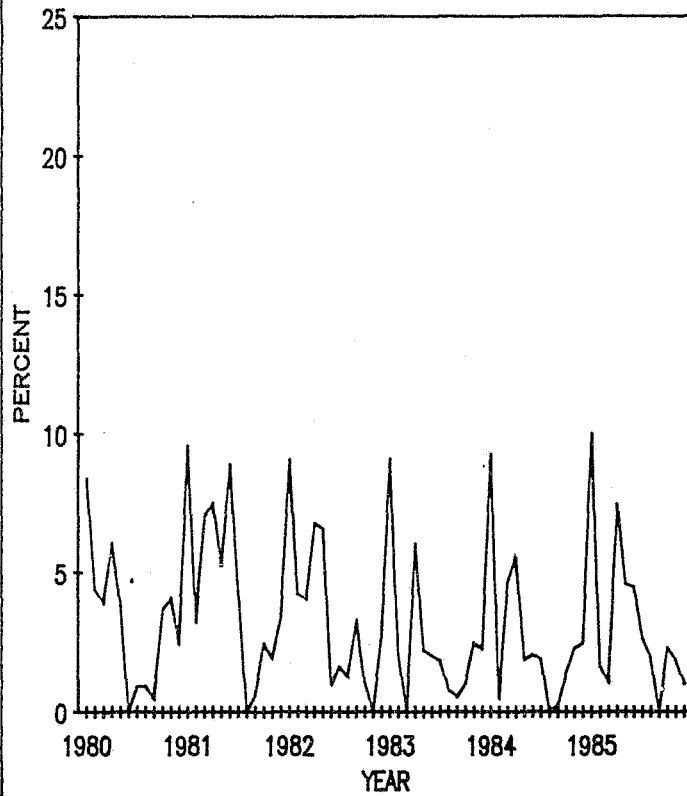RESIDENT POPULATION: DOT
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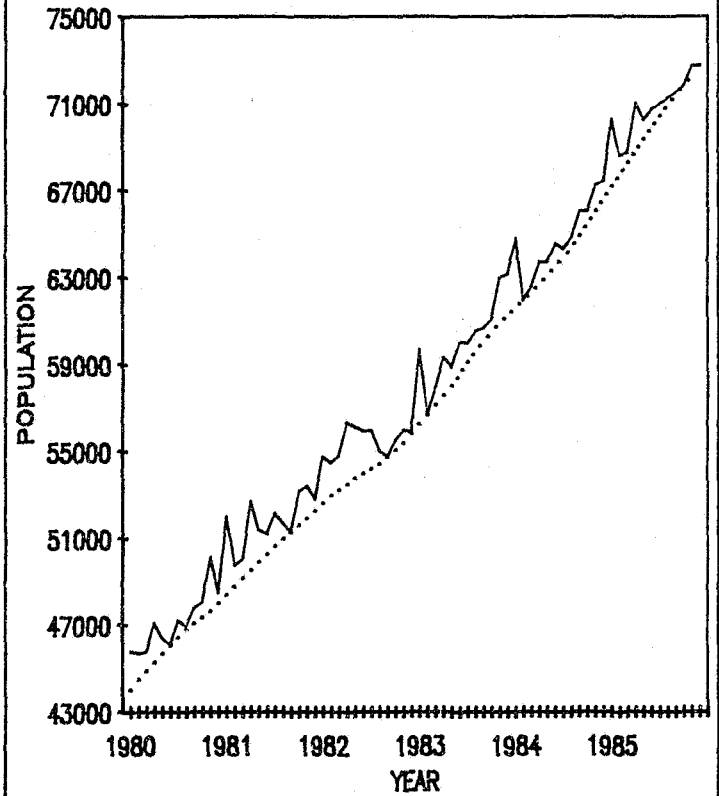
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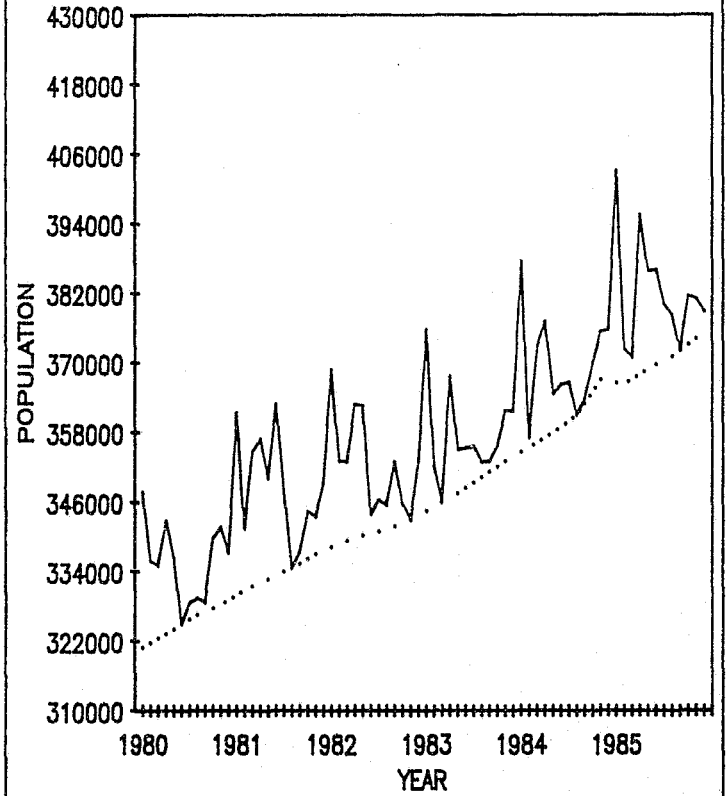OF RESIDENT POPULATION
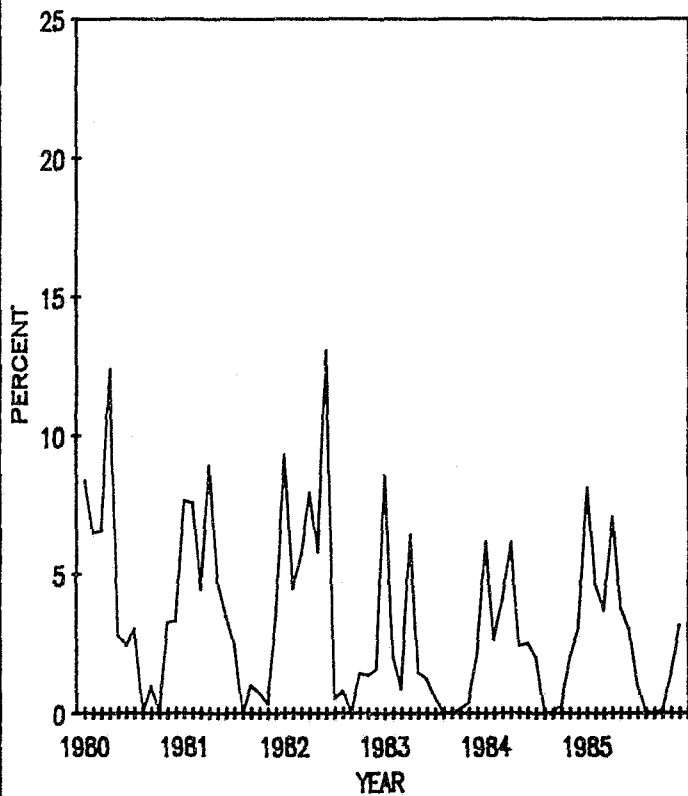
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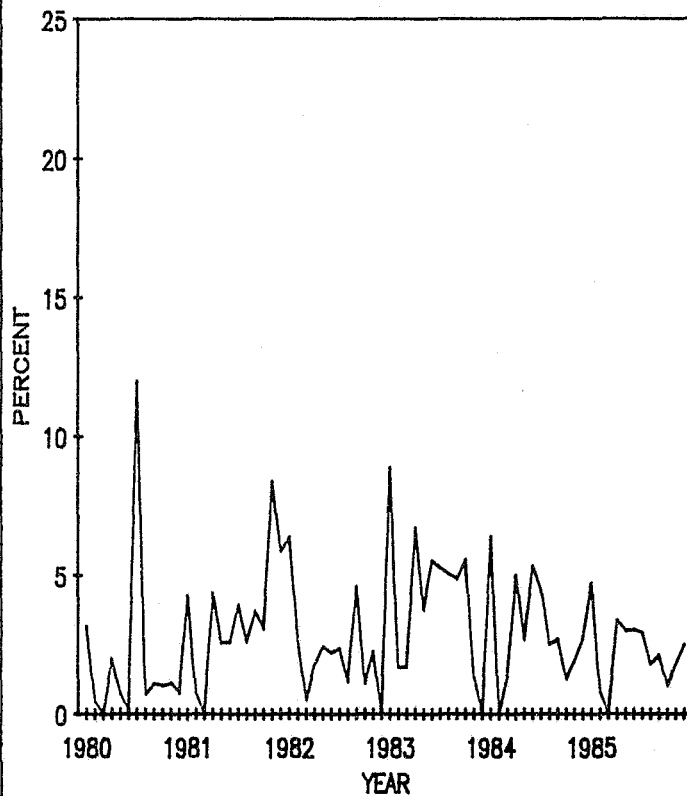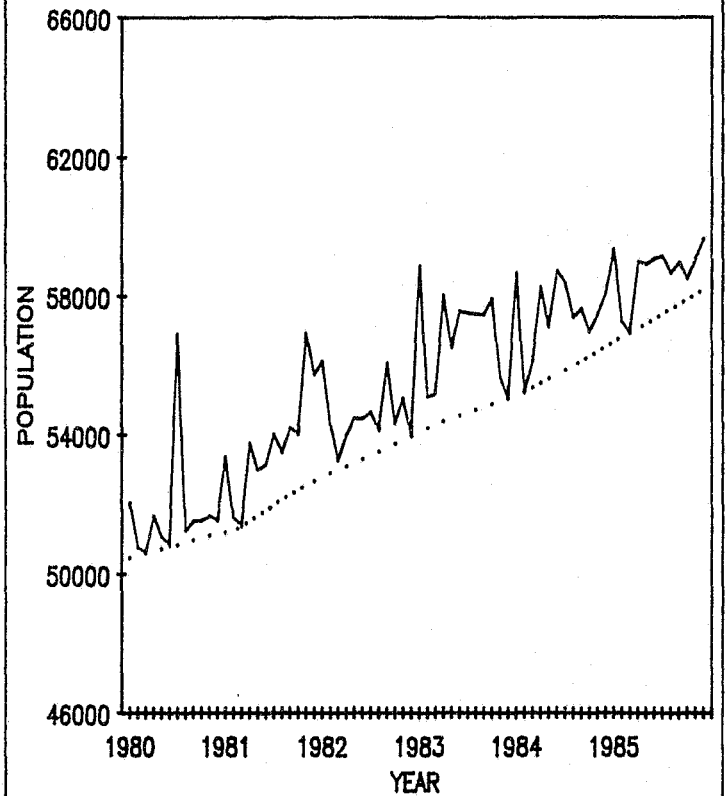RESIDENT POPULATION: DOT
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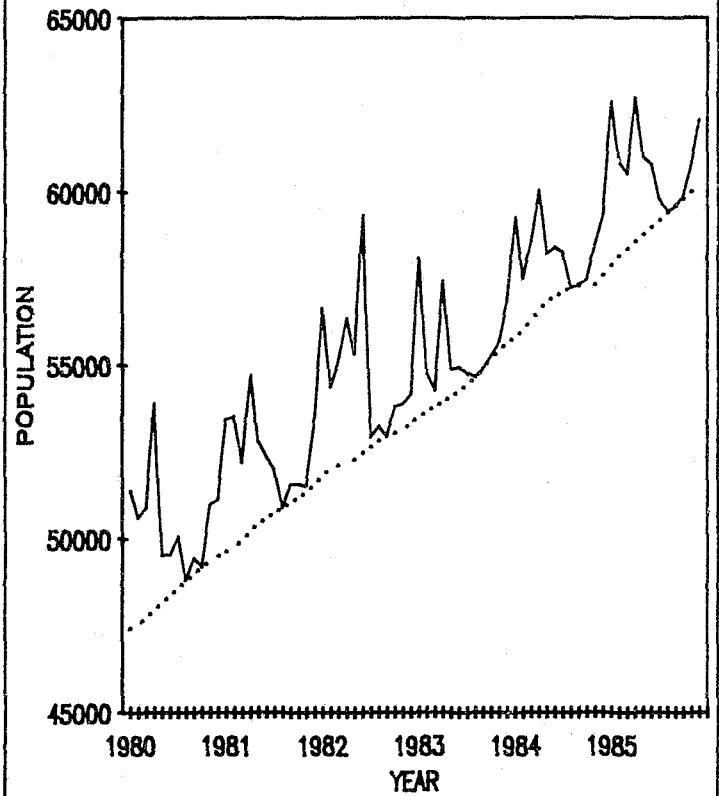
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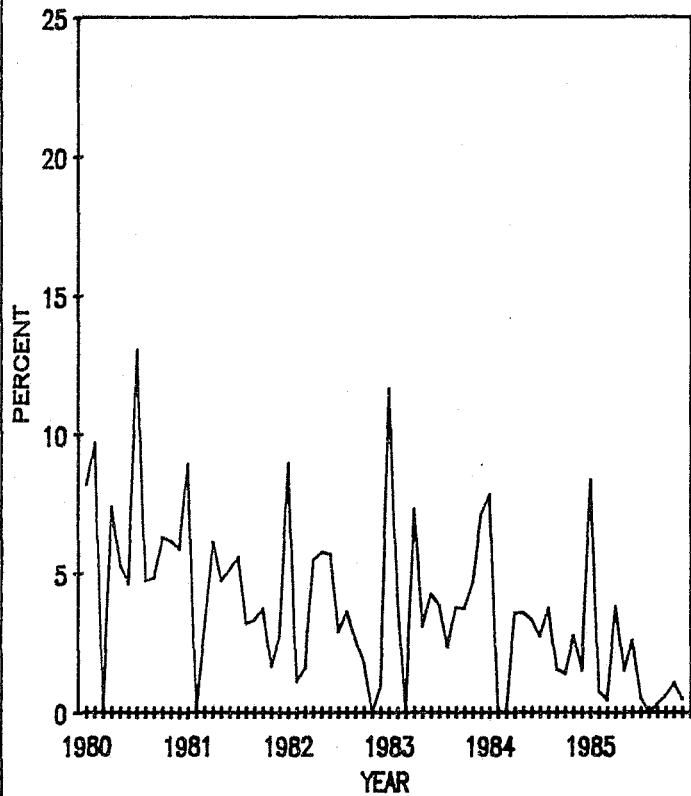
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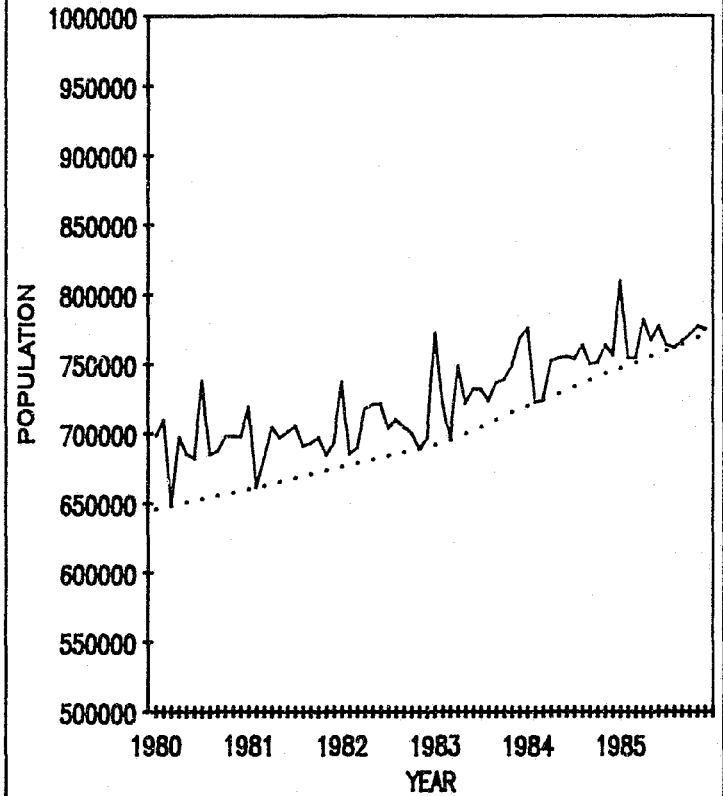
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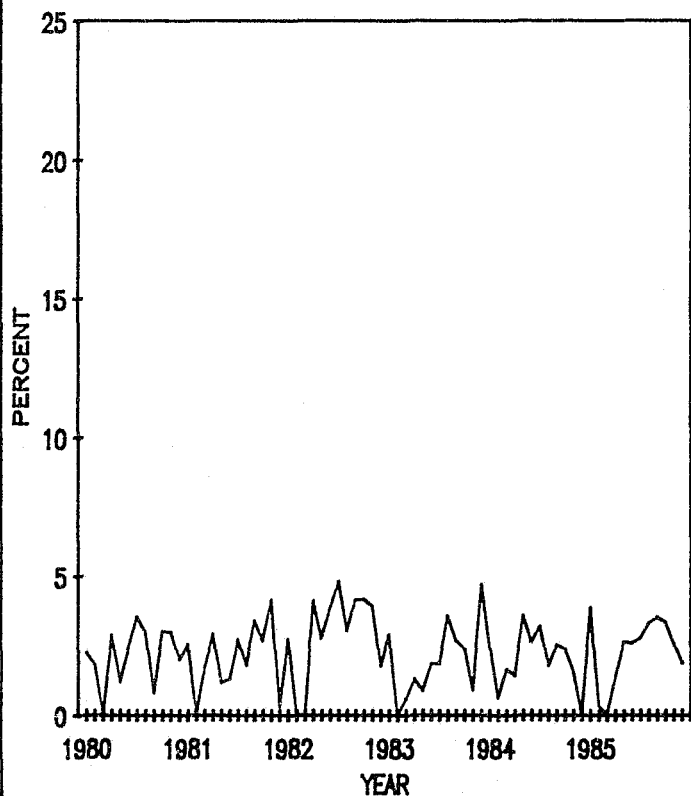
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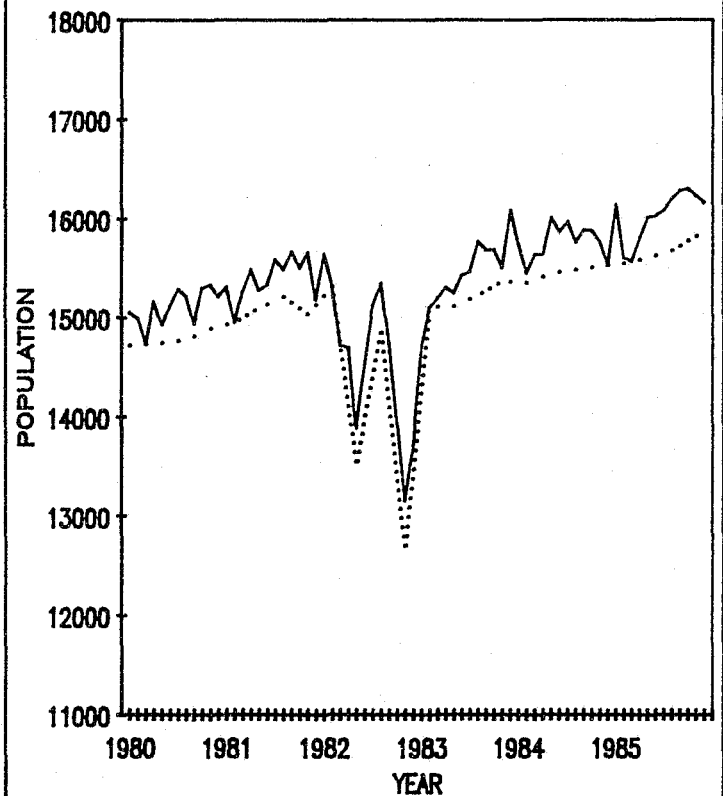
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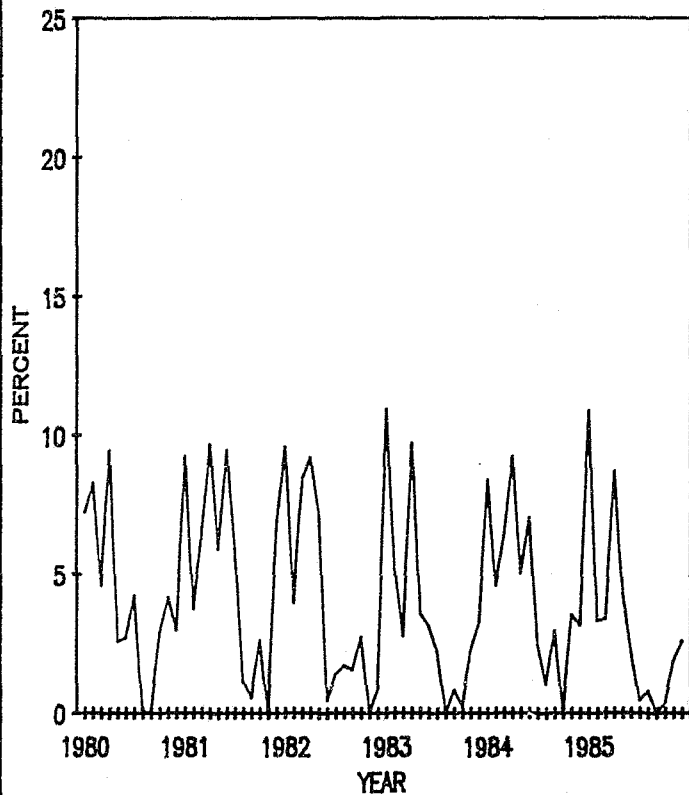
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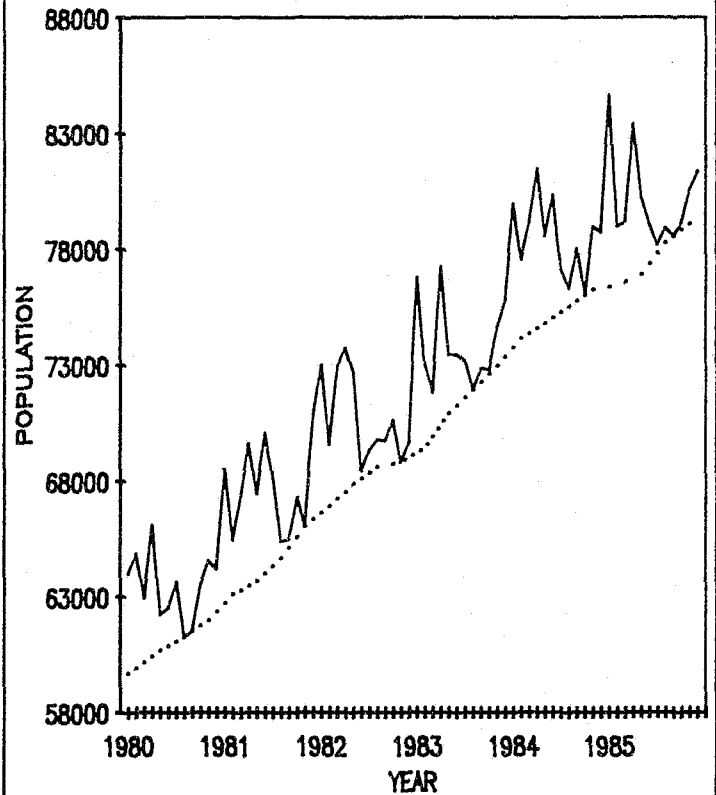
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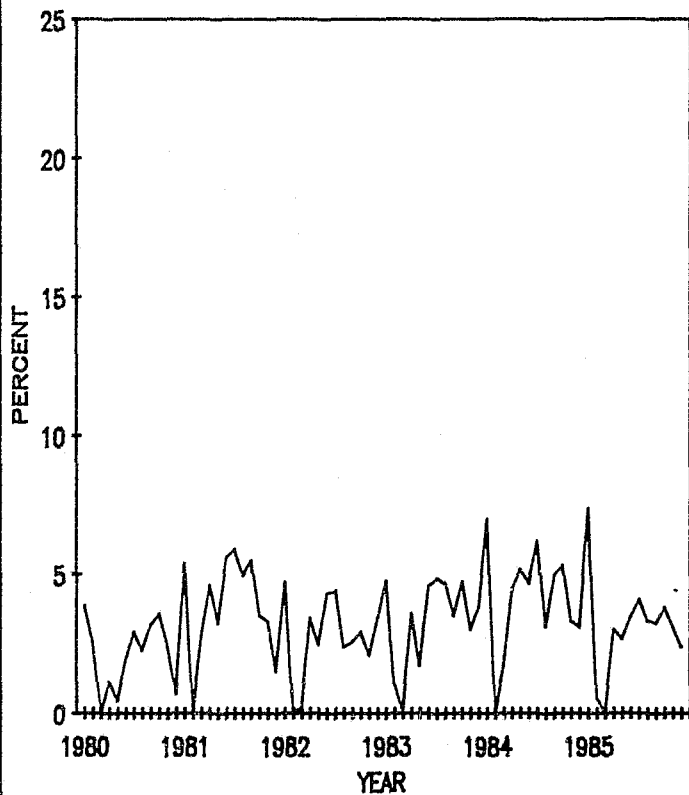
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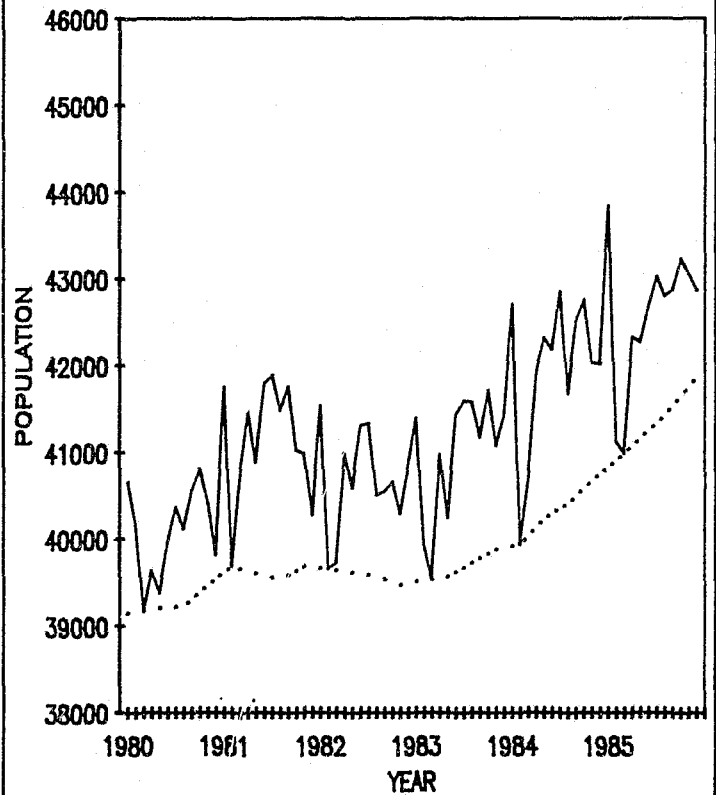
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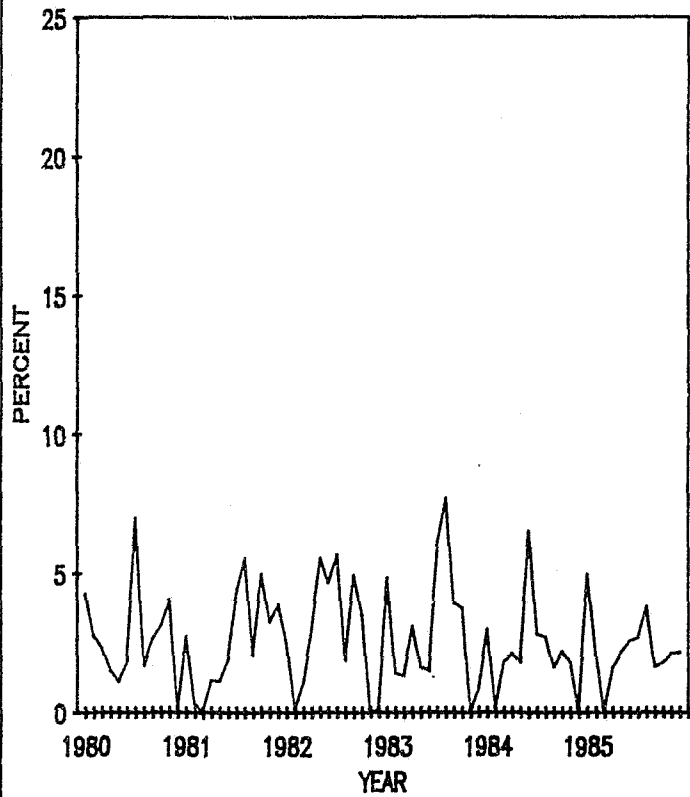
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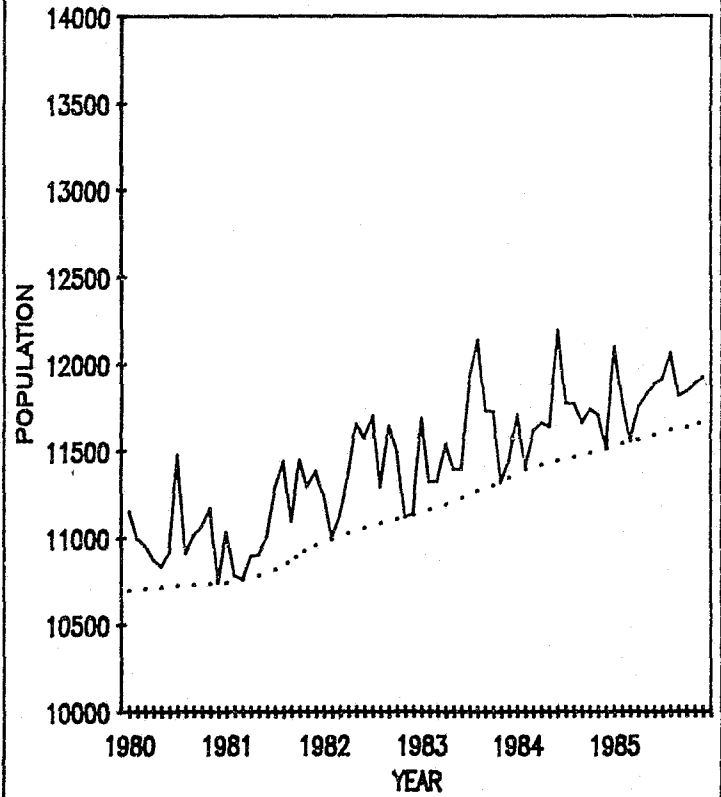
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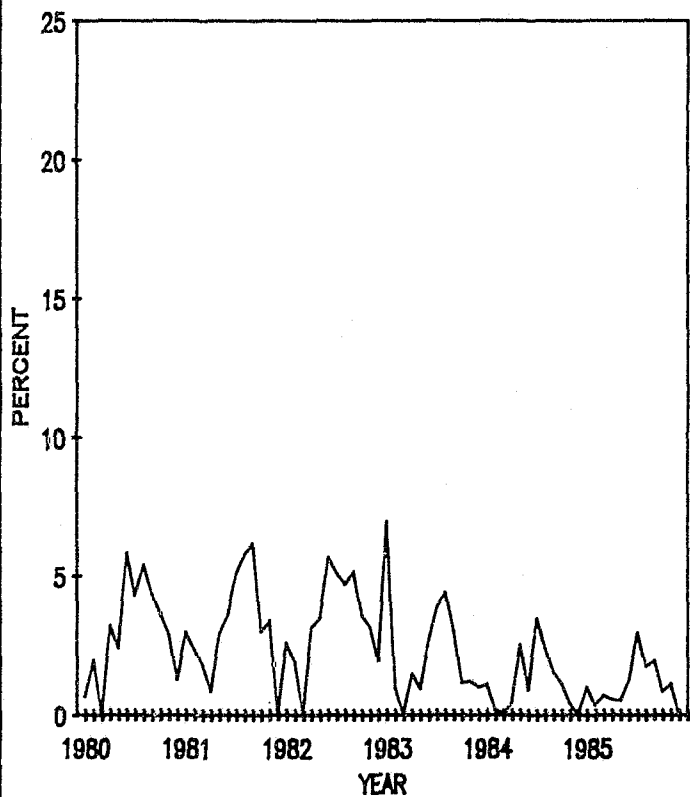
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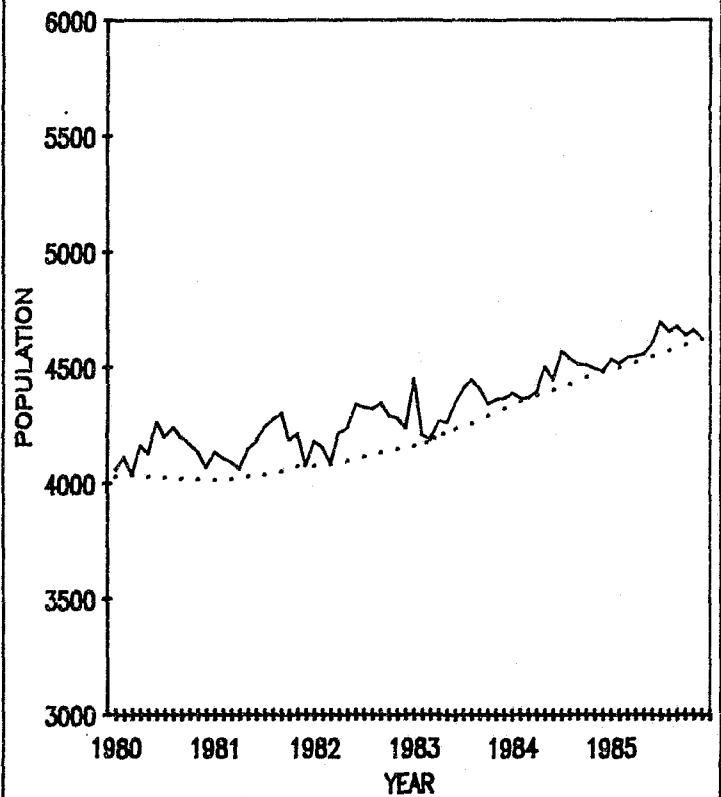
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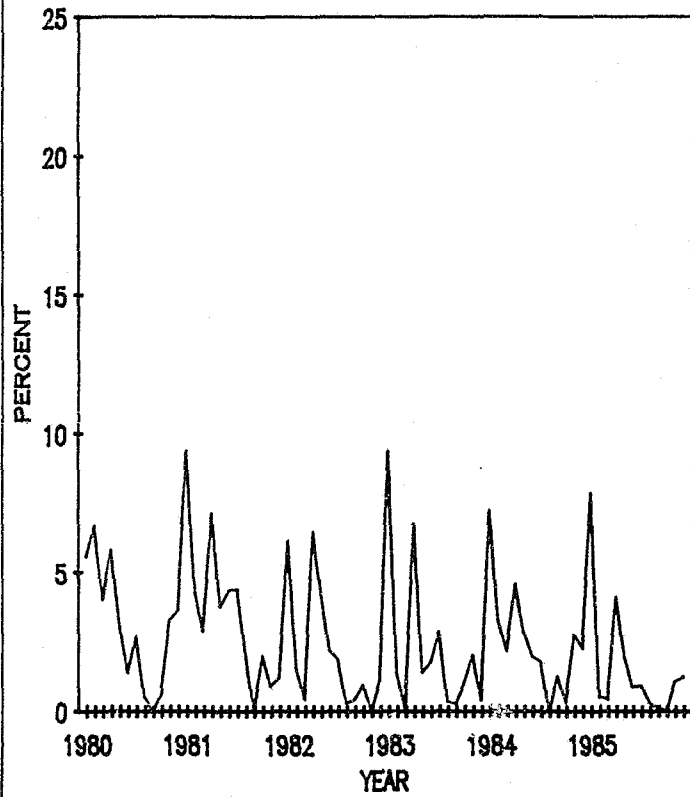
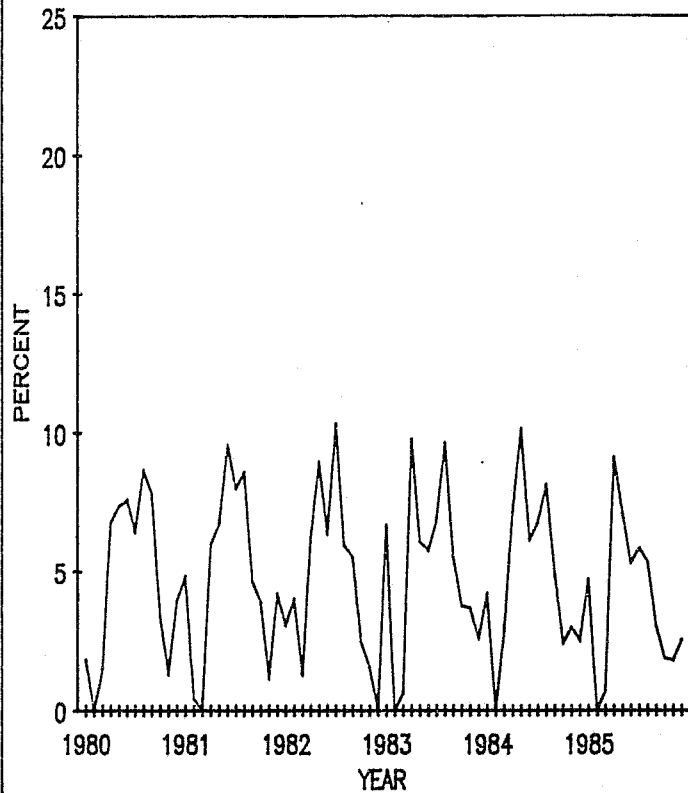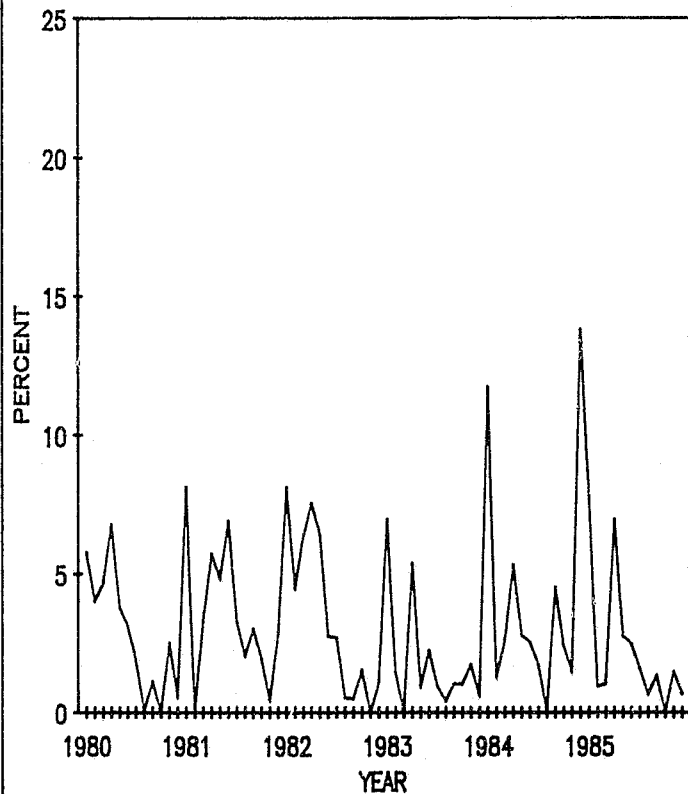LAKE COUNTY
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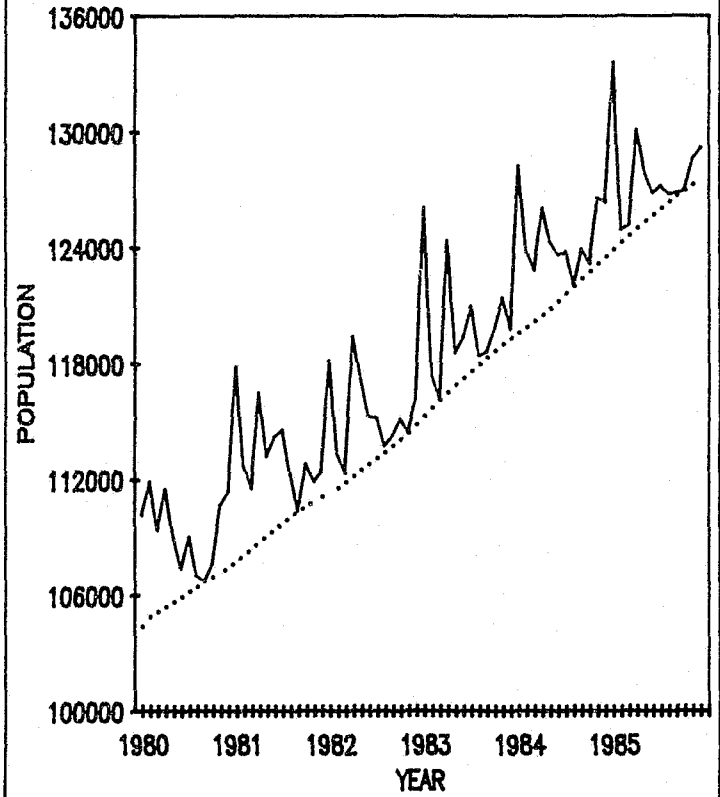
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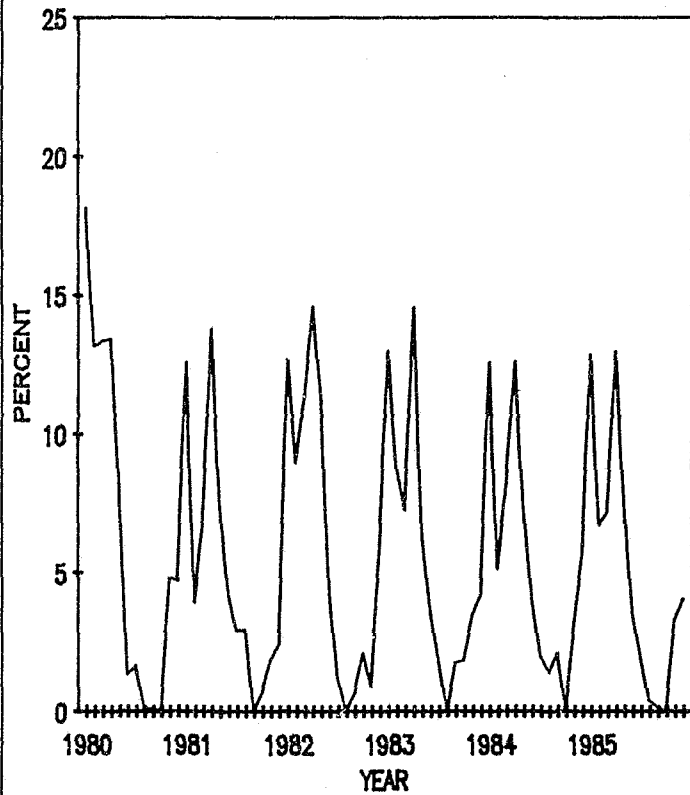
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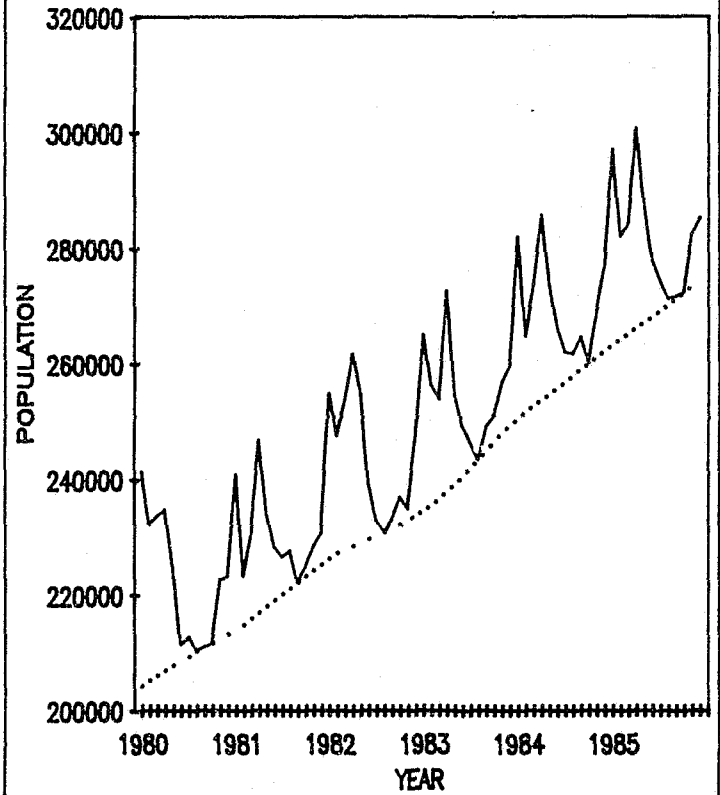
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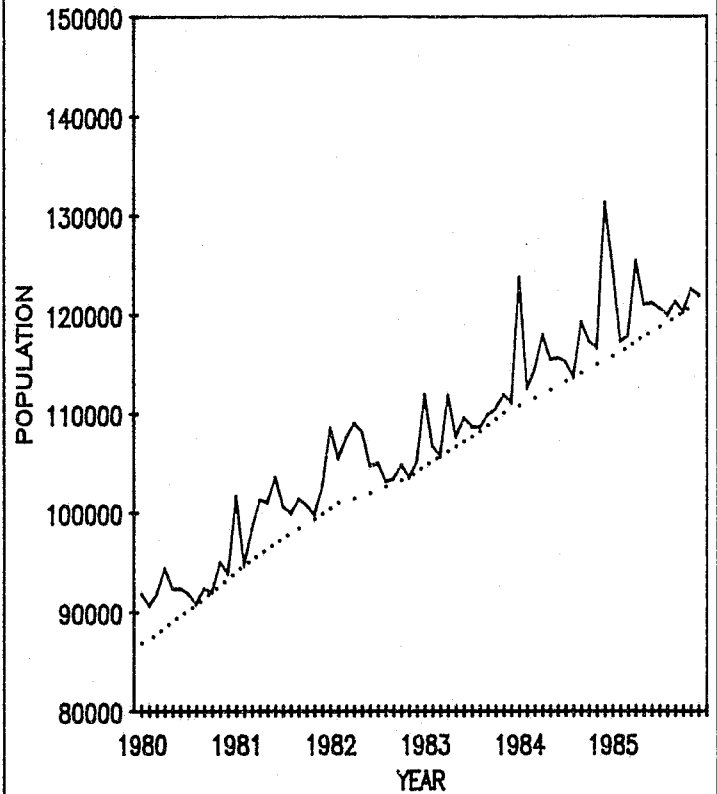POPULATION INFLUX AS A PERCENT
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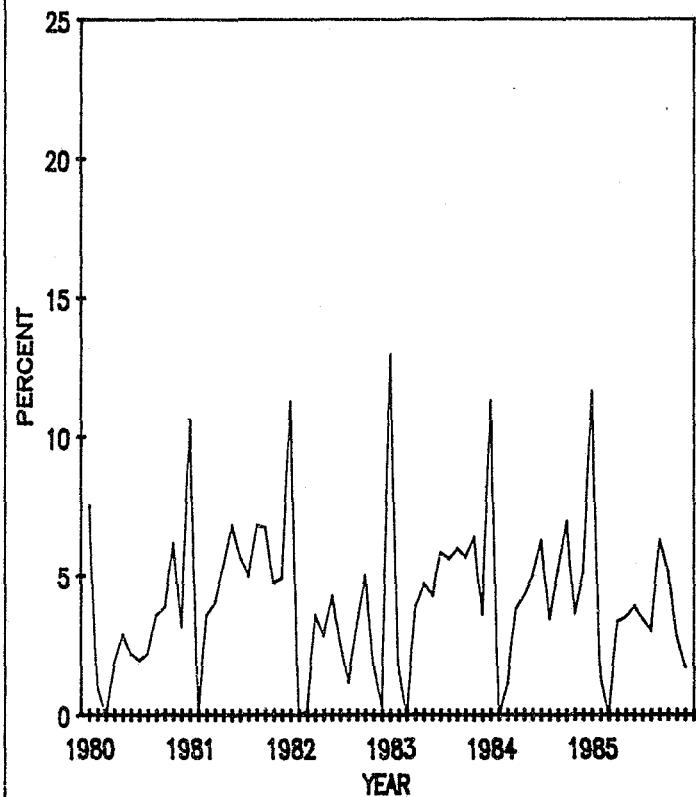
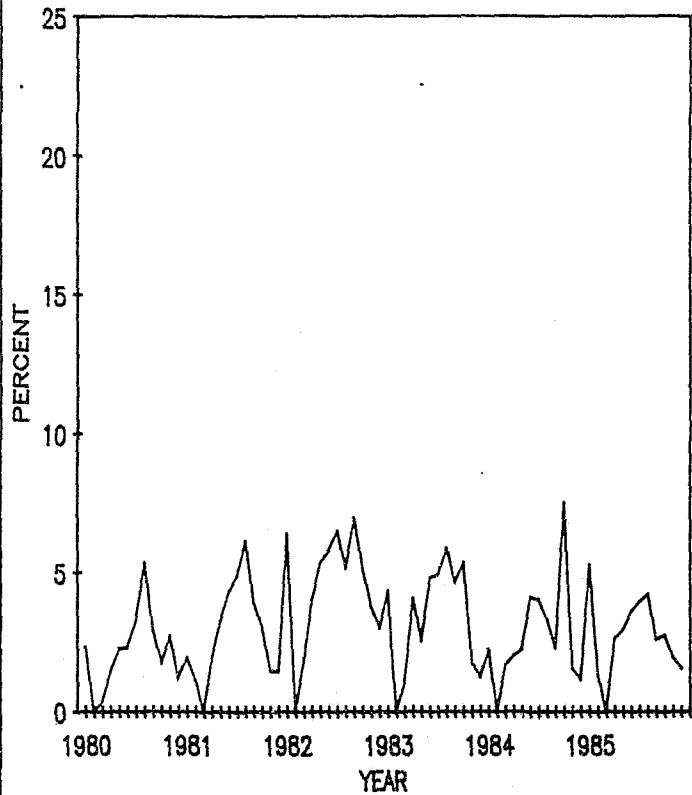LEON COUNTY
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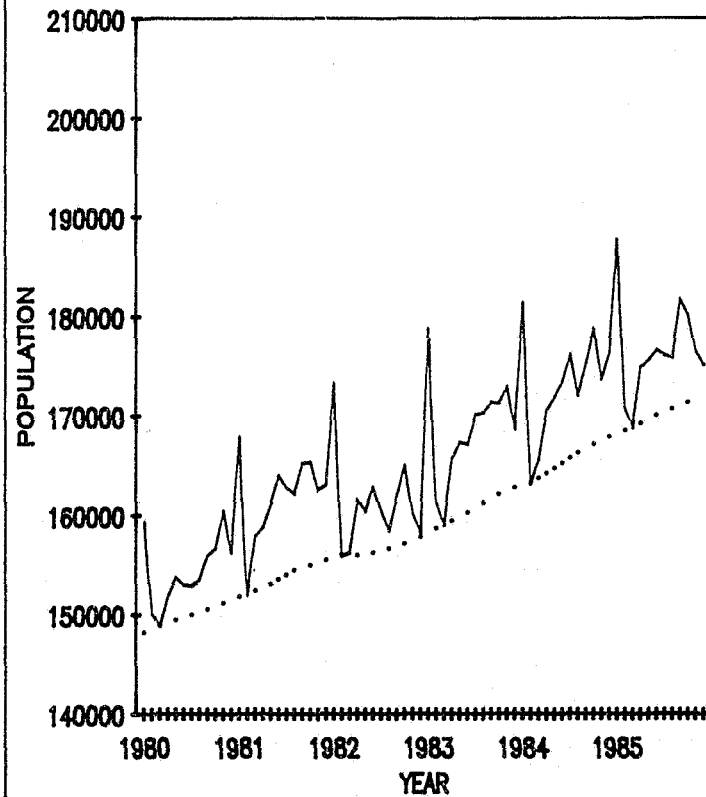
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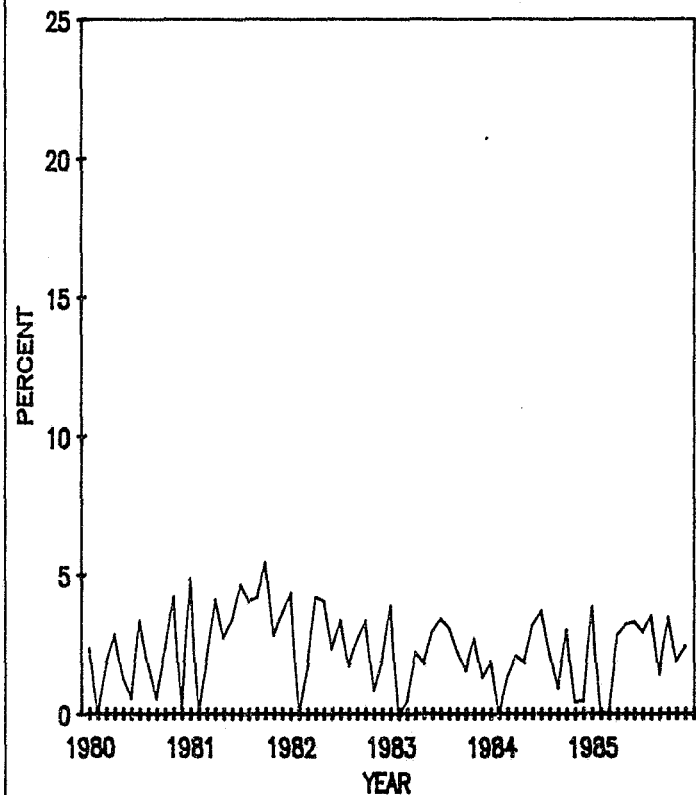
LEVY COUNTY
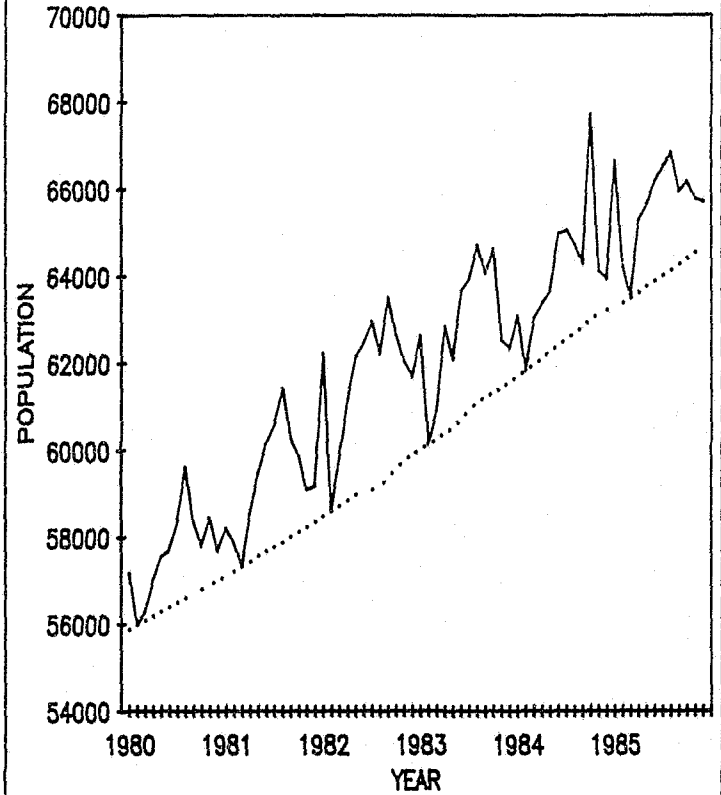RESIDENT POPULATION: DOT
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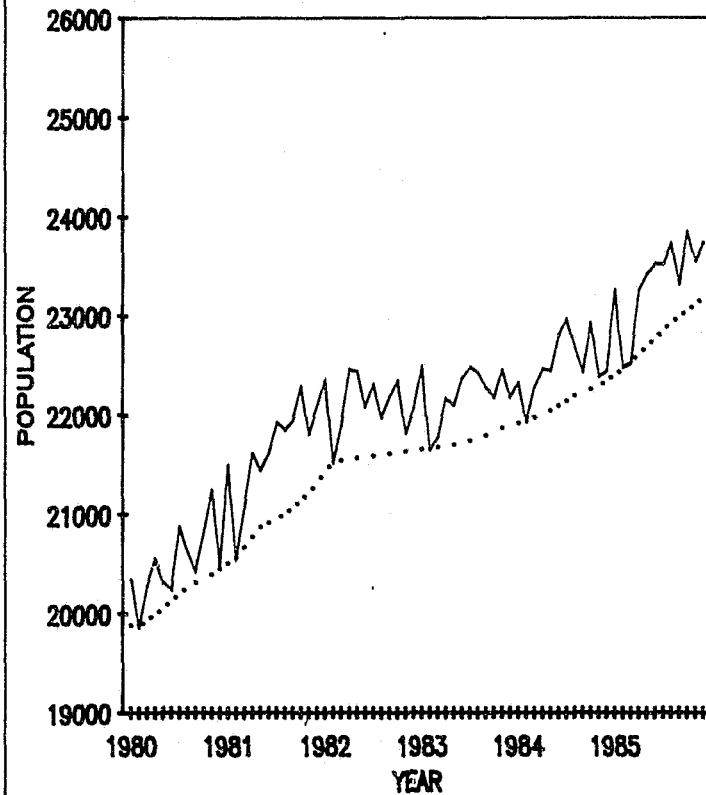
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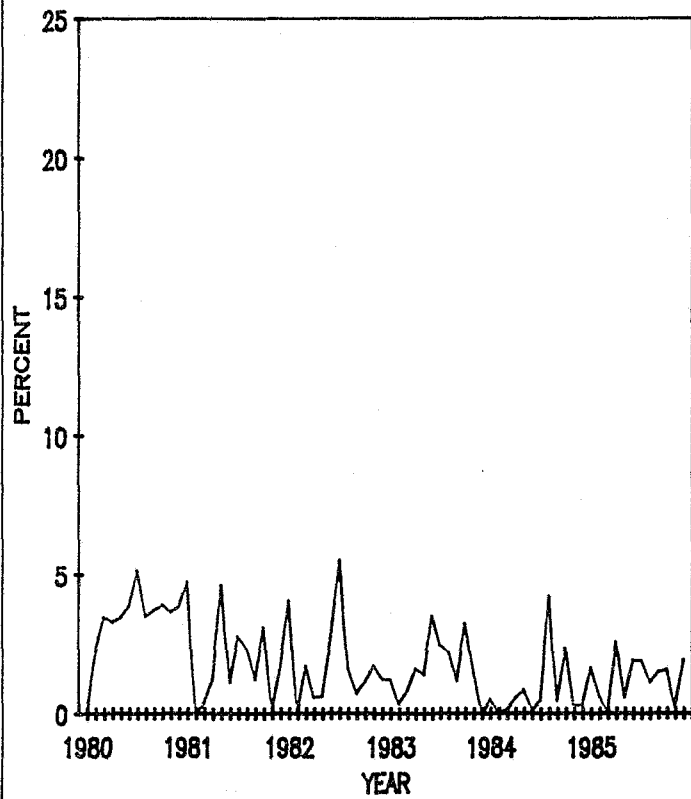
LIBERTY COUNTY
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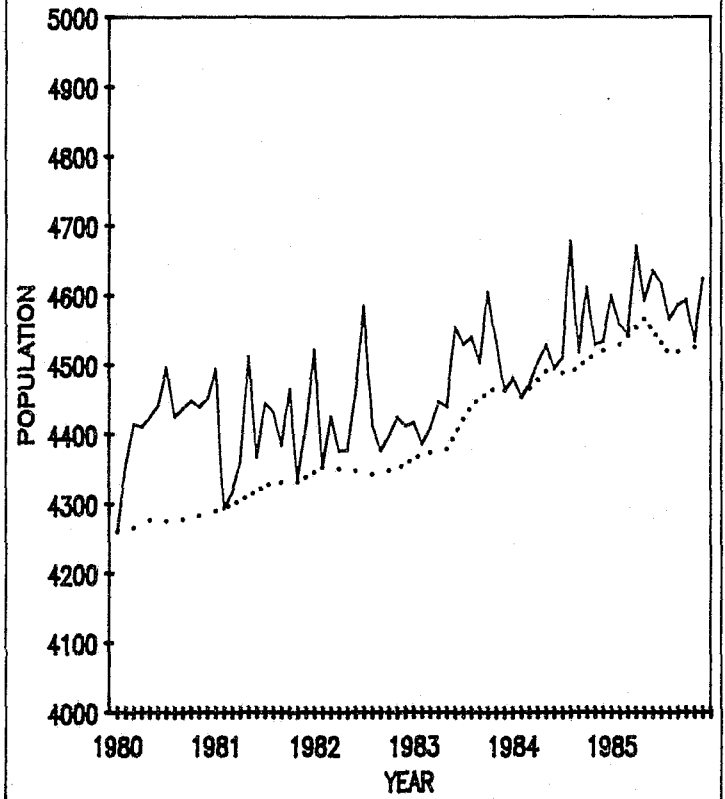
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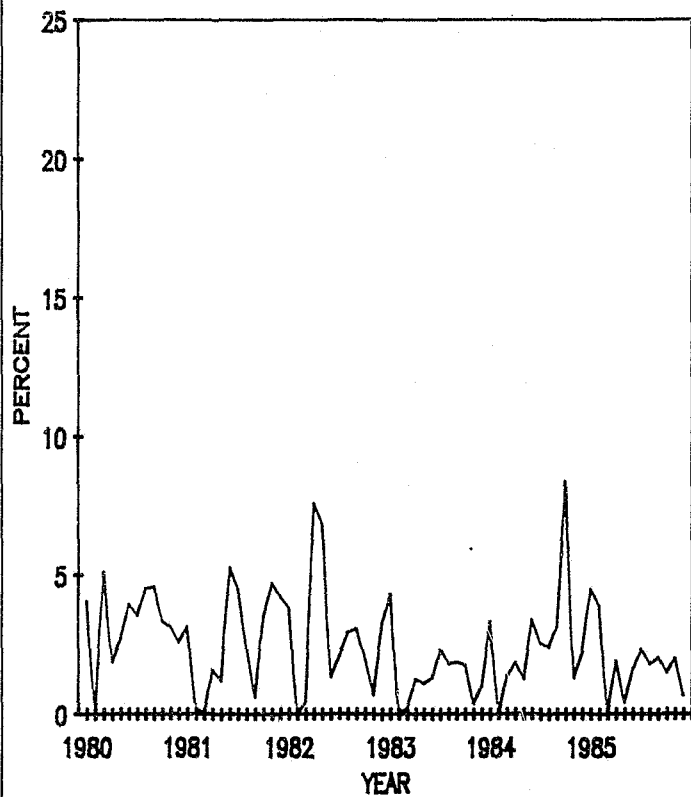
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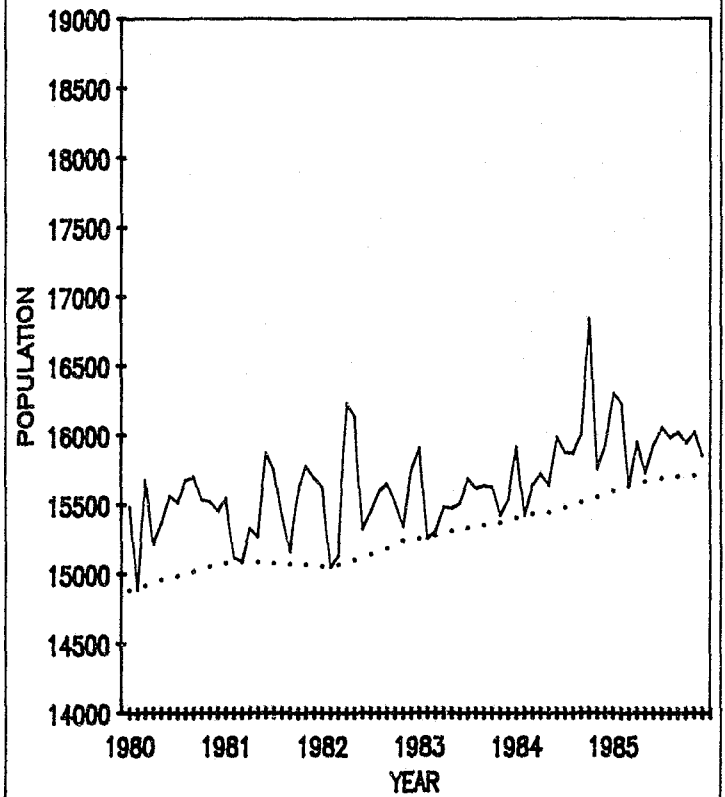
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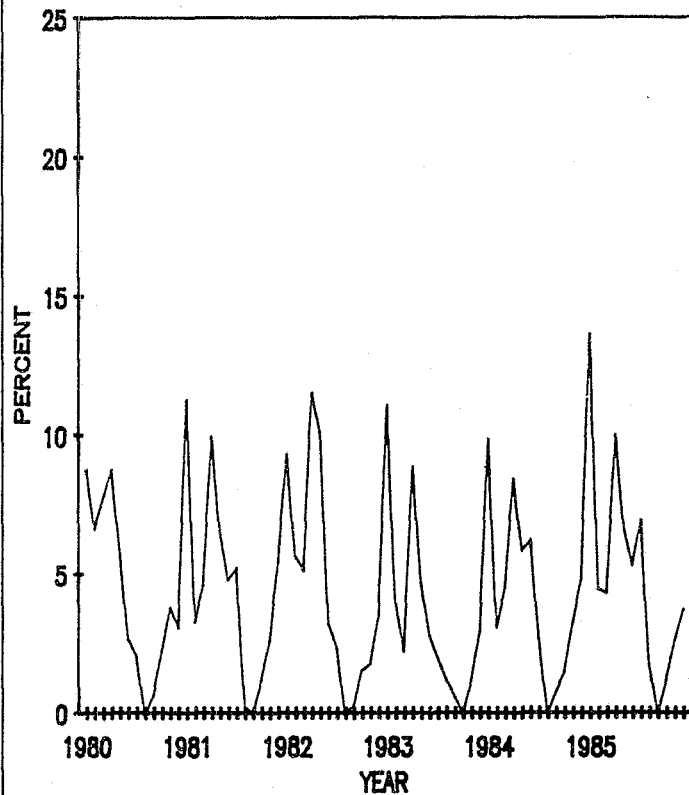
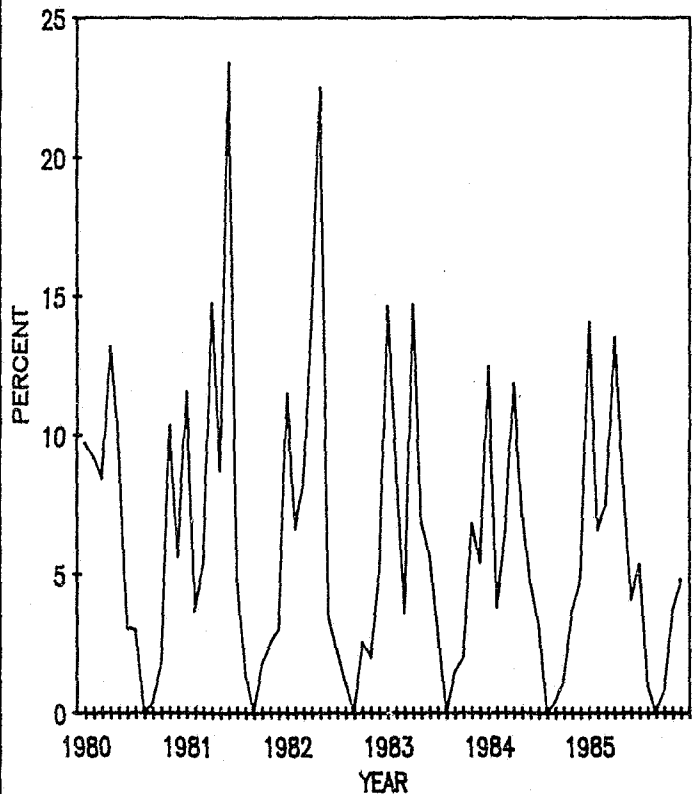MANATEE COUNTY
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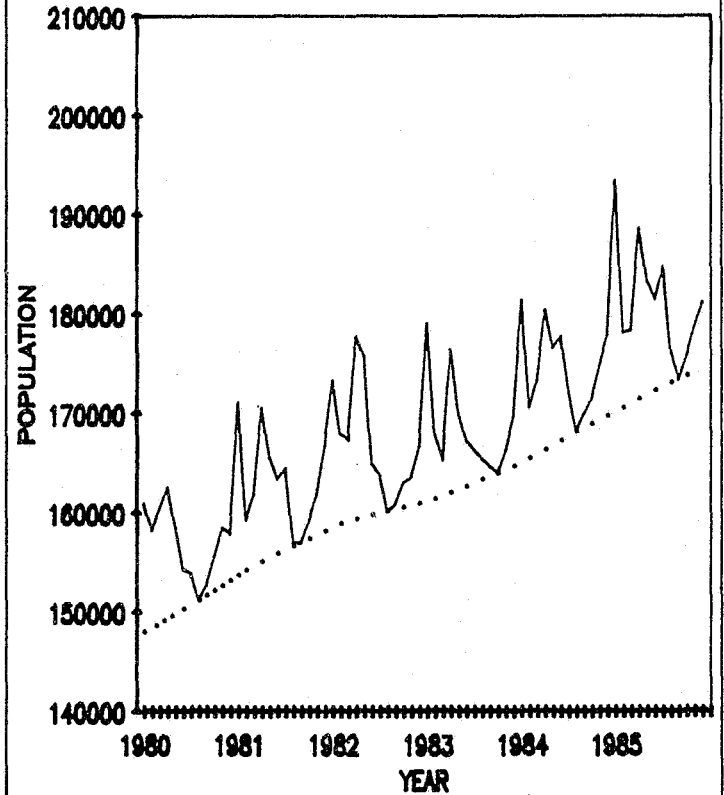
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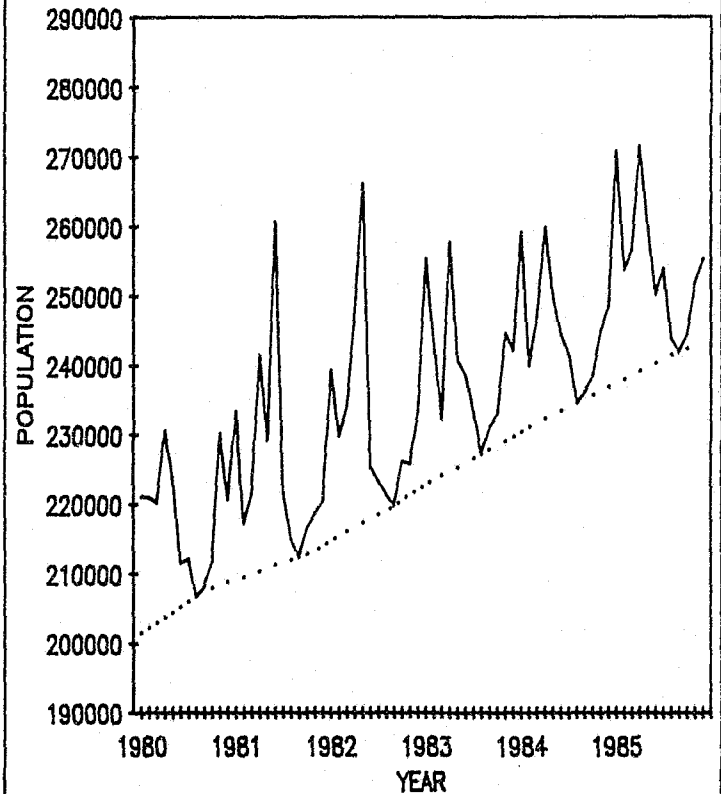POPULATION INFLUX AS A PERCENT
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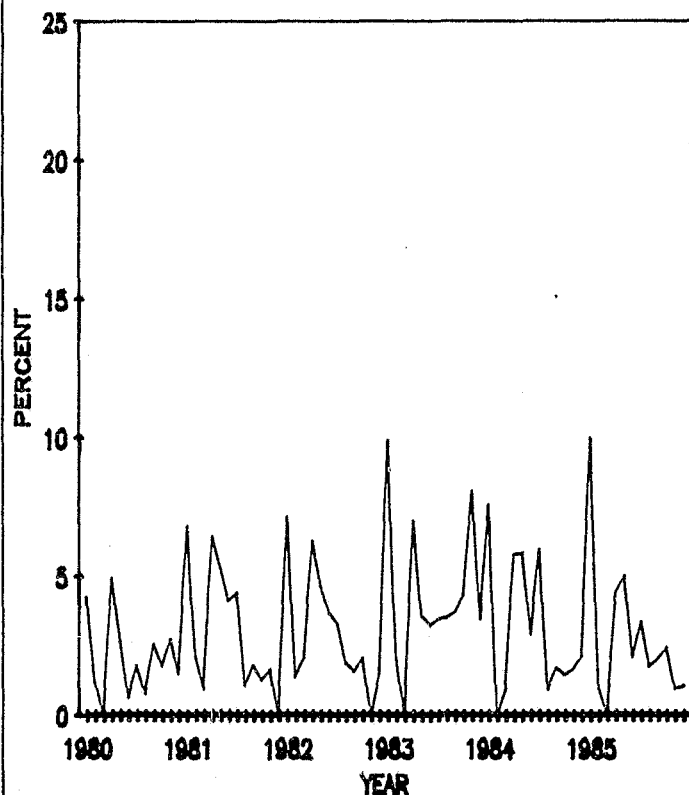
MARION COUNTY
RESIDENT POPULATION: DOT
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MARTIN COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

MARTIN COUNTY
RESIDENT POPULATION: DOT
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MONROE COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

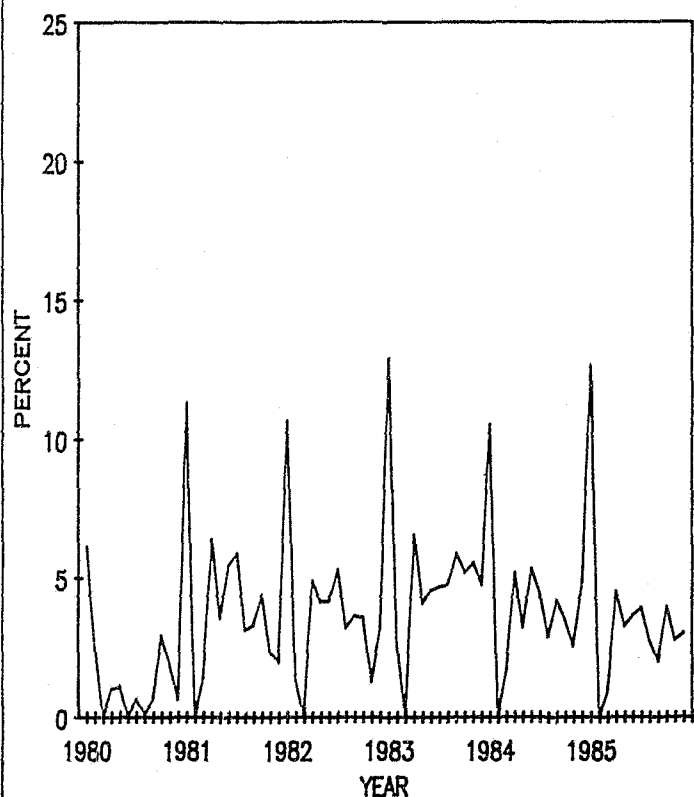MONROE COUNTY
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NASSAU COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

NASSAU COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

OKALOOSA COUNTY
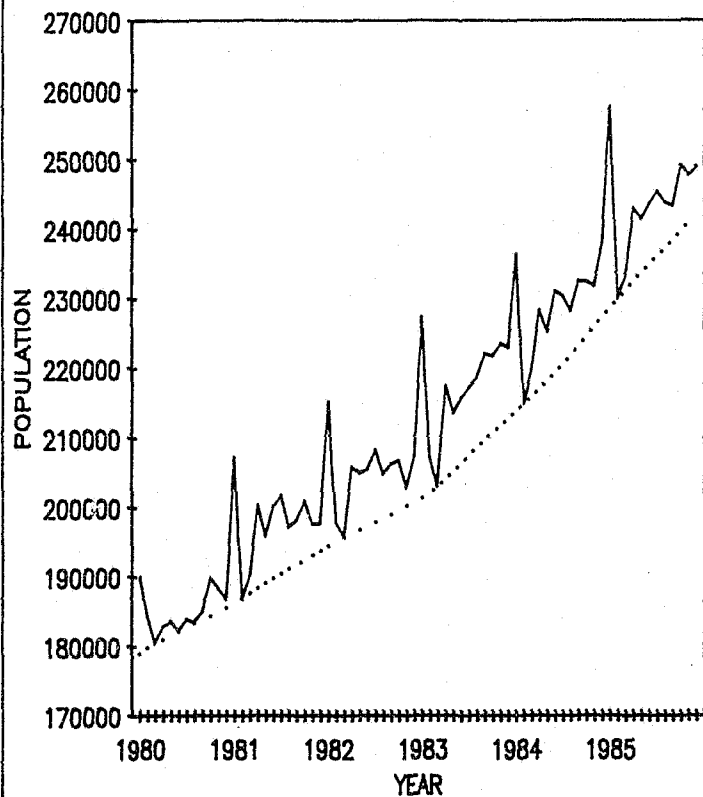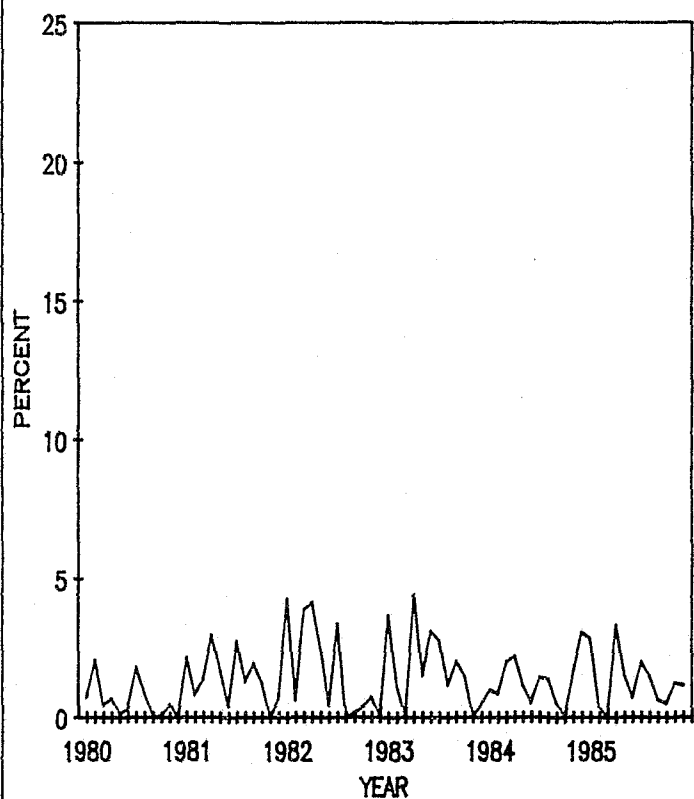POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

OKALOOSA COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

OKEECHOBEE COUNTY
POPULATION INFLUX AS A PERCENT OF RESIDENT POPULATION

OKEECHOBEE COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

ORANGE COUNTY
POPULATION INFLUX AS A PERCENT OF RESIDENT POPULATION

ORANGE COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

OSCEOLA COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

OSCEOLA COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

PALM BEACH COUNTY
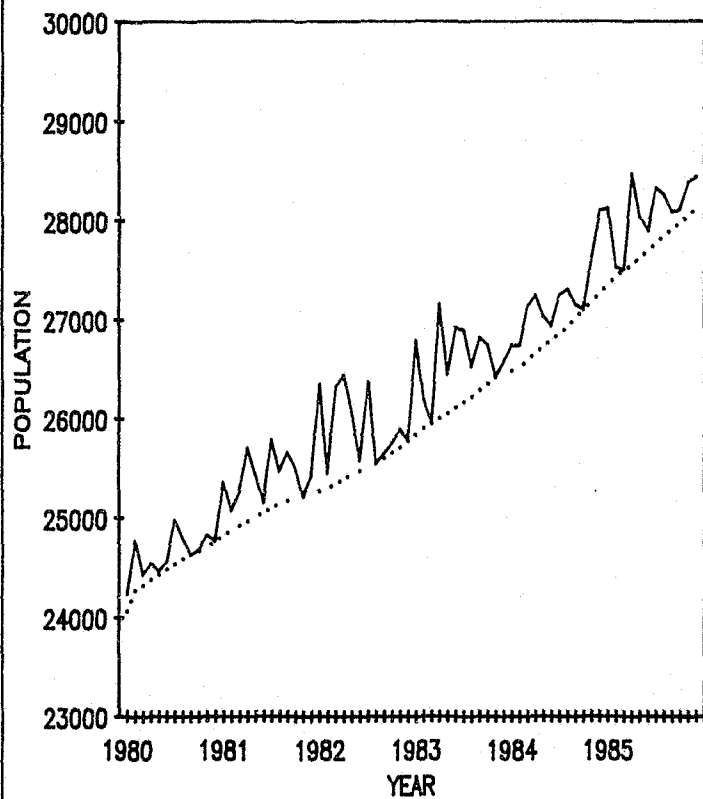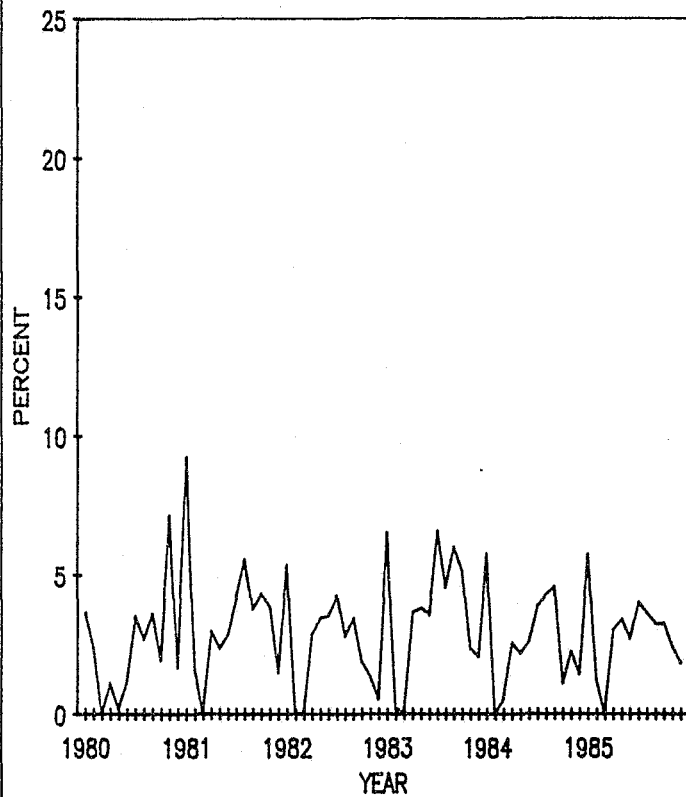POPULATION INFLUX AS A PERCENT
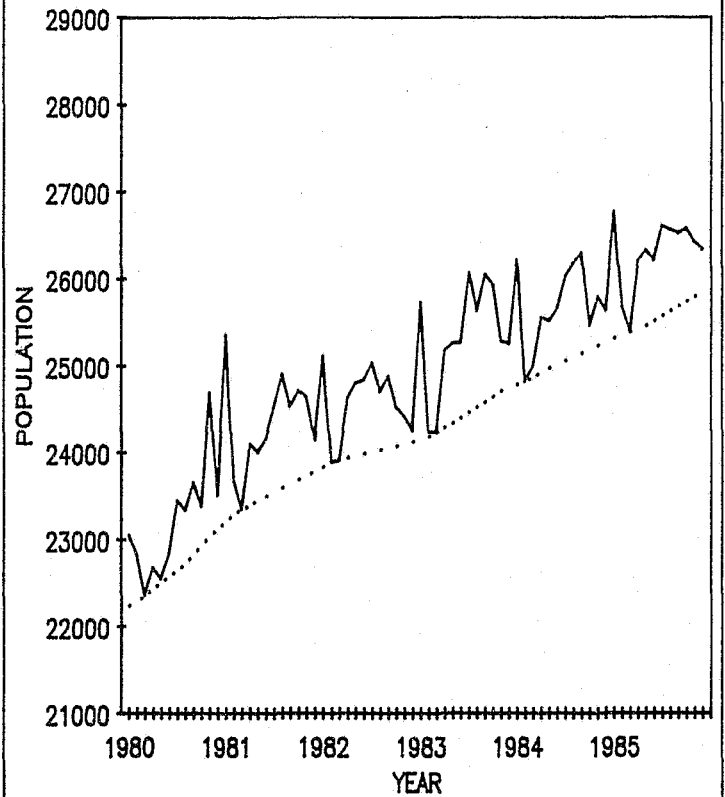OF RESIDENT POPULATION

PALM BEACH COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

PASCO COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

PASCO COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

PINELLAS COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

PINELLAS COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

POLK COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

POLK COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

PUTNAM COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

PUTNAM COUNTY
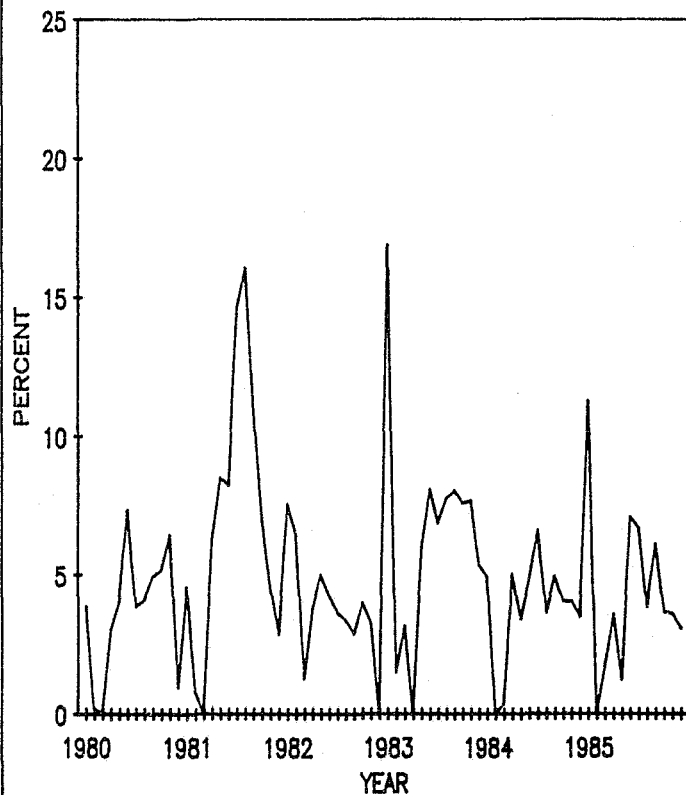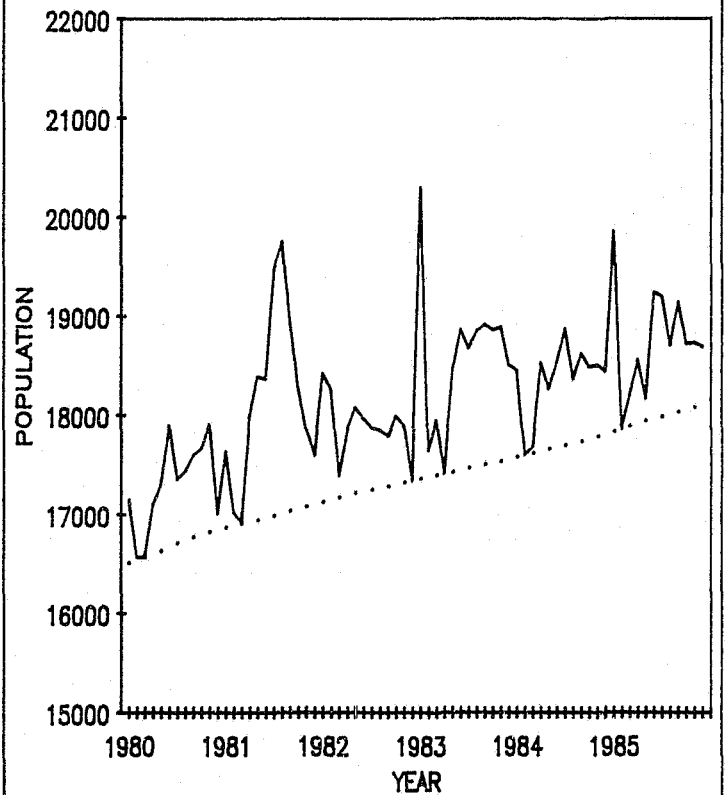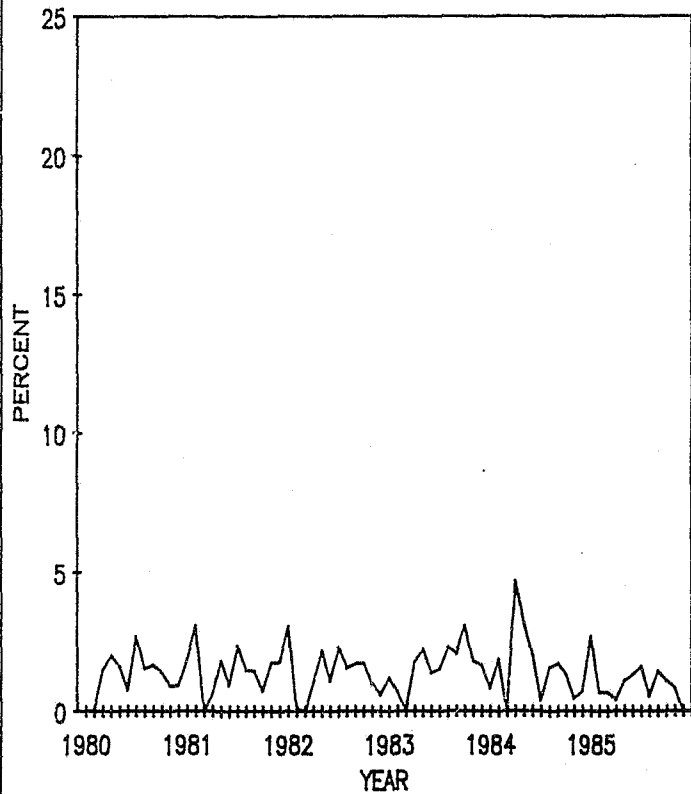RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

ST. JOHNS COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

ST JOHNS COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE
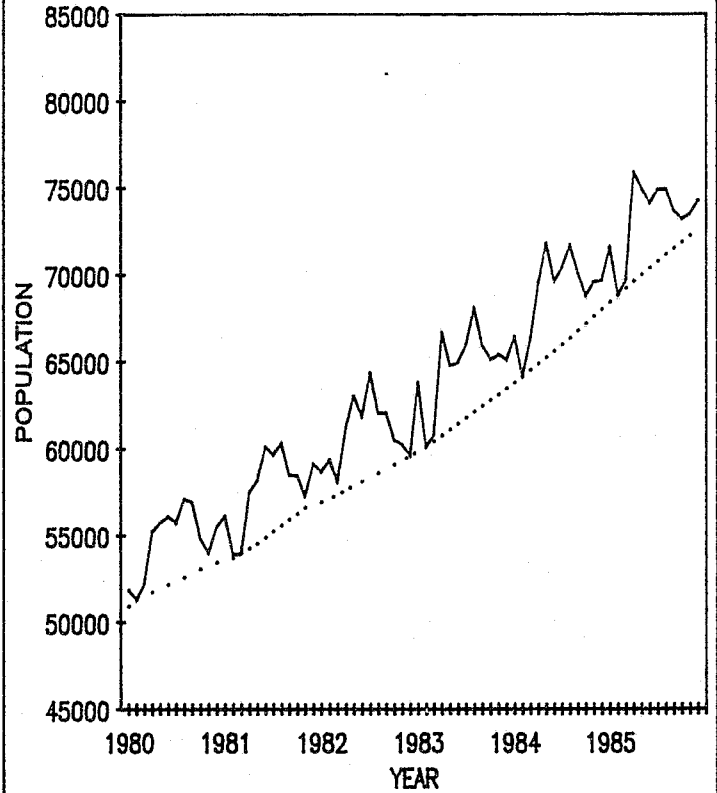
ST. LUCIE COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

ST LUCIE COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

SANTA ROSA COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

SANTA ROSA COUNTY
RESIDENT POPULATION: DOT
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SARASOTA COUNTY
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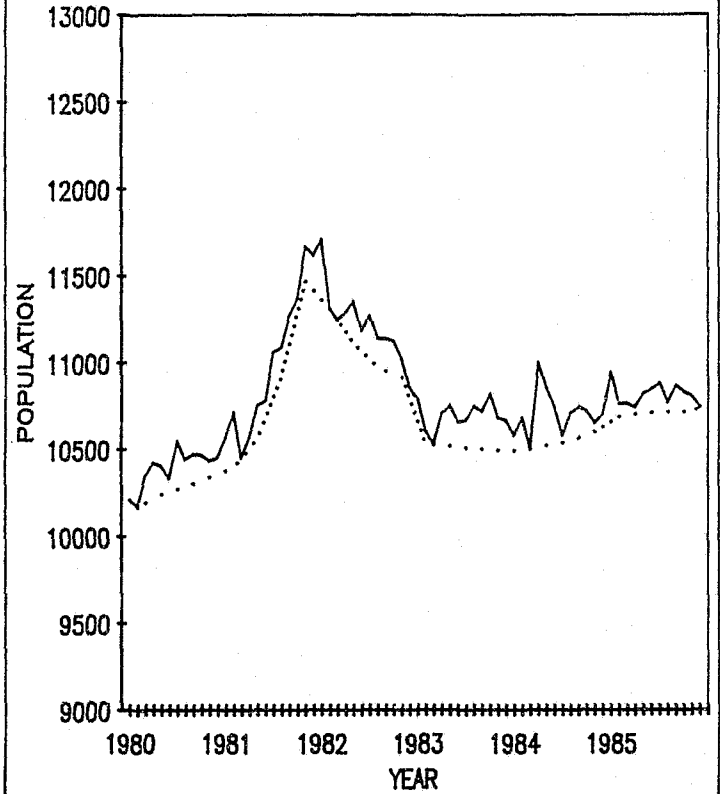OF RESIDENT POPULATION

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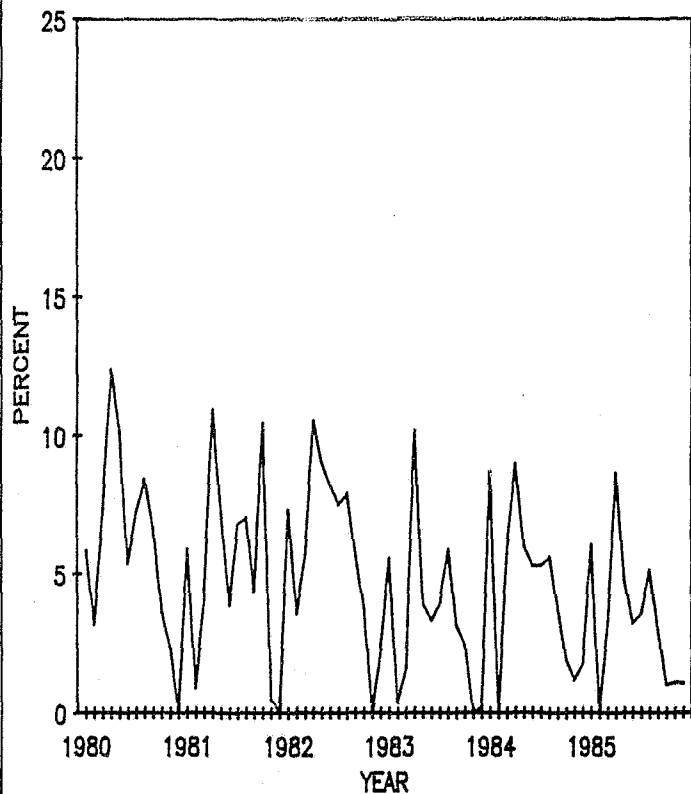RESIDENT POPULATION: DOT
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SEMINOLE COUNTY
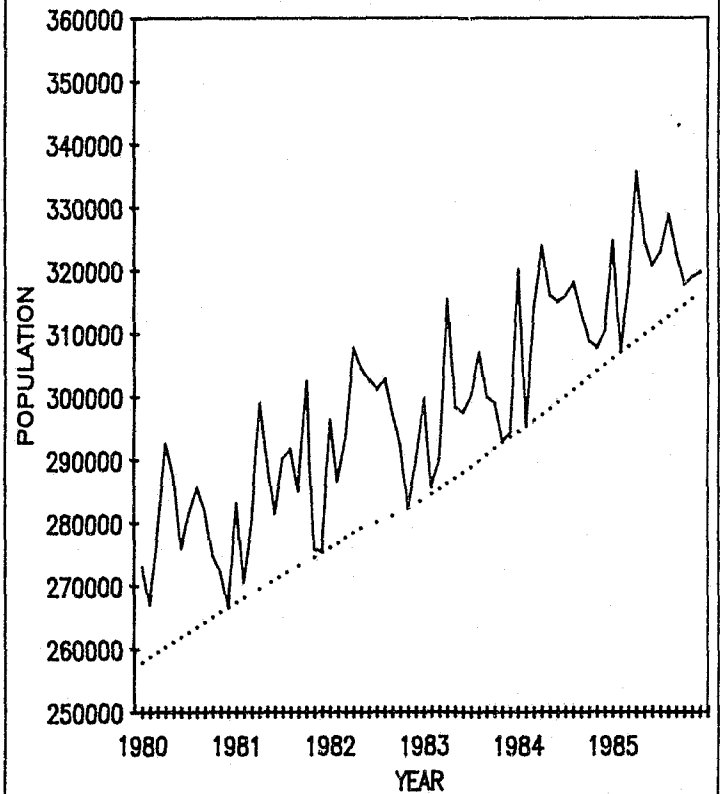POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

SEMINOLE COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

SUMTER COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

SUMTER COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

SUWANNEE COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

SUWANNEE COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

TAYLOR COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

TAYLOR COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

UNION COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

UNION COUNTY
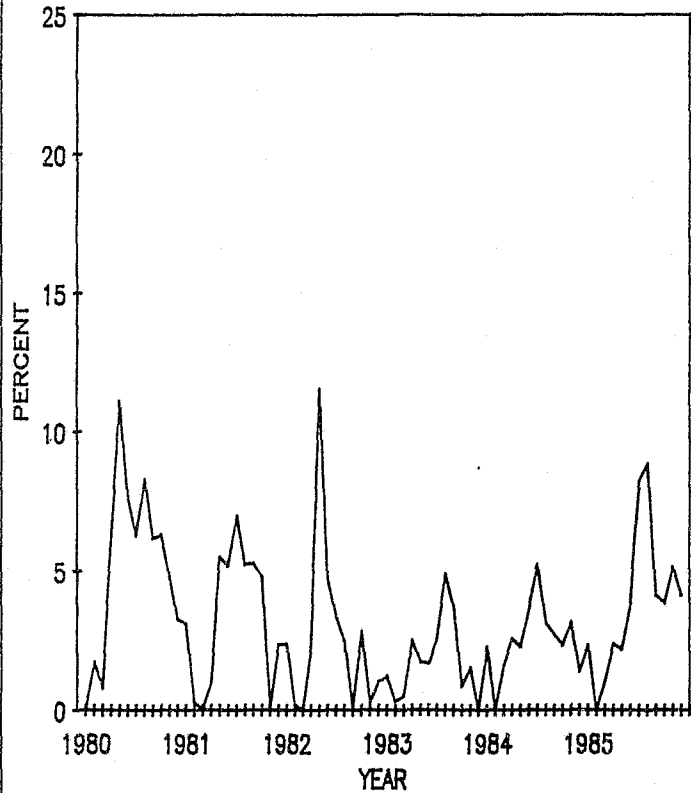RESIDENT POPULATION: DOT
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VOLUSIA COUNTY
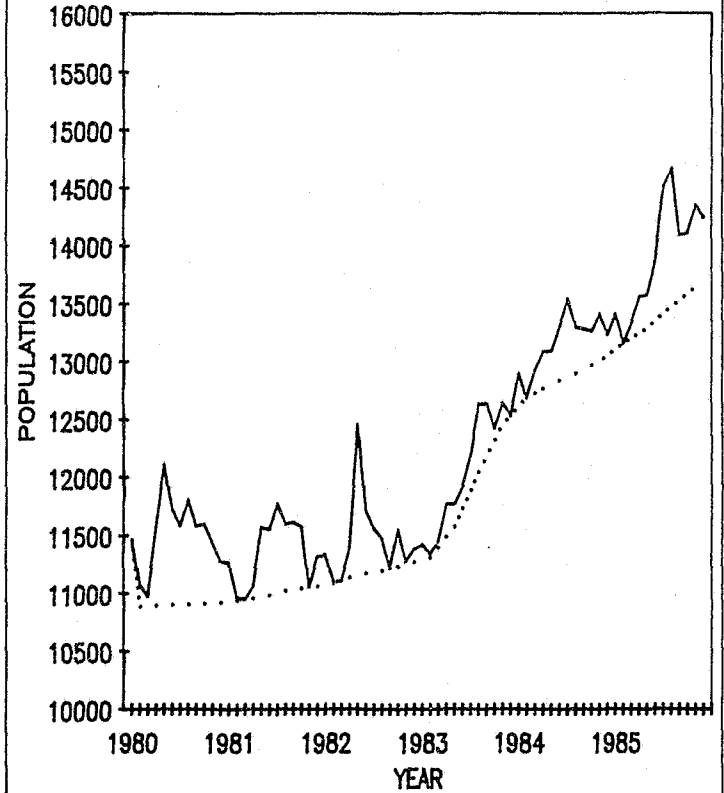POPULATION INFLUX AS A PERCENT
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VOLUSIA COUNTY
RESIDENT POPULATION: DOT
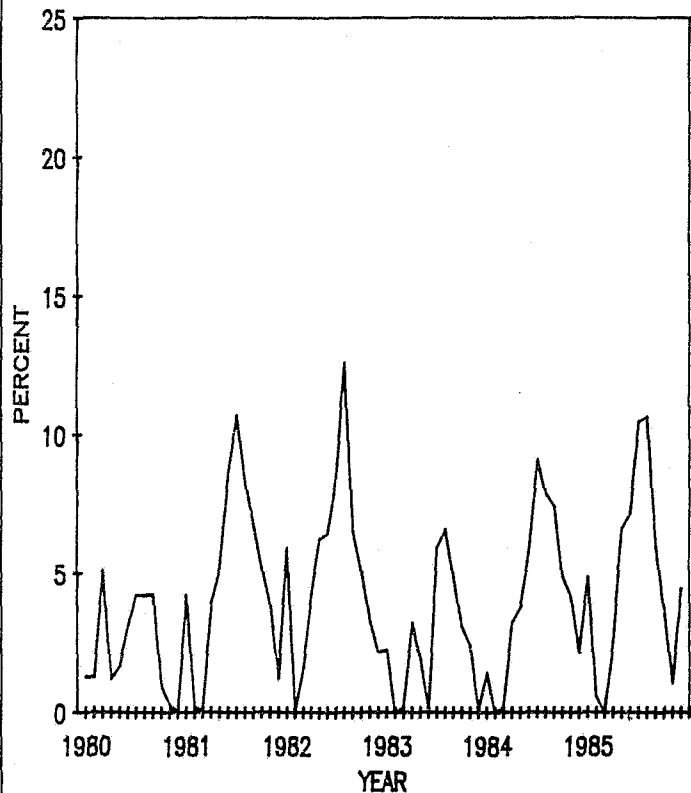TOTAL POPULATION: LINE

WAKULLA COUNTY
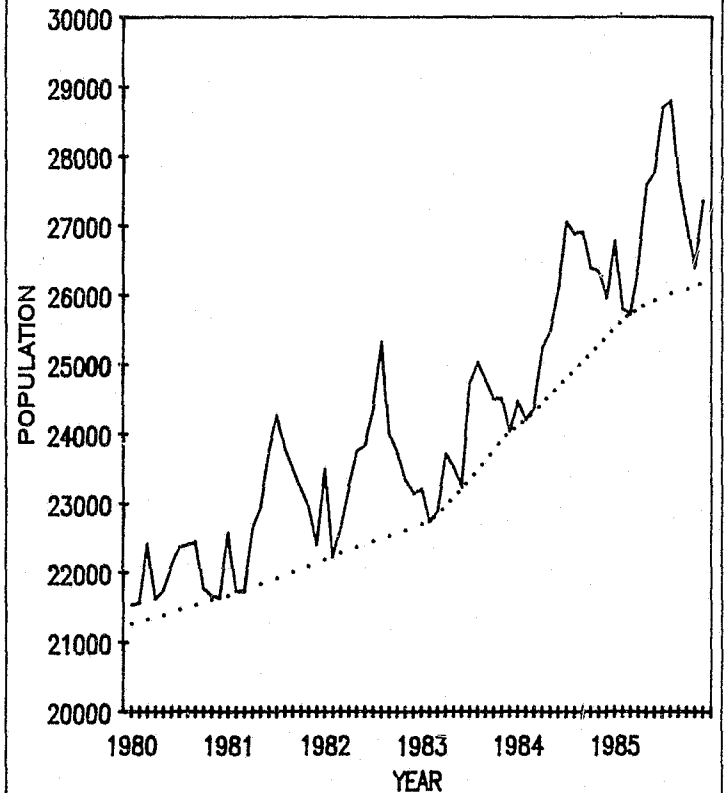POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

WAKULLA COUNTY
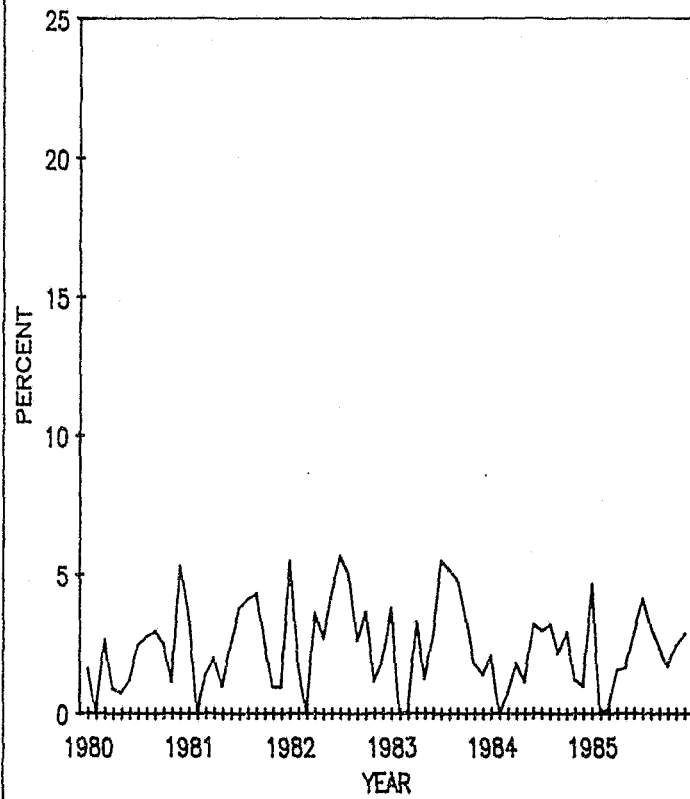RESIDENT POPULATION: DOT
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WALTON COUNTY
POPULATION INFLUX AS A PERCENT
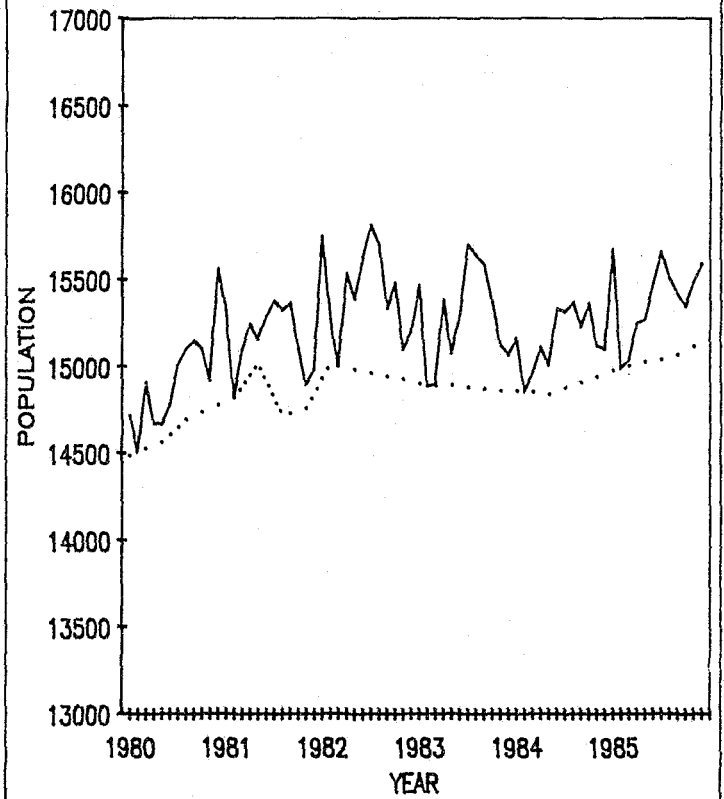OF RESIDENT POPULATION

WALTON COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

WASHINGTON COUNTY
POPULATION INFLUX AS A PERCENT
OF RESIDENT POPULATION

WASHINGTON COUNTY
RESIDENT POPULATION: DOT
TOTAL POPULATION: LINE

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_____ **Florida Visitor Study 1982.** (Tallahassee: Florida Department of Commerce, 1982)

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_____ **Florida Visitor Study 1985.** (Tallahassee: Florida Department of Commerce, 1985)

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