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**CORRECTIONAL ALCOHOL TREATMENT CENTERS:  
AN IMPACT EVALUATION**

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**December, 1989**

**PUBLICATION #: 16,159-47 pgs.-250 cps.-01-90**  
**Approved By: Ric Murphy State Purchasing Agent**

U.S. Department of Justice  
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## ABSTRACT

In the wake of increased commitments to county houses-of-correction for drunk driving in recent years, the Commonwealth of Massachusetts established three correctional alcohol treatment centers which are designed to detain and provide alcoholism education and treatment to multiple drunken driving offenders. These alternatives to houses-of-correction were viewed as the best way of dealing with the repeat OUI offender in that a merger of incarceration and alcohol treatment would make it more likely that OUI offenders would be sentenced and treated for their drinking problems than would be the case with incarceration only.

This report presents results from an impact evaluation of two of those correctional alcohol treatment facilities: the Longwood Treatment Center in Boston and the Western Massachusetts Correctional Alcohol Center (WMCAC) in Springfield. The purpose of this study was to assess the impact of correctional alcohol treatment on the recidivism (reincarceration) and rearrest rates of multiple OUI offenders released from these facilities. The Middlesex County Jail and House of Correction in Billerica was selected as a comparison (non-treatment) site for purposes of measuring impacts at the two correctional alcohol treatment centers. Three post-release follow-up periods were employed in the study: twelve, eighteen and twenty-four months.

The major finding which emerges from this study is that the Longwood Treatment Center has a statistically significant lower recidivism rate at each post-release follow-up period than either the Western Massachusetts Correctional Alcohol Center or the Middlesex County Jail and House of Correction. For example, at the 12 month follow-up, the Longwood recidivism rate was 6.6% compared to a rate of 15.6% at the Western Massachusetts Correctional Alcohol Center and 15.9% at the the Middlesex County Jail and House of Correction. Similarly, Longwood had the lowest rearrest rate at each follow-up period although the differences between Longwood and the two other facilities were not always statistically significant. The differences between the 12 and 18 month recidivism and rearrest rates at WMCAC and Billerica were not statistically significant. A new OUI offense was the offense which most frequently accounted for recidivism and rearrest across all facilities and all follow-up periods.

These results provide evidence of the positive impact of Longwood's correctional alcohol treatment as documented by lower rates of recidivism and rearrest among Longwood releasees. By contrast, the research was not able to document a treatment effect at the Western Massachusetts Correctional Alcohol Center as its recidivism and rearrest rates were not significantly different than those documented for Billerica releasees.

On the basis of these findings, the following recommendations are offered: 1) further research on WMCAC and Longwood; 2) re-consideration of the target population at WMCAC; and, 3) continued emphasis on the aftercare component at Longwood and WMCAC.

## TABLE OF CONTENTS

	Page
<b>I. INTRODUCTION</b>	1
Historical Background	2
<b>II. FACILITY DESCRIPTION</b>	5
Longwood Treatment Center	5
Western Massachusetts Correctional Alcohol Center	7
The Middlesex County Jail and House of Correction	8
Post-Program Recidivism Among OUI Offenders: A Review	9
<b>III. RESEARCH METHODOLOGY</b>	12
Research Objectives	12
Research Questions	12
Sample	13
Identifying the Multiple OUI Offender	16
Sample Characteristics	17
Socio-Demographic Characteristics	18
Post-Program Outcomes: Re-arrest and Recidivism	20
Recidivism Data	22
Rearrest Data	22
Some Caveats on the Research	23
<b>IV. RESULTS</b>	26
Recidivism Rates: 12, 18 and 24 Months	26
Recidivism by New Offense	29
Rearrest Rates: 12, 18 and 24 Months	30
Rearrests by New Offense	34
<b>V. CONCLUSIONS AND RECOMMENDATIONS</b>	37
Summary and Conclusions	37
Discussion	38
Recommendations	42
<b>VI. REFERENCES</b>	46

## TABLES

	Page
Table 1: Sample Size by Facility and Follow-up Period	14
Table 2: Selected Characteristics of Offenders	19
Table 3: Recidivism Rates by Releasing Institution and Follow-up Period	28
Table 4: Type of Return by Facility and Follow-up Period	31
Table 5: Rearrest Rates by Releasing Institution and Follow-up Period	33
Table 6: Offense for Which Arrested by Facility and Follow-up Period	36

## I. INTRODUCTION

In 1987, the Research Division of the Massachusetts Department of Correction completed an evaluation study of the Longwood Treatment Center, the state's first minimum security prison designed exclusively to detain and provide alcoholism education and treatment to multiple drunk driving offenders. In light of the newness of the concept of "correctional alcohol treatment center," the focus of this study was on evaluating program processes (LeClair, Felici, and Klotzbier, 1987). Specifically, the study objectives were to: determine if the program was implemented as planned and served the correct target population; analyze the various costs of the Longwood program; provide feedback to program administrators concerning implementation and operation issues; and, obtain preliminary measures of program success.

In regard to this last objective, it was revealed that relatively few individuals completing the program were rearrested and reincarcerated within one year of release. Specifically, 6% (6) of 99 program completers were reincarcerated within one year of their release which compared very favorably to a department wide recidivism rate of 27% and to a rate of 18% for other minimum security level institutions.

The study, although not intended as a formal outcome evaluation, concluded that preliminary findings suggested that the Longwood program was effective in reducing recidivism of multiple drunk driving offenders. Because of the small number of program completers available for study and the consequent preliminary nature of the outcome findings, it was recommended that a further formal outcome evaluation study utilizing a larger sample size be conducted. This report presents

the results from a post-program outcome evaluation of the Longwood Treatment Center and two comparison facilities: the Western Massachusetts Correctional Alcohol Center in Springfield and the Middlesex County Jail House of Correction in Billerica. Before describing each of these facilities, a brief historical background to the establishment of correctional alcohol treatment centers is provided.

### HISTORICAL BACKGROUND

The original impetus for the establishment of correctional alcohol treatment centers was the 1982 "Act to Increase the Penalties for Operating a Motor Vehicle While Under the Influence of Intoxicating Liquors." This law provided for alcohol education, counseling programs, residential treatment programs in public health settings, and increased certainty of punishment for repeat offenders by mandatory incarceration in county correctional facilities. One effect of strict enforcement of the 1982 law was a dramatic increase in Operating Under the Influence (OUI) commitments to county correction facilities. Within one year of the law, 25% of county jail and house of correction commitments were OUI offenders which exacerbated already severely overcrowded conditions (Forcier et al., 1986).

A second effect of the law was that the rapid influx of OUI offenders into the county system led to significant change in the demographic profile of the county population. As a group, OUI offenders were found to be older, more educated, more likely to be married and receive shorter sentences when compared to other county commitments (Williams, 1984). Moreover, the typical OUI offender was found to be a chronic alcohol abuser with a non-criminal background except for

alcohol-related offenses (Moore, 1985).

Third, these demographic changes in the county population had serious policy and programmatic implications for the system. A lack of programs and financial resources, and overcrowding, coupled with the relatively short nature of OUI sentences meant that the county correctional system of incarcerating OUI offenders only served a custodial and punitive function. This was found by research to fail in deterring repeat OUI offenders for three reasons. First, the law's progenitors did not foresee the overrepresentation of chronic alcoholics among convicted drunk drivers. It has been determined that incarceration alone has a minor rehabilitation effect, if any, on this segment of the drunk driving population. Second, the typical OUI offender and the typical non-OUI offender were thought to differ substantially on a number of demographic variables (Williams, 1984). Judges were reluctant to take otherwise law-abiding citizens and incarcerate them with other types of criminals. As a result, some OUI offenders were circumventing the system and not being sent to county houses of correction at all. Third, research conducted both within the state and nationally indicated that 30%-40% of the total OUI population were repeat OUI offenders (Brown et al., 1984; National Transportation Safety Board, 1984; Beerman et al., 1988).

It became increasingly clear that the best prescription for dealing with the repeat OUI offender was through a merger of punishment and alcohol treatment (Goldhammer, 1987) and that the existence of alternatives to county houses of correction made it more likely that OUI offenders would be sentenced and treated for their drinking problems. In response, the Sentencing and Corrections Committee of the Governor's Statewide Anti-Crime Council issued their Preliminary Report on Prison Overcrowding (1983) which recommended the

establishment of three one-hundred-bed statewide facilities to house multiple OUI offenders. These facilities were seen as helping to relieve overcrowding in the county houses of correction while simultaneously providing multiple OUI offenders with alcohol treatment during their period of incarceration. Each facility was to target multiple OUI offenders who would be transfers from county houses of correction where they had begun serving their sentences.

The first of these facilities to be established was the Longwood Treatment Center in Boston which opened in March 1985. In December 1985, the Western Massachusetts Correctional Alcohol Center (WMCAC) opened in Springfield, Massachusetts. The final facility established was the Eastern Massachusetts Correctional Alcohol Center in New Bedford, Massachusetts which began operation in April 1987. This report is focused on the Longwood Treatment Center, Western Massachusetts Correctional Alcohol Center, and a comparison site, the Middlesex County Jail and House of Correction.\* Each of these facilities is briefly described in the next section.

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\* The Eastern Massachusetts Correctional Alcohol Center was not included in this study since it has not been in operation long enough to have generated a release sample of adequate size for purposes of a recidivism study.

## II. FACILITY DESCRIPTION

### Longwood Treatment Center

The Longwood Treatment Center is a 125 bed facility located in Boston, Massachusetts which is operated by the Massachusetts Department of Correction. The primary mission of the Longwood Treatment Center is the detention of multiple OUI offenders. A secondary mission is the provision of alcoholism treatment for this population. The staff at Longwood is comprised of both DOC correctional officers and counselors, and contracted alcoholism treatment counselors. The alcoholism treatment vendor contracted by the DOC for Longwood is Valle Associates of Lynn, Massachusetts.

Eligible candidates are drawn from the population of OUI offenders sentenced to county houses of correction or MCI-Framingham (the state correctional facility for females) for a governing offense of OUI. The specific eligibility requirements include:

- OUI offenders with fines or weekend sentences are ineligible;
- OUI offenders with a record of prior incarcerations for violent offenses, concurrent violent offenses or outstanding warrants for violent offenses are ineligible;
- A maximum of 36 months to parole eligibility; and,
- No medical or detoxification needs.

Those OUI offenders sentenced to county houses of correction or MCI-Framingham are screened at their original correctional placement by a Longwood DOC counselor. If the offender meets the eligibility requirements, he or she may transfer to Longwood although transfer is on a volunteer basis only. Upon arrival at Longwood a DOC counselor conducts an intake evaluation to be used at the initial classification hearing. In the future, the resident will meet with this DOC

counselor for any legal or departmental issues that might arise. New residents are also required to attend an orientation session conducted by a Valle counselor. During this session, the new resident is given a battery of evaluative tests, such as the Minnesota Multiphasic Personality Inventory (MMPI) and the Alcoholism Use Inventory (AUI). At the end of this session, the resident is assigned a Valle counselor. The results of these tests are used by the Valle counselor to design an individualized treatment program for the new resident.

There are three phases in the Longwood Treatment program. Phase I is basically a comprehensive alcohol education program. During this phase, residents are introduced to the disease concept of alcoholism. Attendance at meditations, lectures, group therapy sessions, Alcoholics Anonymous (AA) meetings, discussion groups and spirituality lectures is required. Phase II is designed to help the residents internalize the alcohol education learned in Phase I. Various class exercises are used to achieve this internalization. The emphasis in Phase III is to build an outside support system. This is done primarily by obtaining an outside AA sponsor, establishing an outside AA network, attending three outside AA meetings per week and participating in the Community Restitution Program (CRP) and work release.

In the community restitution program, residents work outside the treatment center on clean-up or horticultural projects. After successful completion of the CRP program, residents are eligible for work-release. The resident may return to a previously held job or secure a new one.

As a condition of their release from the facility, residents are required to sign an aftercare contract. This contract outlines the residents' intention to participate in Alcoholics Anonymous after release, continue with alcohol counseling, secure employment and maintain contact with the Longwood aftercare coordinators.

Western Massachusetts Correctional Alcohol Center

The Western Massachusetts Correctional Alcohol Center (WMCAC) is a 125 bed facility located in Springfield, Massachusetts. It is jointly funded by the Massachusetts Department of Correction and the Hampden County Sheriff's office. It has been in operation since December 1985.

Eligible candidates are drawn from the pool of individuals committed by the courts under the provisions of the Driving Under the Influence of Liquor law (DUIL), as well as other misdemeanants admitted to a house of correction with serious alcohol problems. Individuals are processed through the original county house of correction placement and then, if deemed eligible, transferred to WMCAC. The WMCAC screens and identifies eligible candidates at four county houses of correction: Berkshire County, Franklin County, Hampden County, and Hampshire County. To be considered for the facility, the following eligibility criteria must be met:

- No outstanding criminal warrants;
- No medical needs or needs for detoxification;
- No weekend or evening sentence;
- No prior felony convictions within the past twelve months; and,
- No prior crimes against the person.

Transfer to WMCAC is strictly on a volunteer basis. Should a resident violate the rules of the facility, he or she may be terminated from the program and returned to the original house of correction placement.

Alcoholism Services of Greater Springfield is the treatment vendor. The treatment program is based on a 28 day treatment model referred to as Phase I. Program adjustments are made for offenders with sentence lengths longer or shorter than 28 days. Upon arrival to WMCAC, each resident is assigned a counselor. Assessment information is gathered through interviews, tests and autobiographical narratives. During the first week, the counselor and resident

collaborate to develop an individualized treatment plan based on the assessment results. Individualized treatment plans may include, but are not limited to: alcohol education, counseling (individual, group, family), Alcoholics Anonymous, physical fitness, recreation, nutrition, and other rehabilitative services. As a condition of release, the resident is required to participate in the aftercare program.

The philosophy of treatment at WMCAC appears to be identical to Longwood. Both facilities adopted the Alcoholics Anonymous (AA) model that alcoholism is a disease and abstinence is the only known and advocated method of treating the disease.

#### The Middlesex County Jail and House of Correction

The Middlesex County Jail and House of Correction, which opened in 1930, is a 530 bed facility located in Billerica, Massachusetts. Similar to other county houses of correction, men who are committed there have a maximum sentence length of 2½ years. Men are committed for all types of offenses ranging from OUI to assault and battery to rape of a child. The alcohol treatment available consists of weekly Alcoholics Anonymous meetings, weekly discussion groups led by Alcoholics Anonymous members and weekly films on alcohol and drugs. There are no treatment vendor or alcoholism counselors. The Middlesex County Jail and House of Correction is the largest of the 15 county facilities and receives the largest number of OUI commitments in any given year. In 1987, for example, Middlesex received 531 OUI commitments which represented 26% of their total commitments in that year (Holt and McCarthy, 1988).

Before describing the research methodology for this study, a brief review of research concerned with post-program recidivism of repeat OUI offenders is presented below.

Post-Program Recidivism Among OUI Offenders: A Review

The proceedings from a 1986 conference on OUI recidivism sponsored by the National Commission Against Drunk Driving (1986) noted that few definitive conclusions can be drawn from the research literature on the impact of OUI programs on OUI recidivism. Although it is generally acknowledged that there is no positive (and some negative) empirical evidence for the effectiveness of jail sentences alone for OUI (National Highway Traffic Safety Administration, 1985), as yet no consistent lessons have emerged from evaluations of the impact of various OUI programs on OUI recidivism. Thus, while some studies have indicated positive effects, others have indicated no or negative effects (for reviews, see National Commission Against Drunk Driving, 1986; National Highway Traffic Safety Administration, 1985).

The ambiguous nature of the research findings is partly attributable to at least two major factors. First, there is the (increasing) multiplicity of OUI programs utilizing varying approaches which are too diverse for an overall evaluation. Thus, some programs are primarily educational in nature while others provide alcohol treatment and, still others seek to couple education, incarceration and treatment. Second, many attempts to evaluate OUI programs have been methodologically flawed and thus incapable of accurately measuring program effects. Among these methodological flaws have been: a lack of control or comparison groups; weak or unclear measures of program outcomes or recidivism (e.g., rearrest); the utilization of self-report and attitudinal data; and, the diverse objectives of the programs being evaluated.

Some things are, however, known about this offender population. Research has indicated that approximately 30% - 40% of all persons arrested for drunk driving have a prior OUI conviction and are thus, repeat offenders (Beerman et al.,

1988; National Transportation Safety Board, 1984). It is also well established from research that drivers involved in alcohol-related fatal crashes have a higher frequency of previously recorded accidents, license suspensions and revocations, OUI convictions, speeding convictions and other "harmful moving violations, (U.S. Department of Health and Human Services, 1983).

Despite these commonalities, the population of drinking drivers has been characterized as quite heterogeneous and the profile of the drinking driver described as "inadequate" making the prediction of recidivism risk difficult (Beerman et al., 1988). For example, even among repeat OUI offenders, Beerman et al. (1988) have found significant differences among drivers with different numbers of prior drinking and driving offenses. Thus, drivers with one or two OUI arrests had more nonmoving traffic violations than drivers with three or more OUI arrests. Those OUI offenders with higher levels of arrests were more likely to be unemployed, have a prior criminal record, to operate after license suspension/revocation, refuse a blood alcohol level test, and to be arrested for OUI on weekday afternoons and early evening hours.

Unlike the Longwood and WMCAC programs which combine treatment with incarceration in a correctional facility, research on programs for repeat offenders has generally addressed other types of programs. For example, Siegal's (1985) evaluation of a "Weekend Intervention Program (WIP)", a diagnostic program targeting first and repeat OUI offenders examined its impacts on OUI recidivism and prevention of further alcohol-related traffic accidents. The recidivism measure used in this study was defined as rearrest for any alcohol-related offense within two years. It was found that repeat offenders participating in WIP had a small, but statistically significant, lower recidivism rate (21.8%) than those who were jailed (26.8%) or who received a suspended sentence and/or fine (30.4%).

McCarty and Argeriou (1988) compared 2-year follow-up arrest rates for repeat OUI offenders sentenced to one of two mandated sanctions for second offenders in Massachusetts: a minimum of 7 days in a house of correction versus a 14-day residential alcoholism treatment program. They found that persons admitted to the 14-day program were significantly less likely to be rearrested for OUI than those committed for a minimum of 7 days in a house of correction who were found to be at 1.9 times greater risk of rearrest than those in the residential treatment program. On the basis of these findings, the authors concluded that mandated short-term residential treatment may be effective in preventing further rearrest for OUI among repeat offenders.

While these studies provide encouraging results from short-term interventions for repeat (usually, second) offenders, they do not provide lessons on the efficacy of long-term programs (60 days or longer) which combine treatment and punishment in a correctional setting, and which target multiple OUI offenders as defined as three or more OUI convictions. For this information, we turn to the results of the present study.

### III. RESEARCH METHODOLOGY

#### Research Objectives

The primary objective of this study is to assess the impact of correctional alcohol treatment on recidivism and rearrest rates of OUI offenders. As mentioned previously, an earlier evaluation of the Longwood Treatment Center followed a small sample of 99 releases for 12 months and obtained a recidivism rate of 6% for this cohort (LeClair, Felici, and Klotzbier, 1987). The small sample size, coupled with the lack of a comparison group, however, made it difficult to assess the precise impact of correctional alcohol treatment on post-release adjustment.

The present study assesses program impacts by comparing post-release recidivism and rearrest rates of releases from three facilities: the Longwood Treatment Center; Western Massachusetts Correctional Alcohol Center (WMCAC); and, the Middlesex County Jail and House of Correction. Longwood and WMCAC are the correctional alcohol centers for which program impacts are being measured. The Middlesex County Jail and House of Correction (hereafter referred to as Billerica) was selected as a comparison site for this study.

#### Research Questions

This study addresses the following research questions:

1. What are the rearrest and recidivism rates for persons released from Longwood, WMCAC and Billerica?
2. Are OUI offenders who complete the program at Longwood and the WMCAC less likely to be rearrested and reincarcerated for subsequent OUI offenses than similar OUI offenders released from Billerica?

3. For what types of offenses are releasees likely to be rearrested and reincarcerated?

### SAMPLE

The nature of the sentencing process for OUI offenses precludes random assignment to a correctional alcohol treatment facility versus house of correction. Instead, Longwood and WMCAC screen and select program candidates meeting eligibility criteria from among those persons sentenced to county houses of correction. While this raises methodological problems about "selection bias" and "program creaming" (i.e., selecting the "best" or most motivated treatment candidates), the researcher can only seek to reduce this by "matching" on variables which have the potential to confound treatment effects.

The sample for this study is comprised of multiple OUI offenders released from the Longwood Treatment Center, Western Massachusetts Correctional Alcohol Center, and Middlesex County Jail and House of Correction between January 1, 1985, and September 30, 1986. The sample of releases was further restricted by the inclusion of three additional criteria: 1) the inmate must have had an original sentence of at least 45 days; 2) the subsequent release must have been for expiration of sentence, good conduct discharge or parole to the street; thus, revise and revoke sentences were excluded, and; 3) Longwood and WMCAC releasees must have completed the respective programs to be included. All releasees meeting the above criteria were included in the study sample.

Three post-release follow-up periods are used in this study: twelve, eighteen, and twenty-four months following release. Because of staggered admission and release dates, the sample size varied by follow-up period. Specifically, the number of cases (i.e., releasees) available for study decreased with each successive follow-up period. Those released between January 31, 1985, and September 30, 1986, were included in the 12 month follow-up; those released between January 31, 1985, and June 30, 1986, were included in the 18 month follow-up; and, those released between January 31, 1985, and December 31, 1985, were included in the 24 month follow-up. The sample size for each follow-up period by facility is found in Table 1.

**Table 1**  
**Sample Size by Facility and Follow-up Period**

Facility	Follow-up Period		
	12 Months	18 Months	24 Months
Longwood	350	259	96
WMCAC	135	81	---
Billerica	327	269	155

A computer listing of Longwood program releasees was generated by the DOC Operations Research Unit. At Longwood, 350 releases were included in the twelve month follow-up, 259 in the eighteen month follow-up, and 96 in the twenty-four month follow-up.

A handwritten admission and release roster was used to select the WMCAC sample. Unlike Longwood which accepted only OUI offenders, WMCAC accepted offenders with a broader range of offenses. For example, contempt, operating after license revocation, non-support and liquor-keeping were among the non-OUI offenses listed on the roster. These offenders were excluded from the sample. The WMCAC also differed from Longwood by accepting OUI offenders with short sentences. It was common to find OUI offenders with sentences of 7, 10 or 30 days at WMCAC. As mentioned previously, persons having an original sentence of less than 45 days were excluded from the study sample.

At WMCAC, 135 releases were included in the twelve month follow-up and 81 in the eighteen month follow-up. There were an insufficient number of releases (N=4) from WMCAC available for a twenty-four month follow-up sample so WMCAC was excluded from this part of the study.

Billerica received persons with a broad range of sentences and offenses from the courts. Computerized admission reports were used to locate OUI offenders. Individuals who did not meet the minimum criteria were excluded from the sample. This resulted in a comparison sample of 327 releases in the twelve month follow-up, 269 in the eighteen month follow-up, and 155 in the twenty-four month follow-up.

Before presenting the sample characteristics, the next section provides a brief overview of issues in identifying the multiple OUI offender.

Identifying the Multiple OUI Offender

In 1982, Massachusetts enacted new drunk driving legislation titled the "Driving Under the Influence of Liquor" Law (Chapter 373 of the Acts of 1982). The law had a tougher penalty structure than the law it replaced (Chapter 505 of the Acts of 1975) and among other penalties, established mandatory license suspension and jail sentences for first, second, and multiple offenders. Thus, with respect to jail sentences, first offenders could be sentenced to up to 2 years in jail, second offenders could be sentenced to a mandatory jail term ranging from 7 days to 2 years, and third and multiple offenders were to receive a mandatory jail sentence ranging from 60 days to 2 years. (The minimum mandatory sentence for those with four or more offenses was 60 days as for third offenders). Additional provisions of the law specified a mandatory 1 year jail sentence which could range up to 10 years for vehicular homicide, and a mandatory 7-day jail sentence for driving after OUI license revocation which could range up to a maximum of 2½ years.

It should be emphasized that these and other provisions of the 1982 law represented broad parameters and minimum mandatory penalties within which there was considerable sentencing latitude available to the judiciary. Judges were encouraged to apply more than the minimum mandatory penalties where appropriate or even to go beyond the law's provision by prescribing treatment for alcoholism or mandatory attendance at meetings of Alcoholics Anonymous.

Drunk driving laws were toughened even further in 1986 with the passage of the Safe Roads Act (Chapter 620 of the Acts of 1986). Under the 1986 Act, the mandatory minimum sentence for third offenders was lengthened from 60 to 90 days and furthermore, where feasible, incarceration was to be in a "Longwood type" facility. The 1986 Act also specified more severe penalties for those with

four or more offenses by raising the mandatory minimum jail sentence to 6 months.

Other increased jail sentence provisions of the 1986 Act included:

- 2-day mandatory minimum jail sentence for failing to attend the second offender alcohol rehabilitation program and a mandatory minimum of 14 days incarceration for a second failure;
- the maximum penalty for either misdemeanor or felony motor vehicle homicide was raised from 10 to 15 years;
- the mandatory of minimum incarceration for driving with a license suspended or revoked for OUI violation was raised from 7 to 60 days, and the 7-day mandatory minimum jail sentence option for second offenders was raised to 14 days.

In sum, this review of the jail provisions and mandatory minimum sentences established in the 1982 and 1986 laws indicate that even first offenders may be sentenced to a jail term. Second offenders may be sentenced to 14 days in jail or 14 days in a residential alcohol rehabilitation program and placed on probation. It is only third, fourth and other multiple offender and vehicular homicide cases for whom the laws specify mandatory minimum jail terms. Thus, although we refer to "multiple OUI offenders" as comprising the study sample, in fact, some percentage are first and second offenders.

### SAMPLE CHARACTERISTICS

The sample characteristics for each site are described below through the presentation of frequency distributions of several sociodemographic variables. Sex, age, race, marital status, education, occupation, and average length of stay in the program were examined for group differences. The data are summarized in Table 2.

### Socio-Demographic Characteristics

Sex: The vast majority of releasees at each site were male. Males comprised 85.4% (299) and females 14.6% (51) of the Longwood sample. The WMCAC sample was 96.3% (130) male and 3.7% (5) female. Since females are not sentenced to Billerica, that sample was 100.0% male.

Age at Incarceration: The mean age at incarceration was similar at all three facilities: 32.5 at Longwood; 33.6 at WMCAC; and, 31.4 at Billerica. Age at incarceration ranged from 17 years at all three facilities to 67 years at Billerica.

Education: The mean number of school years completed was similar at all three sites: 11.8 years at Longwood; 11.4 at WMCAC; and 11.5 at Billerica.

Race: The vast majority of inmates at each facility were white. Whites constituted 92.6% (324) of the Longwood sample while Blacks, Native Americans and Hispanics accounted for 7.2% (26) of the sample. The WMCAC sample was 83.0% (112) White, 13.3% (18) Black, and 3.7% (5) Hispanic. The Billerica sample was 95.7% (313) white and 4.2% (14) other.

Marital Status: A minority of subjects at each facility were married: 19.4% (68) at Longwood; 21.5% (29) at WMCAC; and, 26.3% (86) at Billerica. By contrast, 54.3% (190) at Longwood, 42.2% (57) at WMCAC, and 57.8% (189) at Billerica were single.

Occupation: Except for Longwood, the majority of subjects at each site were employed in manual trades (skilled, semi-skilled and unskilled) before their incarceration. Thus, 48.5% (169) at Longwood, 55.6% (75) at WMCAC, and 59.0% (193) at Billerica were previously employed in manual trades. By contrast, professionals accounted for only 2.3% (8) at Longwood, 1.5% (2) at WMCAC, and 1.2% (4) at Billerica.

Length of Stay: The average length of stay prior to release varied significantly by facility with Longwood having the longest average length of stay and WMCAC the

ortest. The average length of stay at Longwood was 93.4 days compared to 64.2 days at WMCAC and 81.0 days at Billerica. The differences between Longwood and WMCAC, Longwood and Billerica, and Billerica and WMCAC on length of stay were statistically significant (P .05).

**Table 2**  
**Selected Characteristics of Offenders**  
**By Facility**

<b>Characteristic</b>	<b>Longwood (N=350)</b>	<b>Western Mass (N=135)</b>	<b>Billerica (N=327)</b>
Percent Male	85.4	96.3	100.0
Mean Age	32.5	33.6	31.4
Mean School Years Completed	11.8	11.4	11.5
Percent White	92.6	83.0	95.7
Percent Married	19.4	21.5	26.3
Percent Manual Workers	48.5	55.6	59.0
Mean Length of Stay (days)	93.4	64.2	81.0

### Post-Program Outcomes: Re-Arrest and Recidivism

The utilization of criminal justice system measures such as arrest, conviction, or reincarceration to measure OUI program effectiveness is at best an imperfect process (Siegal, 1985). For example, research has indicated that the probability of arrest for OUI is extremely low and is estimated to be between 1/500 to 1/2000 (Presidential Commission on Drunk Driving, 1983). In other terms, one would have to drive under the influence of alcohol between 500 and 2,000 times before being arrested for OUI. In short, arrest for OUI has a low base rate of occurrence. Moreover, arrest and conviction rates for OUI have been found to vary widely by jurisdiction (Siegal, 1985).

While others have frequently used rearrest as an outcome measure in evaluations of OUI rehabilitation programs, (see, for example, McCarty and Argeriou, 1988), a more standard and less ambiguous measure used in correctional research is recidivism as defined by conviction and/or reincarceration following release. This point has been cogently stated by England (1971:219):

"The acid test of penocorrectional efforts are recidivism rates as measured by convictions; any test less severe than this is assailable on the ground that, since public officials originally declare an individual guilty of a criminal act, and order him dealt with in ways designed to prevent further violations, only the finding of public officials should be used to decide whether or not the intent of the earlier dealings was fulfilled. Technically, at least, the administrators of the criminal law as applied to adults are concerned only with violations thereof, not with near violations, nor with types of personal or social adjustment which might conceivably lead to violations."

The primary outcome measure used in this study of correctional alcohol treatment effectiveness is recidivism. Although defined differently across jurisdictions, recidivism as used here refers to reincarceration. The standard DOC definition of a recidivist is "any offender who returns to a state or federal

correctional institution, or to a house of correction during the follow-up period for 30 days or more. The follow-up period is typically one year from the date of the offender's release to the community."

For purposes of this study, this standard definition of recidivism has been altered slightly in two ways. First, because OUI offenders typically receive and serve shorter sentences than other types of offenders, we have dropped the criterion of reincarceration for 30 days or more. Instead, reincarceration for any period of time satisfies the definition of recidivist.

Second, the typical follow-up period used in the annual DOC recidivism reports is "one year from the date of the offender's release to the community." This study uses three follow-up periods: 12 months; 18 months; and, 24 months following release to the community. The additional follow-up periods were incorporated for two reasons. First, to examine for "cross-over effects", a phenomenon whereby results detected in a one year follow-up become reversed in the second or third year (LeClair, 1983).

Second, research on alcohol treatment effectiveness indicates that because of the chronic and relapsing nature of alcoholism and problem drinking, longer and multiple follow-up periods are preferable to shorter ones (Vaillant, 1983). Short-term follow-ups are said to be misleading because persons may alternate periods of abstinence, controlled drinking, and abusive drinking. As Polich et al. (1980) have noted, alcoholism is a multifaceted and highly variable disorder displaying no-single course over time but involving frequent remissions, frequent relapses, and diverse behavior patterns. It is well-known that treatment effects decay over time and therefore, the longer the period of time over which follow-up is conducted, the more accurate a picture one obtains of the post-treatment drinking behavior of alcoholics.

### Recidivism Data

Recidivism data were collected from the offenders' post-release records, the Office of the Commissioner of Probation, county admission and release rosters, and the manual record keeping system at Billerica. Five methods were used to track recidivists. Initially, probation checks were conducted at the Office of the Commissioner of Probation on all sampled releasees. Listed on the card was a chronological criminal history of the individual. While reincarceration was usually recorded, the specific location was omitted. This necessitated the use of a second method. All 812 releasees were checked against the Department of Correction's computerized list of admissions to county houses of correction for the years 1985-1987. Although this list provided valuable commitment information, it did not provide positive identification or release information. Third, to verify actual reincarceration, county houses of correction were contacted. This was done to confirm the date of birth of releasees believed to have been reincarcerated there. If a birth date was a match, admission and release information were requested. Fourth, on-site visits to the Billerica House of Correction were made. The manual record file was checked to see if Billerica releasees had been recommitted there. Finally, county house of correction rosters were manually screened, looking for possible commitments undetected by the other four methods.

### Rearrest Data

Because rearrest is so frequently used as a measure in OUI research, rearrest data were collected for purposes of comparison. Rearrest records were checked through visits to the Office of the Commissioner of Probation. Again, listed on the

probation cards was rearrest information. The record listed date of arraignment, offense and appearance dates. Exact rearrest dates were not available. In lieu of this, arraignment dates were substituted for rearrest dates (Cicchetti and Enos, 1987). The first arraignment date after release was recorded as the first re-arrest. The large sample size (812) precluded the use of additional methods to cross check rearrest dates.

#### Some Caveats on the Research

Before presenting the results of this study, some caveats are presented which should be considered when interpreting the study results. The first of these concerns the use of Billerica as a comparison site to either the Western Massachusetts Correctional Alcohol Center or the Longwood Treatment Center. Thus, with respect to WMCAC, Billerica may not be an appropriate comparison site since WMCAC does not, like Longwood, draw upon Billerica for its program population. This issue is potentially significant when one considers that the level of enforcement in the Western region of the state is substantially higher than in the Eastern region of the state where Billerica and Longwood are located. For example, a study by the Senate Post Audit and Oversight Bureau (1986) found that of nine Massachusetts cities, Springfield had the highest level of OUI enforcement in terms of average annual arrests, average arrests per officer, and average arrests per 1,000 population for the years 1983, 1984, and 1985. By contrast, Boston had the lowest level of OUI enforcement of the nine cities for the same years. The implication of this is that releasees from WMCAC are exposed to a higher probability of rearrest for OUI than releasees from either Billerica or Longwood (although the probability of OUI arrest is still very low statewide).

The utilization of a house of correction located in the Western region of the

state which could have served as a comparison to WMCAC, however, was not possible because WMCAC takes all mutiple OUI offenders from the western houses of correction who are sent by the specific facility to WMCAC through an internal classification process. This contrasts with the Longwood Treatment Center whose treatment and custodial staff recruit and select program participants through their own screening process at the house of correction level. This raises the prospect of program "creaming" or in other terms, choosing the best and most motivated candidates for treatment leading to a bias in favor of a positive treatment effect at Longwood and conversely, leaving the poor treatment candidates at Billerica. This is less likely to occur at WMCAC since they accept all house of correction referrals, some percentage of whom are resistant to treatment and in a stage of denial.

Controlling for any "self-selection" at Longwood and the fact that WMCAC takes all referrals is difficult without a random assignment process which was not possible because of both court sentencing practices and progam eligibility criteria. The researchers sought to correct for this by matching on certain variables. As was apparent from the sample description, the three samples are generally similar except on the variable "average length of stay".

This leads to a second major caveat. Although WMCAC's stated length of stay is 120 days, the average length of stay for the WMCAC releasees in our study was 64.2 days. This significant discrepancy is explained by the fact that many of the WMCAC releasees in this study were only serving 60 day sentences and were among the initial program entrants to WMCAC which began operation in December 1985.

Related to this is the fact that our sampling criteria for the 12 month follow-up were those released between January 31, 1985 and September 30, 1986 and for

the 18 month follow-up, those released between January 31, 1985 and June 30, 1986. Subsequent discussions with the Director of WMCAC have indicated that the program was not fully implemented or operational until July of 1986. In effect, a significant portion of the WMCAC sample in this study were very likely not exposed to a fully operational treatment program. The extent to which the WMCAC program was fully operational or not prior to July 1986, however, could only actually have been determined by use of a process evaluation design which was outside the scope of the present study.

#### IV. RESULTS

The results are presented in four sections. The first section presents recidivism rates at each follow-up period by facility. The second section presents the recidivism data by new offense at each follow-up period by facility. The third section presents rearrest rates at each follow-up period by facility. The fourth section presents the rearrest data by new offense for each follow-up period by facility.

##### RECIDIVISM RATES: 12, 18, and 24 Months

###### 12 Months

Longwood had the lowest recidivism rate at twelve months of the three facilities. Of the 350 Longwood releasees in the 12 month follow-up, 23 were reincarcerated within one year of release for an overall recidivism rate of 6.6% (see Table 3). This rate is virtually identical to the 6% recidivism rate obtained in the first Longwood study on a smaller sample of 99 releasees. In addition to holding up for a much larger sample, the rate compares very favorably to a total DOC recidivism rate of 27% and 18% for other minimum/pre-release security level facilities (Holt and Lorant, 1989).

Of the 135 Western Mass releasees in the 12 month follow-up, 21 were reincarcerated within one year of release for a recidivism rate of 15.6%. This rate is substantially higher than the Longwood rate of 6.6%. The difference between the 12 month recidivism rates at Longwood and WMCAC was statistically significant ( $P < .01$ ).

Of the 327 Billerica releasees in the 12 month follow-up, 52 were reincarcerated within one year of release for an overall recidivism rate of 15.9%. This rate is higher than the Longwood rate and virtually identical to the WMCAC rate. The difference between the 12 month recidivism rates at Longwood and Billerica was statistically significant ( $P < .01$ ). The difference twelve month rates at Billerica and WMCAC was not statistically significant ( $P > .05$ ).

### 18 Months

At the 18 month follow-up period, Longwood continued to have the lowest recidivism rate although as expected, the rate increased. Of the 259 Longwood releasees in the 18 month follow-up, 27 were reincarcerated within 18 months of release for a recidivism rate of 10.4%. This is still well below the overall DOC recidivism rate of 27% and 18% for other minimum/pre-release security level facilities.

The recidivism rate at WMCAC also increased at the 18 month follow-up period. Of the 81 WMCAC releasees in the 18 month follow-up, 17 were reincarcerated for a recidivism rate of 21%. The difference between the 18 month recidivism rates at WMCAC and Longwood was statistically significant ( $P < .05$ ).

At 18 months, the Billerica recidivism rate also increased and continued to remain the highest of the three facilities. Of the 269 releasees in the 18 month follow-up, 62 were reincarcerated within 18 months of release for a recidivism rate of 23 percent. The difference between the 18 month recidivism rates at Billerica and Longwood was statistically significant ( $P < .01$ ). The difference between the 18 month recidivism rates at Billerica and WMCAC was not statistically significant ( $P > .05$ ).

24 Months

The 24 month recidivism rates were obtained for Longwood and Billerica only. Because only 4 releasees were eligible for a 24 month recidivism follow-up, WMCAC was not included in the two year follow-up.

At two years, the Longwood recidivism rate increased only slightly and remained well below the overall DOC recidivism rate of 27%. Of the 96 Longwood releasees in the two year follow-up, 11 were reincarcerated within 24 months of release for a recidivism rate of 11.5%.

The Billerica recidivism rate also increased at two years, as expected. Of the 155 Billerica releasees in the 2 year follow-up, 42 were reincarcerated within 2 years of release for a recidivism rate of 27.1%. The difference between the 2 year rates at Billerica and Longwood was statistically significant ( $P < .01$ ).

The recidivism rates for each follow-up period are reported in Table 3 below.

**Table 3**  
**Recidivism Rates by Releasing Institution and Follow-up Period**

<u>Institution</u>	<u>Follow-up Period</u>								
	<u>12 Months</u>			<u>18 Months</u>			<u>24 Months</u>		
	<u>N</u>	<u>R</u>	<u>RR</u>	<u>N</u>	<u>R</u>	<u>RR</u>	<u>N</u>	<u>R</u>	<u>RR</u>
Longwood	350	23	6.6	259	27	10.4	96	11	11.5
Western Mass	135	21	15.6	81	17	21.0	---	---	---
Billerica	327	52	15.9	269	62	23.0	155	42	27.1

\* In reading the table, please note the following: (1) N represents the number of OUI offenders in the corresponding follow-up group; (2) R represents the number of OUI offenders who are recidivists; and, (3) RR (recidivism rate) represents the percent of offenders in the follow-up period who recidivated.

RECIDIVISM BY NEW OFFENSE

This section presents results on the types of new offenses which were committed by the recidivists (see Table 4). The types of offenses were categorized into the following groups: OUI; Motor Vehicle; Person; Sex; Property; Alcohol Related; Drug; Parole Violation (Technical); and, Other. The new governing offense which was committed most frequently by recidivists at each facility at each follow-up period was OUI. The majority of recidivists at each facility during each follow-up period were reincarcerated as a result of a new conviction for OUI. At Longwood, 78.3% (18) of the recidivists at 12 months, 63.0% (17) of those at 18 months, and 81.8% (9) of those at 24 months were reincarcerated for a new OUI offense.

At WMCAC, 71.4% (15) of the recidivists at 12 months and 76.5% (13) of those at 18 months were reincarcerated for OUI. At Billerica, 57.7% (30) of the recidivists at 12 months, 54.8% (34) of those at 18 months, and 61.9% (26) of those at 24 months were reincarcerated for a new OUI offense.

The next most frequently documented new offense for which releasees were reincarcerated was motor vehicle offenses. At Longwood, 13.0% (3) of the recidivists at 12 months, 25.9% (7) of those at 18 months and 18.2% (2) of those at 24 months were reincarcerated for a motor vehicle offense. At WMCAC, 14.3% (3) of the recidivists at 12 months and 5.9% (1) of those at 18 months were reincarcerated for a motor vehicle offense. At Billerica, 15.4% (8) of the recidivists at 12 months, 12.9% (8) at 18 months, and 16.7% (7) at 24 months were reincarcerated for a motor vehicle offense.

These numbers alone probably underestimate the number of recidivists who incur motor vehicle offenses since the data are only for governing offenses and are

based on the driver's Registry of Motor Vehicle records. When combined with the number of recidivists whose new offense was for OUI, and who by definition, were operating after revocation if still faced with mandatory license suspension/revocation after release, the data would be consistent with research which indicates that anywhere from one third to two thirds of persons whose licenses had been suspended or revoked because of drunk driving continued to drive during the period of revocation (Williams et al., 1984a; 1984b; Ross and Gonzales, 1988).

No other offense categories stand out among the recidivists except for property offenders at Billerica. Fourteen percent (7) of the recidivists at 12 months, 16.1% (10) of those at 18 months, and 11.9% (5) of those at 24 months were reincarcerated for a property offense.

#### REARREST RATES: 12, 18, AND 24 MONTHS

This section presents rearrest data by follow-up period and facility. The reader is asked to note that the rearrest rates are based on all rearrests which includes those who were defined as recidivists who incurred a new arrest and were reincarcerated and those who were rearrested but not reincarcerated.

##### 12 Months

As was the case with recidivism, Longwood had the lowest rearrest rate at 12

Table 4

## Type of Return by Facility and Follow-up Period

	Longwood			Western Mass		Billerica		
	<u>12</u>	<u>18</u>	<u>24</u>	<u>12</u>	<u>18</u>	<u>12</u>	<u>18</u>	<u>24</u>
OUI	18 ( 78.3)	17 ( 63.0)	9 ( 81.8)	15 ( 71.4)	13 ( 76.5)	30 ( 57.7)	34 ( 54.8)	26 ( 61.9)
Motor Vehicle	3 ( 13.0)	7 ( 25.9)	2 ( 18.2)	3 ( 14.3)	1 ( 5.9)	8 ( 15.4)	8 ( 12.9)	7 ( 16.7)
Person	1 ( 4.3)	1 ( 3.7)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	2 ( 3.2)	0 ( 0.0)
Sex	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)
Property	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	1 ( 4.8)	1 ( 5.9)	7 ( 13.5)	10 ( 16.1)	5 ( 11.9)
Alcohol Related	1 ( 4.3)	1 ( 3.7)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)
Drug	0 ( 0.0)	1 ( 3.7)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)
Parole Violation (Technical)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	1 ( 4.8)	1 ( 5.9)	3 ( 5.8)	3 ( 4.8)	1 ( 2.4)
Other	<u>0 ( 0.0)</u>	<u>0 ( 0.0)</u>	<u>0 ( 0.0)</u>	<u>1 ( 4.8)</u>	<u>1 ( 5.9)</u>	<u>4 ( 7.7)</u>	<u>5 ( 8.1)</u>	<u>3 ( 7.1)</u>
<b>TOTALS</b>	<b>23 (100.0)</b>	<b>27 (100.0)</b>	<b>11 (100.0)</b>	<b>21 (100.0)</b>	<b>17 (100.0)</b>	<b>52 (100.0)</b>	<b>62 (100.0)</b>	<b>42 (100.0)</b>

months. Of the 349 Longwood releasees in the 12 month follow-up,\* 87 were rearrested within one year of release for a rearrest rate of 24.9%.

Western Mass had the highest rearrest rate of the three facilities at the 12 month follow-up. Of the 135 WMCAC releasees in the 12 month follow-up, 46 were rearrested within one year of release for a rearrest rate of 34.1%. This rate is similar to the 30-33% repeat OUI offender rate which has been noted in other Massachusetts (Brown et al., 1984) and national research (National Transportation Safety Board, 1984). The difference between the Longwood and WMCAC rearrest rates at twelve months was not statistically significant ( $P > .05$ ).

The Billerica rearrest rate at 12 months was higher than Longwood and slightly less than WMCAC. Of the 326 Billerica releasees in the twelve month follow-up, 103 were rearrested within one year of release for a rearrest rate of 31.6%. The difference between the Longwood and Billerica rearrest rates at 12 months was not statistically significant ( $P > .05$ ).

#### 18 Months

Of the 258 Longwood releasees in the 18 month follow-up, 84 were rearrested within 18 months of release for a rearrest rate of 32.6%. Of the 81 WMCAC releasees in the 18 month follow-up, 31 had been rearrested within 18 months of release for a rearrest rate of 38.3%. The same 18 month rearrest rate was obtained at Billerica where 103 of 269 releasees were rearrested within 18 months of release for a rate of 38.3%. None of the 18 month rearrest rate differences between the facilities were statistically significant ( $P > .05$ ).

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\* The 12 month Longwood sample dropped from 350 to 349 because rearrest data could not be determined for one releasee. The 12 month Billerica sample dropped from 327 to 326 for the same reason.

24 Months

At 24 months, Longwood had a slightly higher rearrest rate than Billerica although the difference was not statistically significant ( $P > .05$ ). Of the 96 Longwood releasees at 24 months, 44 were rearrested within two years of release for a rearrest rate of 45.8%. Of the 154 Billerica releasees in the 24 month follow-up, 66 were rearrested within two years of release for a rearrest rate of 42.9%. Again WMCAC was not included in the 24 month follow-up because there were only 4 releasees during this time period.

Rearrest rates by facility and follow-up period are presented in Table 5.

Table 5

Rearrest Rates by Releasing Institution and Follow-up Period

<u>Follow-up</u>	<u>Follow-up Period</u>								
	N	<u>12 Months</u>		N	<u>18 Months</u>		N	<u>24 Months</u>	
		R	RR		R	RR		R	RR
Longwood	349	87	24.9	258	84	32.6	96	44	45.8
Western Mass	135	46	34.1	81	31	38.3	---	---	---
Billerica	326	103	31.6	269	103	38.3	154	66	42.9

\* In reading the table, please note the following: (1) N represents the number of OUI offenders in the corresponding follow-up group; (2) R represents the number of OUI offenders who were rearrested; and, (3) RR (rearrest rate) represents the percent of offenders in the follow-up period who were rearrested.

REARREST BY NEW OFFENSE

This section presents results on the types of new offenses for which the releasees were arrested (see Table 6). As was the case with the recidivists, OUI continued to be the offense for which persons were most frequently rearrested across facilities and follow-up periods although it no longer represented the majority of offenses for which persons were rearrested. Instead, there was a wider variety of types of offenses which accounted for rearrest at each follow-up than was the case with recidivism.

At Longwood, 31.1% (27) of the rearrestees at 12 months, 31.0% (26) of those at 18 months, and 36.4% (16) of those at 24 months were reincarcerated for a new OUI offense. At WMCAC, 39.1% (18) of those at 12 months and 45.2% (14) of those at 18 months were rearrested for a new OUI offense. At Billerica, 31.1% (32) of those at 12 months, 32.0% (33) of those at 18 months, and 36.4% (24) of those at 24 months were rearrested for a new OUI offense. As evident from these numbers, except for WMCAC which had a slightly higher percentage of releases rearrested for OUI, the three facilities are basically similar in terms of OUI being the leading offense for which releasees were rearrested at each time period.

Motor vehicle offenses were the next most frequently experienced reason for rearrest at Longwood across all follow-up periods but this was not true of WMCAC or Billerica. At Longwood, 17.2% (15) of those rearrested at 12 months, 21.4% (18) of those at 18 months, and 18.2% (8) of those at 24 months were rearrested for a new motor vehicle offense. After motor vehicle offenses, property, person, and other offenses were the next most frequently experienced reasons for rearrest.

At WMCAC, the categories of "other" and motor vehicle offenses followed

OUI as reasons for rearrest at the 12 and 18 month follow-up. However, a smaller sample size coupled with the fact that rearrest offenses were distributed more evenly across the different categories makes it difficult to attribute much significance to the findings.

At Billerica, 22.3% (23) of those rearrested at 12 months, 20.4% (21) of those at 18 months, and 18.2% (12) of those at 24 were rearrested for "other" offenses (e.g., disturbing the peace, possession of an open container, leaving the scene of an accident). The next most frequent offense resulting in rearrest at for each follow-up period to rearrest were motor vehicle followed by property offenses.

The rearrest by new offense data are presented is Table 6.

Table 6

## Offense for Which Arrested by Facility and Follow-up Period

Offense	Longwood			Western Mass		Billerica		
	<u>12</u>	<u>18</u>	<u>24</u>	<u>12</u>	<u>18</u>	<u>12</u>	<u>18</u>	<u>24</u>
OUI	27 ( 31.1)	26 ( 31.0)	16 ( 36.4)	18 ( 39.1)	14 ( 45.2)	32 ( 31.1)	33 ( 32.0)	24 ( 36.4)
Motor Vehicle	15 ( 17.2)	18 ( 21.4)	8 ( 18.2)	5 ( 10.9)	3 ( 9.7)	17 ( 16.5)	18 ( 17.5)	13 ( 19.7)
Person	11 ( 12.6)	8 ( 9.5)	7 ( 15.9)	3 ( 6.5)	1 ( 3.2)	8 ( 7.8)	9 ( 8.7)	6 ( 9.1)
Sex	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	1 ( 2.2)	1 ( 3.2)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)
Property	13 ( 14.9)	13 ( 15.5)	5 ( 11.4)	4 ( 8.7)	3 ( 9.7)	11 ( 10.7)	10 ( 9.7)	5 ( 7.6)
Alcohol Related	4 ( 4.6)	4 ( 4.8)	1 ( 2.3)	1 ( 2.2)	2 ( 6.5)	6 ( 5.8)	6 ( 5.8)	4 ( 6.1)
Other	11 ( 12.6)	7 ( 8.3)	3 ( 6.8)	8 ( 17.4)	5 ( 16.1)	23 ( 22.3)	21 ( 20.4)	12 ( 18.2)
Drug	6 ( 6.9)	8 ( 9.5)	4 ( 9.1)	5 ( 10.9)	2 ( 6.5)	6 ( 5.8)	6 ( 5.8)	2 ( 3.0)
Unknown	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	1 ( 2.2)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)
<b>TOTALS</b>	<b>87 (100.0)</b>	<b>84 (100.0)</b>	<b>44 (100.0)</b>	<b>46 (100.0)</b>	<b>31 (100.0)</b>	<b>103 (100.0)</b>	<b>103 (100.0)</b>	<b>66 (100.0)</b>

## V. CONCLUSIONS AND RECOMMENDATIONS

### Summary and Conclusions

The purpose of this study was to assess the impact of correctional alcohol treatment on the recidivism and rearrest rates of multiple OUI offenders released from the Longwood Treatment Center and the Western Massachusetts Correctional Alcohol Center. The Middlesex County Jail and House of Correction was selected as a comparison (non-treatment) site for purposes of measuring impacts at the two correctional alcohol treatment centers. Three post-release follow-up periods were employed in the analysis: 12, 18, and 24 months.

The first major finding which emerges from this study is that the Longwood Treatment Center has a statistically significant lower recidivism rate at each post-release follow-up period than either the Western Massachusetts Correctional Alcohol Center or the Middlesex County Jail and House of Correction. In particular, Longwood's 12 month recidivism rate of 6.6% is consistent with the results of an earlier study that documented a 6.0% recidivism rate for a smaller cohort of 99 releasees. This finding is particularly striking since the present study used a broader definition of recidivism than that used in the first study (and other DOC research) by defining recidivism as reincarceration for any period of time within one year following release as opposed to the typical DOC definition of reincarceration for a period of 30 days or longer.

When compared to both the results of that earlier study and the significantly higher recidivism rate at Billerica from which Longwood draws some of its population, this finding points to the positive impact of Longwood's correctional alcohol treatment. In other terms, the Longwood program has a

positive treatment effect as documented by significantly lower rates of recidivism and rearrest than is obtained with simple incarceration alone.

By contrast, a second major finding of the present study is the failure to discern a treatment effect at the Western Massachusetts Correctional Alcohol Center. Thus, the differences between the 12 and 18 month recidivism rates at Western Massachusetts and Billerica were not statistically significant. This finding lends tentative support to the that statement that the WMCAC program is currently not having a (positive) treatment effect on recidivism and rearrest rates when compared to a facility where there is no or minimal treatment.

A third major finding from this study is that when people do recidivate, it is usually for OUI. A new OUI offense was the offense which most frequently accounted for recidivism and rearrest across all facilities and all follow-up periods. The next most frequently documented offense leading to recidivism or rearrest was usually a motor vehicle offense. These findings are generally consistent with research documenting the unique nature of OUI offenders vis-a-vis other types of offenders (Williams, 1984). Moreover, they highlight the chronic and relapsing nature of alcoholism as well as the importance of post-release aftercare in the recovery process.

### Discussion

How is one able to explain the presence of an alcohol treatment effect at Longwood but none at WMCAC? Which factors seem to account for the differential outcomes at the two facilities? We believe that at least four factors may help to answer these questions.

One factor possibly related to the absence of a treatment effect at WMCAC concerns length of stay. Although WMCAC claims to have a length of stay of 120

days, the average length of stay for the WMCAC releasees in this study was 64.2 days. This is significantly shorter than the average length of stay at Longwood which was 93.4 days and Billerica which was 81 days. This is primarily attributable to the fact that many of the WMCAC releasees in this study were among the early entrants to the facility and this cohort was generally only serving 60 day sentences.

A second related factor which may explain the higher recidivism rate at WMCAC concerns the extent to which the WMCAC releasees in this study were exposed to a fully operational treatment program. The WMCAC staff have noted that although the facility opened and accepted its first program participants in December 1985, the treatment program at WMCAC wasn't fully implemented or operational until July 1986. This is a potentially significant issue in light of the fact that 86.6% (117) of the 135 WMCAC releasees in this study entered the facility before July 1986 and thus may not have been exposed to a fully functioning treatment program.

To address this issue, we compared the twelve month recidivism rates of WMCAC releasees who entered the facility before July 1986 to those who entered on or after July 1986. Contrary to the expectations of WMCAC staff, releasees who entered WMCAC before July 1986 actually had a slightly lower recidivism rate than those who entered on or after July 1986. Thus, of the 117 releasees who entered WMCAC before July 1986, 18 were reincarcerated within twelve months of release for a recidivism rate of 15.4%. Of the 13 releasees who entered WMCAC on or after July 1986, 3 were reincarcerated within twelve months of release for a recidivism rate of 16.7%. While the number of persons in the study sample who entered WMCAC after July 1986 is relatively small, the direction of the relationship between recidivism and date of program entrance is opposite to that hypothesized by WMCAC staff.

A third factor which may account for the higher recidivism rate at WMCAC is the level of enforcement for OUI in the Western part of state. Arrest rates for OUI have traditionally varied widely by locality even though the probability of arrest for OUI is very low. A report by the Senate Post Audit and Oversight Bureau (1986) examining the state's drunk driving law provides evidence of tougher enforcement in the western region of the state. Controlling for population size and number of uniformed police available, Springfield had the highest level of OUI enforcement on three measures (i.e., average annual arrests during period, average arrests on per officer basis, average arrests for each 1,000 population) of nine Massachusetts cities during the years 1983, 1984, and 1985. In short, WMCAC releasees were very likely exposed to a higher probability of rearrest than their counterparts in the Eastern region of the state.

This points to a fourth factor and what is possibly a major limitation of this study and that concerns the appropriateness of Billerica as a comparison site to WMCAC. If in fact OUI arrest rates are significantly higher in the Western region of the state than the Eastern region of the state, a house of correction in the Western part of the state would have served as a better comparison site. In effect, the use of Billerica as a comparison site to WMCAC results in comparing recidivism and rearrest rates which may be suppressed owing to differential enforcement practices.

Moreover, WMCAC does not draw upon the Billerica population for its program participants but rather those county jails and houses of correction located within the Western part of the state. Thus, comparing WMCAC releasees to those from a house of correction upon which it does not draw may be inappropriate for comparative purposes. As was noted earlier, however, the use of a house of correction in the western region of the state as a comparison to WMCAC was not

possible because WMCAC accepts all multiple OUI offenders from other facilities who are sent to WMCAC through an internal classification process.

A final factor which may have adversely affected the WMCAC program is their decision to accept individuals who do not have a governing offense of OUI but rather, other alcohol related misdemeanors which are not related specifically to drunk driving. Examples of other misdemeanor offenses eligible for the WMCAC program are: driving without a license; failure to pay fine, malicious damage; violation of open container law; trespassing; uninsured motor vehicle; disorderly person; reckless driving; leaving the scene of an accident; non-support; shoplifting; drinking in public; violation of a restraining order; attaching plates; and, driving after revocation.

While persons with any of these non-OUI governing offenses were excluded from our study sample and thus in no way figured in the recidivism analysis, we believe that their presence in the WMCAC program may have adversely affected the treatment milieu. As noted earlier, the OUI population is a unique one with special treatment needs. Mixing other alcohol-related offenders with OUI offenders results in a heterogenous population with different issues, problems, and needs. This is especially problematic in light of a sizable amount of alcoholism treatment research which indicates that treatment effectiveness is maximized to the extent that there is an appropriate match between client characteristics and needs, treatment modality, and therapeutic setting (Solomon, 1981). The likelihood of this match happening is reduced to the extent that diverse populations are exposed to the same treatment.

Another area of concern prompted by the study findings relates to the fact that a new OUI offense was the major reason for rearrest and reincarceration across all facilities and follow-up periods. This fact points to the unique nature of

the OUI offender in that when such offenders do recidivate, it is very likely to be for OUI. Moreover, it is further evidence of the chronic and relapsing nature of alcoholism. The finding is also consistent with other research on drunk driving which indicates that anywhere from 30% to 40% of the total OUI population were repeat OUI offenders (Brown et. al., 1984; National Transportation Safety Board, 1984; Beerman et. al., 1988). By definition, the great majority of the OUI offenders in the Longwood and Western Mass programs were already multiple OUI offenders at program entrance. For a sizable minority of those reincarcerated or rearrested after release, OUI continues to be the major reason.

### RECOMMENDATIONS

On the basis of these findings and conclusions, the following recommendations are offered.

#### RECOMMENDATION: Further Research Should be Conducted on WMCAC and Longwood

This study did not employ a comparison house of correction from the western region of the state because WMCAC is already accepting all multiple OUI offenders from those facilities. Instead, WMCAC and Longwood releasees were compared to releasees from the Middlesex County Jail and House of Correction in Billerica. This did not necessarily obscure comparisons to Longwood since Longwood recruits program participants from Billerica and like that facility is located in the Eastern region of state where OUI enforcement practices as measured by arrest rates are lower than in the Western region of the state. By

contrast, comparing WMCAC to Billerica means that care should be exercised in comparing recidivism and rearrest rates between the two facilities because of differential regional OUI enforcement practices and the fact WMCAC does not recruit its participants from Billerica. Because Longwood screens the Billerica population for part of its program population, the possibility of "creaming" or selection bias exists. In other terms, Longwood may select the best and most motivated treatment candidates while screening out the poorer treatment risks who are left to serve their sentence at the house of correction. Ultimately, selection bias can only be eliminated by use of a classic experimental design in which random assignment is used to assign one group to a treatment program and another to a control group. Court sentencing practices and the specific program eligibility criteria at WMCAC and Longwood, however, precluded the use of such a research design.

Further research should be conducted on both facilities in order to address the shortcomings of the present study's use of Billerica as a comparison site. Thus, it is proposed that the recidivism and rearrest rates of WMCAC releasees be compared to a cohort of OUI offenders released from western houses of correction in the year before WMCAC opened. This would compensate for the inability to obtain a current sample of releasees from western houses of correction. In regard to Longwood, it is recommended that the recidivism and rearrest rates of Longwood releasees be compared to a random sample of releasees from other houses of correction in addition to Billerica in which the comparison sample consists of persons who have met and passed Longwood's screening criteria, have been accepted into the Longwood program, but who have opted to remain in the house of correction rather than enter Longwood. This would partly compensate for the issue of selection bias and better insure that the comparison group is more similar to Longwood participants.

**RECOMMENDATION: Re-Consideration of the Target Population at Western Massachusetts Correctional Alcohol Center**

Ostensibly, the primary target population at WMCAC is persons with multiple convictions for OUI and a current governing offense of OUI. However, unlike Longwood, WMCAC also accepts other alcohol-related misdemeanors that are not specifically related to drunk driving. While some may defend this practice on the grounds that all problem drinkers are alike, research in the alcoholism field has consistently found that the problem drinking population is quite heterogeneous with different sociodemographic characteristics, needs, and prognoses.

Although we excluded these non-OUI alcohol-related misdemeanants from the WMCAC sample, their presence in the facility may have adversely affected the treatment milieu. Research has shown that the OUI population is unique with characteristics, needs, and issues quite different from that of other alcohol-related offenders. It is known that treatment effectiveness is maximized to the extent that there is an appropriate match between clients and therapy modality. It is therefore recommended that WMCAC reconsider the policy of accepting non-OUI alcohol related offenders into the program since this increases the heterogeneity of a population at the expense of maximizing the treatment client match. This should not result in any beds going unfilled at WMCAC since the Western region of state and Springfield in particular have the highest level of OUI enforcement as measured by arrests per year, per officer, and per 1,000 population.

**RECOMMENDATION: Continued Emphasis on the Aftercare Component at Longwood and WMCAC**

As would be expected by definition, the number of individuals reincarcerated or rearrested in this study increased with each succeeding follow-up period. In

other terms, the recidivism rate increases as the period of follow-up is extended. Another way of looking at this, however, is by using the terminology from the alcohol treatment field. While it has been said that no single course characterizes the post-treatment process but instead it is one characterized by periods of relapse and remission, it is also true that by definition, the number of persons experiencing one or more relapse episodes would also have to increase as the post-treatment follow-up is extended.

The fact that the most frequently appearing offense accounting for reincarceration or rearrest was OUI highlights the chronic nature of alcoholism and problem drinking among this population. Moreover, it points to the importance of post-release aftercare in the recovery process. It may be that if any further gains are to be achieved by either WMCAC or Longwood in affecting problem drinking behavior and deterring future drunk driving among the released population, it will come through further strengthening of the aftercare process. The present study was not intended to nor did it identify any problems in the aftercare component at either Longwood or WMCAC. Still, it is recommended that both Longwood and WMCAC examine how, if at all, their program aftercare components could contribute toward effecting long-term reduction in problem drinking and driving behavior.

REFERENCES

- Beerman, Kathy A., Margaret M. Smith, and Roberta Hall (1988). "Predictors of Recidivism in DUIs". Journal of Studies on Alcohol 49 (5): 443-449.
- Brown, Marge E., Donald Cochran, and Dennis Mc Carty (1983). An Evaluation of Drunk Driving in Massachusetts under Chapter 373, Acts of 1982. Boston, MA: Office of the Commissioner of Probation and Division of Alcoholism.
- Cicchetti, Carmen and Louise A. Enos (1987). Driving Under the Influence of Liquor: An Analysis Four Years After Chapter 373. Boston: Massachusetts Trial Court, Office of Commissioner of Probation.
- England, Ralph W. (1971). "Postprobation Recidivism". In Radzinowiz, Leon and Marvin E. Wolfgang (eds.), The Criminal in Confinement, pp. 218-224, New York, Basic Books.
- Forcier, Michael W., Norman R. Kurtz, Dale G. Parent, and Mark D. Corrigan. (1986) "Deterrence of Drunk Driving in Massachusetts: Criminal Justice System Impacts." The International Journal of the Addictions 21 (11): 1197-1220.
- Goldhamer, Allen (1987). Drunk Driver Treatment: An Overview of Three Model Centers. NASADAD Alcohol & Drug Abuse special report.
- Governor's Statewide Anti-Crime Council (1983). Preliminary Report on Overcrowding: Steps Towards a Solution. Boston: Massachusetts Committee on Criminal Justice.
- Holt, Linda K. and Alicia McCarthy (1988). Court Commitments to Massachusetts County Facilities During 1987. Boston: Massachusetts Department of Correction.
- Holt, Linda K. and Lisa Lorant (1989). Statistical Tables Describing the Background Characteristics and Recidivism Rates for Releases from Massachusetts Correctional Institutions During 1986. Boston: Massachusetts Department of Correction.
- LeClair, Daniel P. (1983) Varying Time Criteria in Recidivism Follow-up Studies. A Test of the "Cross-Over Effects" Phenomenon. Boston: Massachusetts Department of Correction.
- LeClair, Daniel P., Lynn Felici, and Ed Klotzbier (1987). The Use of Prison Confinement for the Treatment of Multiple Drunken Driver Offenders: An Evaluation of the Longwood Treatment Center. Boston: Massachusetts Department of Correction.
- Lyons, Joseph E. (undated). A Study of Conditions at WMCAC (unpublished report). Springfield, MA: Western Massachusetts Correctional Alcohol Center.
- McCarty, Dennis and Milton Argeriou (1988). "Rearrest Following Residential Treatment for Repeat Offender Drunken Drivers." Journal of Studies on Alcohol 49 (1): 1-6.

- McCarthy, Dennis, Milton Argeriou and Edward Blacker (1985). "Legislated Policies and Recidivism for Driving Under the Influence of Liquor in Massachusetts." Journal of Studies on Alcohol, 46, 97-102.
- Moore, Kathleen (1985). Operating Under the Influence: Programs and Treatment for Convicted Offenders. Boston: Massachusetts Department of Correction.
- National Commission Against Drunk Driving (1986). Conference on Recidivism: A Summary of the Proceedings. Northbrook, IL: Allstate Insurance Company.
- National Transportation Safety Board (1984). Safety Study Deficiencies in Enforcement, Judicial, and Treatment Programs Related to Repeat Offender Drunk Driver. Washington, D.C.: Author.
- Polich, J. Michael, David J. Armor, and Harriet B. Braiker (1980). The Course of Alcoholism: Four Years After Treatment. New York: John Wiley & Sons.
- Presidential Commission on Drunk Driving (1983). Final Report. Washington, D.C.: U.S. Government Printing Office.
- Ross, H. Laurence and P. Gonzales (1988). "Effects of License Revocation on Drunk-Driving Offenders." Accident Analysis and Prevention, 20 (5): 379-391.
- Senate Post Audit and Oversight Bureau (1986). The State's Drunk Driving Law: Appraising Performance; Planning the Future. Boston: Author.
- Siegal, Harvey A. (1985). Impact of Driver Intervention Program on DWI Recidivism and Problem Drinking, Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration. Report # DOT-HS-807-023.
- Solomon, Susan D. (1981) Tailoring Alcoholism Therapy to Client Needs. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services (1983). Fifth Special Report to the U.S. Congress on Alcohol and Health. Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Transportation (1985). Alcohol and Highway Safety 1984: A Review of the State of the Knowledge. (DOT-HS-806-569). Washington, D.C.: U.S. Government Printing Office.
- Vaillant, George E. (1983). The Natural History of Alcoholism. Cambridge, MA: Harvard University Press.
- Williams, Lawrence T. (1984). County Commitments for Driving Under the Influence of Alcohol: 1976 to 1983. Boston: Massachusetts Department of Correction.
- Williams, Rickey L., Roger E. Hagen, and E. McConnell, (1984a). "A Driving Record Analysis of Suspension and Revocation Effects on the Drinking-Driving Offender." Accident Analysis and prevention, 16: 333-338, 1984a.
- Williams, Rickey L., Roger E. Hagen, and McConnell, Edward J. (1984b). "A Survey of Suspension and Revocation Effects on the Drinking-Driver Offender," Accident Analysis and prevention, 16: 339-350.