

TRENDS IN COMMITMENTS
TO CORRECTIONAL INSTITUTIONS
AN ANALYSIS FROM 1935 TO 1977

Prepared by
Charles Metzler
Manager of Data Processing

Massachusetts Department of Correction

William T. Hogan
Commissioner

November, 1979

PUBLICATION # 11601-24-250-11-79-C.R.

APPROVED BY: Alfred C. Holland
State Purchasing Agent

INTRODUCTION

In recent years, there has been a marked increase in the amount of public attention focused on our system of correctional services. One Criminologist contends that this public attention stems from various sources among which are the civil rights movement, public insecurity and fear of crime on the streets which culminated in increased public support for law and order, the reported rise in crime rates, increasing prison populations and thus prison overcrowding, and an increase in prison unrest and disturbances (i.e., Attica 9/71).¹ A result of this attention has caused a series of theoretical discussions and proposed alternatives (Morris 1974; Fogel 1976; Wilson 1977; and Silberman 1978). In addition, there has been a series of state and federal procedural reforms with the implementation of federal programs such as the Law Enforcement Assistance Act and the National Advisory Commission on Criminal Justice Standards and Goals. An example of this federal influence on individual states has been Massachusetts.

The state of Massachusetts underwent a major change in its correctional policies with the passage of the Correctional Reform Act of 1972. Included in this act were programs such as pre-release and furloughs. Other reforms such as the decriminalization of drunkenness and the deinstitutionalization of the juvenile correctional system, were enacted. With these reforms a major responsibility of the Department of Correction has been to examine the effects of these programs and changes.² Among these studies has been the continuation, expansion and refinement of the Annual Statistical Reports which describe characteristics of our prison populations. However, little effort has been made which focuses on

¹ See: Ohlin, 1973

² See: Wittenberg, 1977

specific inmate population changes independent of program effects even though data has been consistently provided since 1935.

The purpose of this report is to identify such trends. Data about Massachusetts court commitments to correctional institutions has been systematically collected since 1935 on a number of variables. Over the years, some variables were no longer collected (i.e., behavioral deviations, nativity) while other new variables were added (i.e., race, age at first arrest). The data, which has been consistently collected for at least 10 years, was chosen for analysis to discover discernible trends. These data elements collected each year are: the total number of commitments to the institution committed to (which implicitly implies the offender's sex), offense, sentence, age at commitment, prior incarcerations, and educational level. The tools for analysis include time series analysis and two statistical tests for trend detection. It is hoped that this identification of trends will be useful for a better understanding of system changes that have occurred in Massachusetts prison populations over the past 42 years.

METHODOLOGY

Sample. For the purpose of the present analysis, a sample was drawn consisting of all court commitments to Massachusetts correctional institutions from the years 1935 to 1977. This resulted in a total number of 39,881 individuals.

Data. While a wide variety of information on offenders has been collected over the years by the Department of Correction, only a few common variables have been systematically collected. One set of variables was chosen which was consistently available from the years 1935 to 1977. This set of data consists of the total number of yearly court commitments, the institution of commitment, and information regarding the offenders' age, offense, and sentence. A second set of variables was chosen which was consistently available from the years 1964 to 1977. This set of data includes information regarding whether or not an offender had prior incarcerations and his/her educational level. Both sets of data were collected from the Massachusetts Department of Correction Yearly Statistical Reports.

Procedure. Time series analysis was applied to the total of court commitments to Massachusetts Correctional Institutions to investigate the existence of a trend. The time series analysis was also applied to the total number of commitments to each of the three committing institutions. Time series analysis consists of the determination of the trend line (method of least squares) and the utilization of a procedure to determine cycles.¹

¹ Seven-year moving averages (SEE: Spiegel, 1966 Pp 283-288)

Two statistical tests² were employed to determine if significant trends exist for each of the following variables: offense, sentence, age at commitment, prior incarcerations, and educational level. These two tests were computed on the percentage of the total population, not on the raw numbers themselves. The percentage was used to gain a better measure of the trend by reducing the impact of shifts in population totals.

² These tests are Daniel's Test and the Mann-Kendall Test (SEE: Bradley, 1968)

FINDINGS

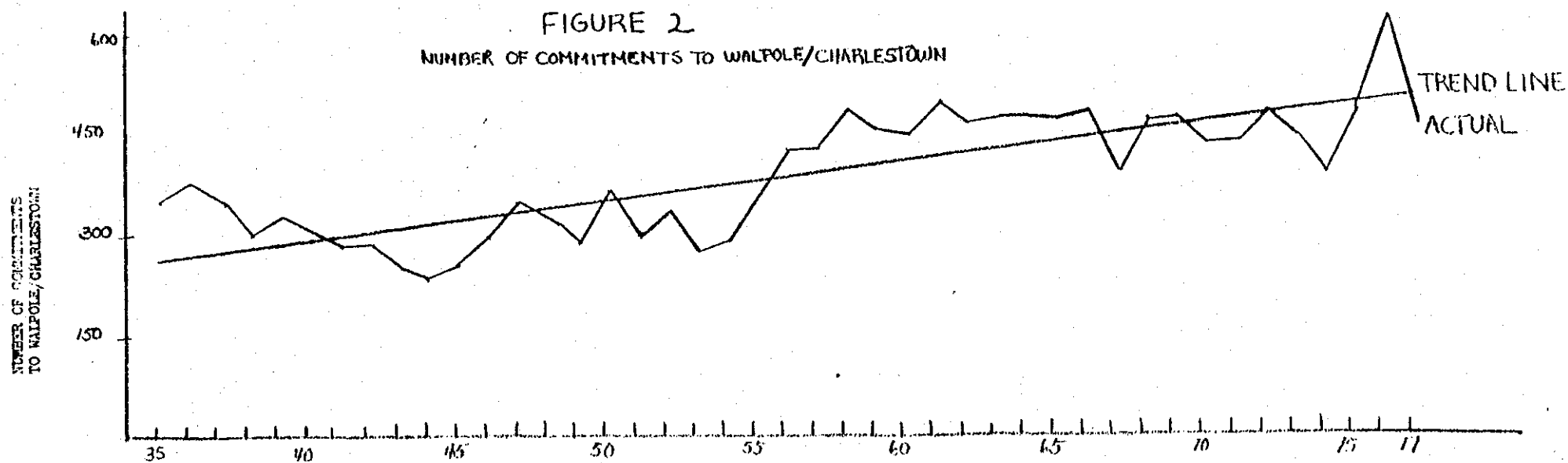
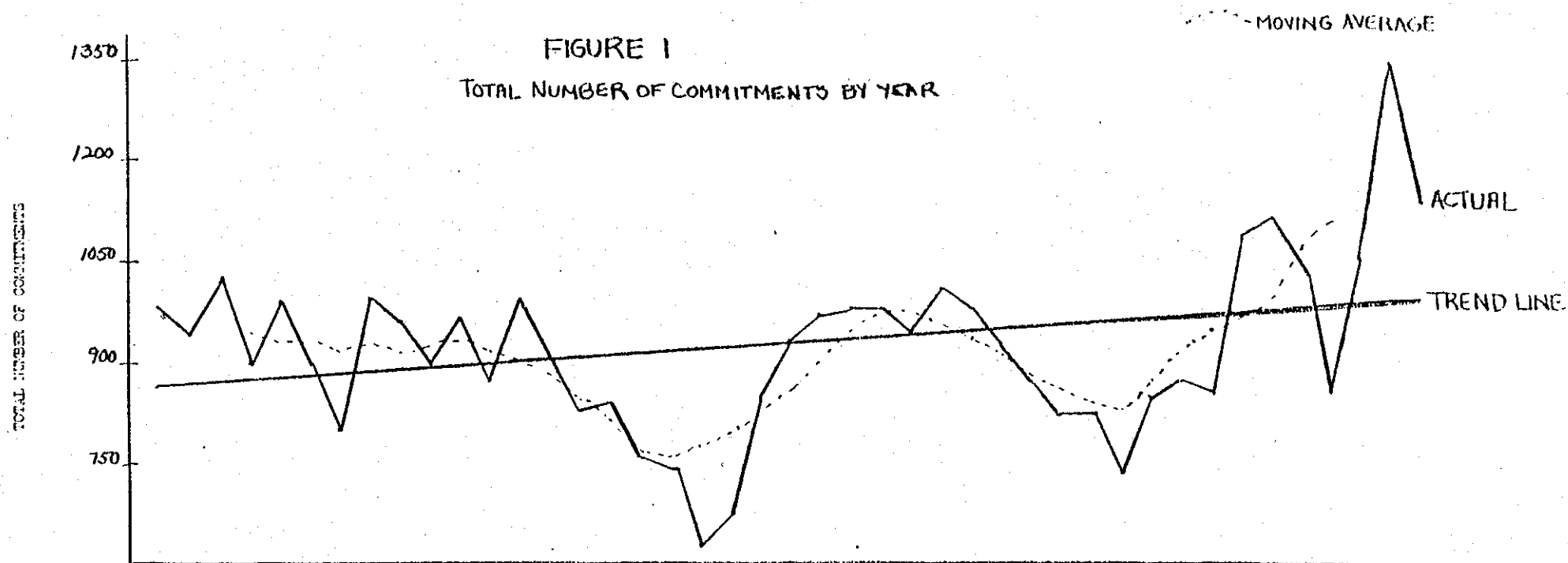
Overall Population Trends

In terms of trends in overall population levels, it was found the number of commitments has increased from 1935 to 1977. The total number of commitments by year is graphically presented in figure 1. Figure 1 also contains the trend line and seven year moving averages. The trend line of this graph illustrates a slight upward trend (correlation = .26). The broken line represents seven year moving averages which reveal four cycles. (1) A general decrease in commitment totals occurred until the early 1950's. (2) From that time until 1960 Massachusetts experienced increasing commitment populations. (3) This is followed by a seven year decrease in commitment populations. (4) Recently however, there has been an increasing number of court commitments to the correctional institutions. Also noteworthy are the apparent drops in commitments during the early 50's, the mid 60's and in 1974. These first two decreases occurred during the Korean and Vietnam wars. In 1974, Massachusetts held a moratorium on court commitments so that many new commitments were held in a house of corrections until room in the major institutions was available. This might explain the sudden drop in the year 1974 and the backlog created by this moratorium might explain the large increase occurring in the year 1976.

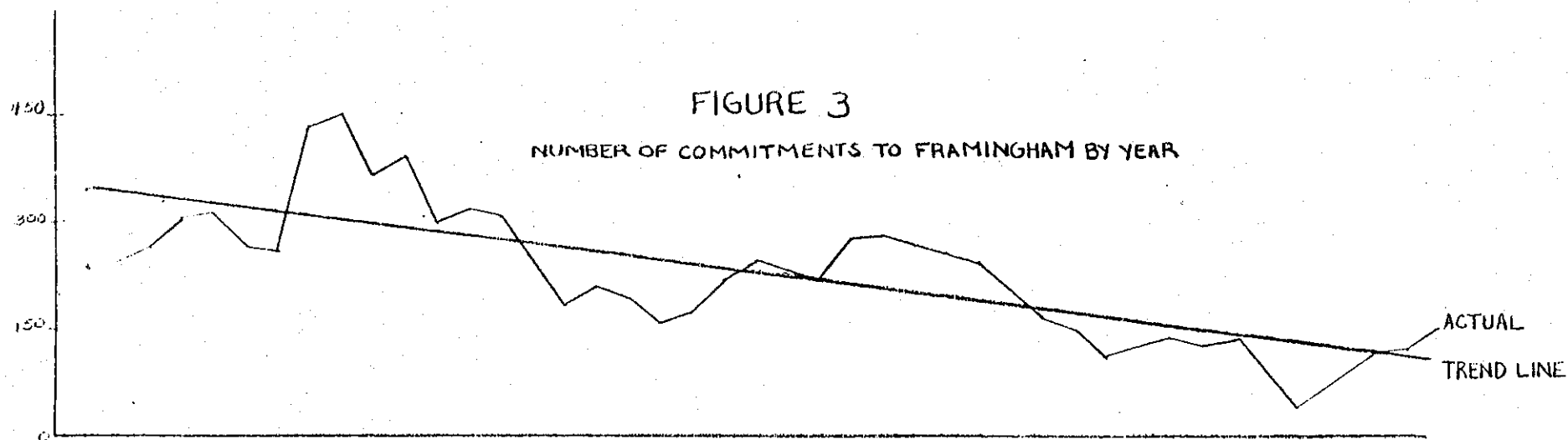
When analyzing commitment totals for specific committing institutions it should be noted that individuals must be committed to one of three correctional institutions. All women are committed to Framingham. Men are committed either to the state prison or to the reformatory. Less serious and younger offenders tend to be sentenced to Concord reformatory while others are committed to the

state prison. It is also important to mention that the site of the state prison was changed from Charlestown to Walpole in 1956.

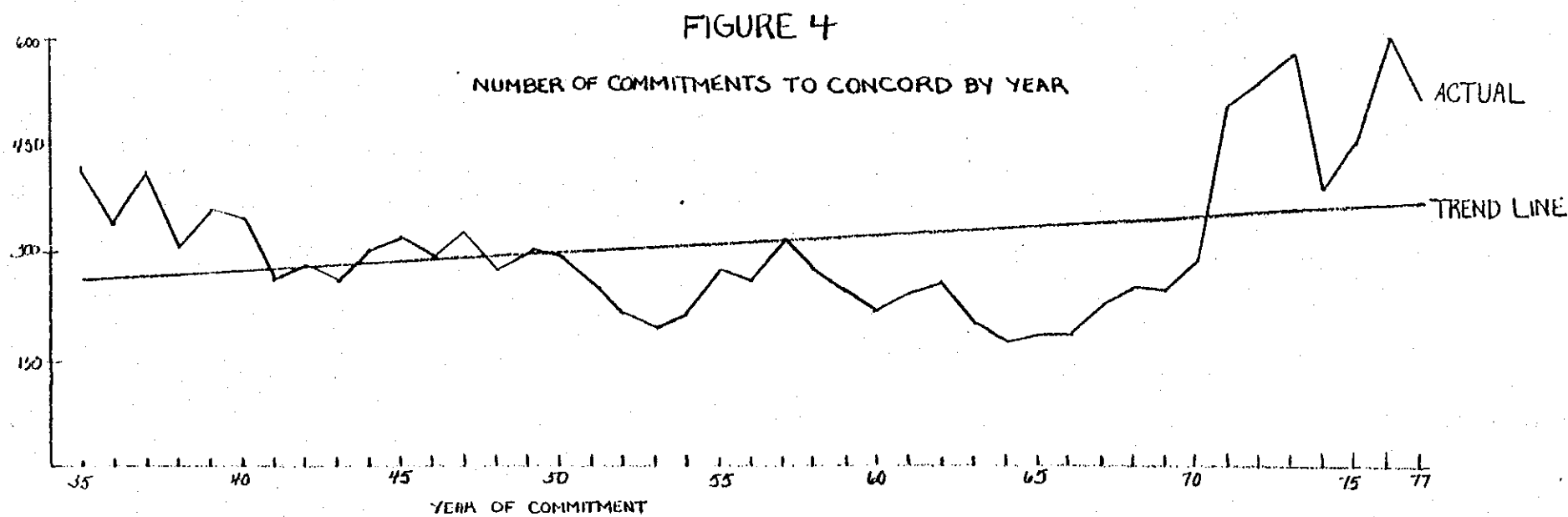
It was found that commitments to Charlestown/Walpole exhibited an upward trend for the period of study while commitments to Concord increased slightly and commitments to Framingham decreased. Figure 2 graphically reveals the upward trend for commitments to Charlestown/Walpole (correlation = .79). Figure 3 graphically denoted the strong downward trend for commitments to MCI-Framingham (correlation = .75). In 1973, only 48 women were committed to Framingham. This is the year after Massachusetts decriminalized drunkenness. Finally, figure 4 graphically reveals the slight upward increase in commitments to MCI-Concord (correlation = .28).



NUMBER OF COMMITMENTS TO FRAMINGHAM



NUMBER OF COMMITMENTS TO CONCORD



Trends in Offense

Analysis of the offense committed revealed significant trends. For men, this analysis considered the following offense categories: murder, manslaughter, armed robbery, unarmed robbery, other person offenses, rape, other sex offenses, burglary, other property offenses, drug offenses and all other offenses. For women committed to Framingham the following offense categories were considered: murder, manslaughter, armed robbery, unarmed robbery, other person, burglary, other property offenses, drug offenses, drunkenness offenses, prostitution, and all other offenses. Table I below summarizes the trends.

TABLE I
TREND IN OFFENSE

<u>OFFENSE</u> <u>CATEGORY</u>	<u>CHARLESTOWN/</u> <u>WALPOLE</u>	<u>CONCORD</u>	<u>FRAMINGHAM</u>
Murder	Upward	N/A	*
Manslaughter	Upward	Upward	Upward**
Armed Robbery	Upward	Upward	Upward**
Unarmed Robbery	Downward	No Trend	No Trend
Other Person Offenses	Upward	Upward	Upward**
Rape	Downward	No Trend	N/A
Other Sex Offenses	Downward	No Trend	N/A
Burglary	Downward	Downward	Slight Upward
Other Property Offenses	Downward	Downward	Upward
Drug Offenses	Upward	Upward	Upward
Drunkenness Offenses	N/A	N/A	Mixed
Prostitution	N/A	N/A	Upward
All Other	Downward	Downward	Strong Downward

* A total of 17 women have been committed for Murder in 43 years.

** Although upward trends occur in the percentage of women committed for Manslaughter, Armed Robbery and Other Person Offenses, the actual number of women in these categories is never more than 20 in a given year.

Court commitments to Charlestown/Walpole increased over the years for the offense categories of murder, manslaughter, armed robbery, other person offenses, and drug offenses. The most notable of the increases were for armed robbery and drug offenses. For instance, in 1943, only 9% of the commitments were convicted for armed robbery compared to 30% of the commitments in 1976. There were no commitments for drug offenses in the years 1935, 1937, 1938, 1941 to 1946, and 1948 to 1951. However, the percentage of commitments for drugs rose steadily until 1972 where a high of 17% of the total commitments were for drugs. Since 1972 the percentage of commitments for drug offenses has decreased to 7% in 1977. On the other hand, the percentage of individuals sentenced to the state prison (Charlestown/Walpole) decreased for the offense categories of unarmed robbery, rape, other sex offenses, burglary, other property offenses, and the category of "other offenses". It should be noted however, that the decrease in rape and other sex offenses commitments may be attributable to the opening of the sexually dangerous persons treatment center in 1958.

Court commitments to Concord reformatory have also changed in regard to offense. Upward trends are noted for individuals convicted for manslaughter, armed robbery, the other person offenses category, and for drug offenses. The largest increases in Concord commitments were for armed robbery and drug offenses revealing trends similar to those for state prison commitments. In 1942, only 6% of the commitments were for the offense of armed robbery while nearly half (43%) of the 1977 commitments were convicted for this offense.

No one was committed to Concord for drug offenses in the years 1935 to 1947, 1949 to 1951, 1959, 1960, 1963 and in 1964; however, by 1971, 18% of the commitments were convicted for drug offenses. This percentage has since decreased to 4% during 1977. There have been fewer Concord commitments for burglary, other property offenses and for the category of "other offenses" over the years. For example, nearly half (44%) of the 1936 court commitments were for burglary while only 8% of the 1977 Concord commitments were committed for this same offense. No significant trends were found for unarmed robbery, rape and other sex offenses.

Offenses committed by females sentenced to MCI-Framingham have changed over the period from 1935 to 1977. Female commitments have increased over the years for the offenses of manslaughter, armed robbery, the "other person offenses" category, burglary, the "other property offenses" category, drug offenses, and for prostitution. The most notable of the upward trends are for the "other property offenses" category, drug offenses and prostitution. Only 2% of the 1937 female commitments was for "other property offenses" compared to 30% in 1977. No women were committed for drug offenses in the years 1943, 1945, 1949 and 1950 but one third of the commitments in 1973 were sentenced for drugs. Similar to the findings for drug offenders, no women were sentenced for prostitution in 1946, 1948 to 1951, 1959 and 1960; however, 21% of the women committed in 1976 were committed for prostitution. No significant trend was documented for women convicted of unarmed robbery over the years. The number of women sentenced to MCI-Framingham for drunkenness rose from 25% in 1945 to a high of 56% in 1962. From 1962 to 1973 the percentage

of commitments for drunkenness declined until the decriminalization went into effect in 1972. The biggest decline for women commitments occurred in the "other offenses" category. In 1945, over 2/3 (69%) of women commitments were for "other" offenses while 7% of the 1972 female court commitments were for these offenses. This decline may be attributed to the decriminalization, and non-prosecution of certain offenses such as abortion, fornication and lewd and lascivious cohabitation. Also noteworthy is the small number of women convicted of murder (a total of 17 commitments in over 40 years).

Trends in Sentence

The analysis of the sentences received revealed significant trends. For Charlestown/Walpole commitments, the analysis considered the minimum sentence. All Concord sentences and most Framingham sentences have an indeterminate minimum sentence, the maximum sentence was analyzed for these women and younger, less serious male offenders. The following sentence categories were selected for analysis: 1 year or less, 2 years, 3 to 6 years, 7 to 10 years, 11 to 12 years, 13 to 18 years, 19 years or more, life and death. Table II below summarizes the trends.

TABLE II
TRENDS IN SENTENCE

<u>SENTENCE CATEGORY</u>	<u>CHARLESTOWN/ WALPOLE</u>	<u>CONCORD</u>	<u>FRAMINGHAM</u>
1 Year or Less	No Trend	No Trend	Upward
2 Years	No Trend	No Trend	Downward
3-6 Years	Downward	No Trend**	No Trend
7-11 Years	No Trend	Upward	Upward
11-12 Years	No Trend	Upward***	****
13-18 Years	Upward	Upward***	****
19 or More Years	Upward	Upward	****
Life	Upward	N/A	*****
Death	*	N/A	Never Occurred

* A total of 72 men have received the death penalty since 1935.

** Over the past 15 years there is a strong downward trend with this category.

*** Always less than 1% of commitment population until 1973.

**** From 1935 to 1970 only 37 women received sentences of over 10 years.

***** Only 12 women have been sentenced to life since 1935.

State prison commitments are receiving longer sentences now than in the past. Upward trends occur for all sentences of 13 years or more and with life sentences. For example, in 1936 only 1% of the commitments

were sentenced to life whereas 14% of the commitments in 1975 were sentenced to life. A downward trend occurred only for minimum sentences of 3 to 6 years. No trend was documented for the categories of 2 years, 7 to 10 years, and 11 to 12 years. Only 14 individuals have been committed to the state prison with sentences of less than 1 year. Also noteworthy is the fact that a total of 72 men have received the death penalty since 1935.

Commitments to the Concord reformatory are receiving longer sentences now than in the past. Until the early 1970's approximately 90% of Concord commitments received a 5 year maximum sentence. However, since the early 1970's there is a large decline in 5 year sentences (28% in 1977).

Unlike the trends observed for male commitments, females are receiving shorter sentences now than in the past. For example, in 1945 only 25% of the female commitments received a sentence of 1 year or less compared to 60% in 1977. Noteworthy, is the fact that only 37 women received sentences over 10 years from 1935 to 1970. Whereas from 1971 to 1977, 81 women received these longer sentences. Therefore, the trend of shorter sentences appears to be reversing during the 1970's. Also noteworthy is the low number of women committed to a life sentence (a total of 12 individuals in over 40 years) and the absence of any women committed to death.

Trends in Age at Commitment

Analysis of an individual's age at incarceration revealed significant trends. This analysis considered the following age categories: 15 or less, 16, 17, 18, 19, 20, 21-24, 25-29, 30-39, 40 and over. Table III below summarizes the trends.

TABLE III
TRENDS IN AGE AT COMMITMENT

<u>AGE CATEGORY</u>	<u>CHARLESTOWN/ WALPOLE</u>	<u>CONCORD</u>	<u>FRAMINGHAM</u>
15 or Younger	*	No Trend	***
16	No Trend	Downward	****
17	No Trend	Downward	No Trend
18	Upward	Downward	No Trend
19	Upward	No Trend	Upward
20	No Trend	No Trend	No Trend
21-24	Upward	Upward	No Trend
25-29	Upward	No Trend	No Trend
30-39	No Trend	Upward	Downward
40 and Older	Downward	**	No Trend

* A total of 14 individuals aged 15 or younger have been committed to the state prison since 1935.

** A total of 77 individuals age 40 and older have been committed to Concord since 1935.

*** A total of 5 women aged 15 or younger have been committed since 1935.

**** A total of 54 women aged 16 year old have been committed since 1935.

The age distribution of commitments to the state prison has changed over the years. The trend has been toward more commitments at younger ages and fewer commitments at older ages. Upward trends have occurred in the age categories of 18, 19, 21-24, and 25-29. For example, only 16% of commitments were between the ages of 25 and 29 in 1939 while 31% of the 1977 commitments fell in this age group. The only age group experiencing downward trend is the 40 years and over category. In 1944, 34% of the commitments to Charlestown fell in

6
this age group as compared to 8% committed to Walpole in 1976.

No significant trends have been documented in four of the age groups (16, 17, 20 and 30-39). It is interesting to note that in 43 years only 14 juveniles have been bound over, convicted as adults and committed to the state prison.

Although the age distribution of Concord commitments has changed over the years, the trend is contrary to that found with commitments to Charlestown/Walpole. That is, there are fewer commitments at younger ages and more commitments at older ages. Significant decreases are observed for the age groups 16, 17, and 18. Conversely, significant increases are found for the age groups 21-24 and 30-39. The more notable increase occurs in the 21-24 age group. In 1943 only 19% of the Concord commitments fell in this age group, compared to 39% of the 1972 commitments. Age groups with no significant change occurred for the 15 or younger, 19, 20, and 25-29 year olds. Only 77 individuals have been committed to Concord who were 40 or older in this 43 year period.

The trends in the age distribution of female commitments differ from the trends found in both of the institutions where males are committed. The age distribution for women has remained remarkably stable over this 43 year period. The only significant changes occurred in the 19 years age group and the 30-39 years age group. Also interesting is the low number of girls bound over and committed as adults. Only five juveniles have been committed at age 15 or less and only 54 individuals were committed at age 16 for the entire 43 year period.

Trends in Prior Incarcerations

Trends regarding an individual's prior incarcerations were analyzed using three factors. These factors are (1) the percent of commitments who were currently serving their first incarceration, (2) the percent of commitments who had previously served one or more juvenile commitments, and (3) the percent of commitments who had served one or more prior state or federal incarcerations. Table IV below summarizes the findings.

TABLE IV
TRENDS IN PRIOR INCARCERATIONS

<u>TYPE OF PRIOR INCARCERATION INDICATOR</u>	<u>WALPOLE</u>	<u>CONCORD</u>	<u>FRAMINGHAM</u>
First commitments	Upward	Upward	Upward
Commitments with one or more juvenile commitments	Downward	Downward	No Trend
Commitments with one or more prior state or federal incarcerations	Slight Downward	No Trend	Slight Upward

Commitments to the state prison at Walpole have fewer prior incarcerations now than in the past. In 1966, 22% of the commitments had no prior incarcerations while 39% of commitments had no prior incarcerations in 1973. Along the same lines, 37% of commitments in 1968 had experiences in juvenile facilities and this percentage dropped to 27% in 1975. The same trend can be seen for commitments to Walpole with prior state or federal incarcerations.

The trends for Concord commitments with prior incarcerations are similar to the trends occurring for Walpole commitments in that more individuals have no prior incarcerations now than in the past,

and fewer individuals now have prior juvenile incarcerations. However, the Concord commitments differ from Walpole commitments since no trend occurs for individuals with prior state or federal incarcerations. The percent of Concord commitments serving their first commitment ranges from 28% in 1966 to 71% in 1971. Also, the percent of commitments who were committed to DYS has ranged from 52% in 1966 to 17% in 1971.

The trends for female commitments to Framingham differ between the three factors which were analyzed for prior incarcerations. On one hand, more of the female commitments are serving their first incarceration now than was the case in the past (35% in 1965, 69% in 1973). On the other hand, more of the female commitments have had prior state or federal incarcerations now than in the past (10% in 1969, 27% in 1973). Coupled with the fact that no trend has occurred for women with prior juvenile incarcerations, it would appear that women are serving fewer county incarcerations.

Trends in Education

Trends in education were analyzed using an individual's last grade completed. The analysis revealed significant trends. The grade level groups which were analyzed are: 5th grade or less, 6th through 8th grade, 9th through 11th grade, high school graduate, some college and college graduate. Table V summarized the trends.

TABLE V
TRENDS IN EDUCATIONAL LEVEL

<u>GRADE LEVEL CATEGORY</u>	<u>WALPOLE</u>	<u>CONCORD</u>	<u>FRAMINGHAM</u>
5th or Less	Downward	Downward	Downward
6th Through 8th	Downward	Downward	Downward
9th Through 11th	No Trend	No Trend	No Trend
High School Graduate	Upward	Upward	Upward
Some College	No Trend	Upward	No Trend
College Graduate	*	**	***

* A total of 54 commitments were college graduates in this 14 year period.

** A total of 19 commitments were college graduates in this 14 year period.

*** A total of 6 women were college graduates in this 14 year period.

Walpole commitments have higher grade levels now than in the past. Downward trends occur for individuals who completed the 8th grade or less, an upward trend is evident for commitments who graduated high school. In 1966 only 6% of the commitments graduated high school while in 1975, 26% fell in this category. No trend was documented for individuals who fall in the 9th through 11th grade completed and in the some college category.

The same trends occurring for Walpole commitments occur for Concord commitments except for the upward trend for Concord commit-

ments with some college. For instance, in 1964 only 5% of commitments were high school graduates and by 1975, 22% fell in this category.

The grade level distribution for female commitments experienced similar trends as those of Walpole. That is, downward trends occur in commitments with an 8th grade level or less, no trend occurs for commitments with 9th through 11th grade levels, and an upward trend has occurred for commitments who have graduated high school. It is interesting to note that only six college graduates were committed in this 14 year period.

DISCUSSION

This report shows that the number of commitments to Massachusetts correctional institutions has increased slightly over the years 1935 to 1977. While the number of males committed to the state prison and Concord reformatory increased, the number of female commitments substantially decreased. Significant trends have also occurred in the following variables: offense, sentence, age at commitment, prior incarcerations and educational level. These trends are summarized below.

For the offense variable, upward trends occur for all offenders convicted for offenses against the person and drug offenses. In addition, upward trends occur for women convicted for offenses against property and for prostitution.

For the sentence variable, men committed to the state prison and to Concord reformatory are receiving longer sentences now than in the past, while females have a mixed trend. Women with sentences of one year or less and with sentences that fall between seven and ten years show an upward trend, whereas a downward trend occurs for women sentenced for 2 years.

For the age at commitment variable, the trends differ in regard to the institution committed to. More men are committed to the state prison at younger ages now than in the past. The trend for women is similar to the trend for men committed to the state prison; however, more men are sentenced to the Concord Reformatory at older ages now than in the past.

For the prior incarcerations variable, the trends differ in regard to the institution committed to. Male commitments to the state prison and the reformatory have fewer prior incarcerations now than in the past. Females have a mixed trend for this variable. While the percent of women committed who were serving their first incarceration has increased over the years, a slight upward trend occurs for female commitments who had served prior state or federal incarcerations.

Finally, there has been an upward trend in the educational level of commitments over the years. There are more commitments who are high school graduates now than in the past.

BIBLIOGRAPHY

- Bradley, James. Distribution Free Statistical Tests. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1968.
- Fogel, David. We are the Living Proof. New York: Anderson Publishing Company. 1976.
- Morris, Noval. The Future of Imprisonment. Chicago: University of Chicago Press. 1974.
- Ohlin, Lloyd. Prisoners in America. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1973.
- Silberman, Charles. Criminal Violence. Criminal Justice. New York: Random House. 1978.
- Speigal, Murray. Theory and Problems of Statistics. New York: McGraw Hill, Inc. 1961.
- Wilson, James Q. Thinking About Crime. New York: Random House. 1977.
- Wittenberg, Shari. Massachusetts Department of Correction Review of Current Research. Boston, MA. 1974.