

Evaluation of the Pre-Parole Residential Environment Phase (PPREP) Program

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Executive Summary

The goals of the Pre-Parole Residential Environment Phase (PPREP) program initiated in April of 1990, were to "enhance rehabilitation and reintegration, and to test readiness for release" by allowing inmates near the end of their term of incarceration to reside in a community setting under strict supervision and electronic surveillance. In order to examine the efficacy of the program, this evaluation focuses on comparing various aspects of the PPREP program (such as costs, inmates' characteristics, and recidivism rates) to the DOC's pre-release centers serving a similar population of inmates.

The evaluation of the PPREP program consists of four main components. First we provided a statistical description of program referrals, participants, terminations, and discharges. Second, we described demographic characteristics and criminal histories of PPREP participants and a comparison group of inmates from DOC pre-release centers. Third, we compared the recidivism rate of PPREP participants to that of the comparison group. Fourth, we analyzed the per-inmate costs of the program, and compared them to the costs of pre-release centers. These analyses were designed primarily to assess whether PPREP affected recidivism in its target population, and whether it is a cost effective form of custody.

The major findings from this evaluation are as follows:

- *Of the 184 participants from the first 20 months of operation, 79 percent completed the program and were paroled, 2 percent received unconditional discharges and 6 percent were given a GCD. Four persons escaped (2 percent), 3 percent were returned to pre-release centers, and 8 percent were returned to higher custody.*
- *Comparing PPREP inmates with other pre-release inmates shows the selection process to be consistent with the program's mission to allow early reintroduction to the community for inmates who pose the least threat to public safety. PPREP participants generally had less serious current offenses and criminal histories, a higher level of education, and a higher proportion were married at the time of their incarceration.*
- *Recidivism for those released to the street directly from PPREP was significantly lower than for inmates released directly from the department's pre-release facilities. The rate for those persons released from PPREP was 15 percent and from the comparison group was 31 percent. Given that participants and the control group were not randomly selected from the pool of eligible inmates, we are unable to determine whether the lower recidivism of PPREP participants is due to the program's effects or to the selection of lower-risk inmates into the program.*
- *With an average daily population of eighteen inmates during the study period, the per-capita costs of the program were roughly equal to those of the DOC's pre-release centers. The results also indicate that the cost factors for PPREP are "utilization sensitive." Since the initial outlay is large, the unit costs are less as the number of units increases. The optimal inmate/staff ratio must be factored into the equation in determining the cost effectiveness of PPREP.*

Introduction

The Massachusetts Electronic Monitoring Program referred to as PPREP (Pre-Parole Residential Environment Phase) is a community-based pre-release program incorporating close supervision by the Department of Correction counselors and a telemetry device worn by the offender. This program, originally based at Park Drive Pre-Release Center in Boston and now located at the Shattuck Correction Unit in Jamaica Plain, began admitting participants on April 18, 1990.

The program is described as follows in guidelines provided by the Park Drive Pre-Release Center:

PPREP is a program designed to enhance rehabilitation and reintegration, and to test readiness for release by maximizing an inmate's time in the community prior to his actual parole or discharge. This program will allow an inmate to further demonstrate his/her competence in a realistic living environment while monitored under strict accountability practices.

Inmates approved for the PPREP Program will be select individuals who will be permitted to reside in the community under close supervision while they continue their employment, education, counseling and other programs. However, they remain in DOC custody and on Park Drive Pre-Release Center's count until their actual release, are required to report in-person to a designated site once per day, are required to report to PDPRC once per week, and are under the supervision of institutional staff. In addition, these individuals will be monitored by electronic surveillance devices.

Inmates deemed suitable for the program are those in minimum security or pre-release facilities who have a suitable home, appropriate sponsor, and either educational programs or employment awaiting them in the community. In addition, they are evaluated on the following criteria:

- No outstanding warrants.
- No assaultive behavior within the last two years.
- No escape history within the last five years.
- No major disciplinary action within the last six months.
- No substance abuse-related disciplinary infractions within the last six months.
- Deemed an appropriate candidate for furlough participation.
- Strong community support demonstrated (e.g., visitation).
- Good overall DOC track-record, e.g., minimal disciplinary history, good institutional evaluations, compliance with mandated programming, success in low supervision.
- Must meet conditions and requirements of the community phase of the program.

The inmate is initially reviewed for suitability in terms of crime committed, criminal history and institutional behavior record. The second phase includes an investigative report regarding the inmate's home placement. Finally, the inmate is seen by the Parole Board. Screening for program eligibility for minimum security inmates begins 12 months prior to their parole eligibility or discharge date, and for pre-release inmates screening begins 7 months prior to parole or scheduled discharge. Inmates may begin the program when they are within 90 days of parole eligibility or a confirmed discharge date.

An implicit goal of PPREP and all other DOC programs is that they are pursued without increased risk to public safety. Given this, PPREP was designed to be a program not for all pre-release inmates but for those who have demonstrated responsible behavior and are deemed suitable for early reintegration into the community.

Research Design

The purpose of program evaluation is to isolate and describe the net effects of participation in the program. The typical method of doing this is analyzing treatment and control groups, i.e., individuals who have participated in the program compared to those who are similar in all relevant respects except that they have not participated in the program. Since the program is the only known difference between the two groups, any observed group differences (such as recidivism rates) can be attributed to program participation.

The ideal method of assuring that the program is the only significant difference between the control and treatment group is random selection of subjects. While this makes for more rigorous evaluations it is not the best selection process from a programming and public safety standpoint. The PPREP mission to select from the general pre-release population only the lower-risk inmates (as defined by the selection criteria) takes precedence over research design needs.

When one cannot randomly assign people to treatment and control groups, the best evaluation strategy is to select a comparison group that closely resembles the treatment group in all relevant aspects. In this evaluation, we compare program participants to the population of inmates from which the PPREP participants were drawn, which is all inmates who entered the DOC's pre-release centers.¹

For our evaluation, data were gathered on inmates in the PPREP program from April 18, 1990 to May 1, 1992, and on pre-release inmates incarcerated during the same time period. Due

¹ Another potential comparison group is inmates who were screened but did not enter the PPREP program. However, these inmates would be different from the PPREP participants in ways relevant to their potential for success, since everyone in this group would have been found inappropriate on the basis of at least one of the eligibility or suitability criteria, or would have chosen not to participate.

to the availability of data, some of the different analyses we perform involve all of the participants during this time frame, and others involve subsets of inmates. For example, our assessment of the selection process involves all of the inmates in this two year period, while the cost analysis covers only those in the program during 1991.

Our analysis consists of four components. First, we produced a statistical description of the program. Second, we compared demographic and criminal history profiles of individuals in the program to those of other pre-release inmates. Third, we compared the recidivism rate of those in the program to that of a comparison group of inmates drawn from the pre-release population. Finally, we analyze the per-inmate costs of the program and compare them to costs for the other DOC pre-release facilities.

Program Referrals and Participants. The completion statistics and referral outcomes were generated from information provided by the PPREP administration, and were coded and entered by the Research Division. The referral information available to us covered the time period from the program's beginning in April of 1990 through February 1992.

Analysis of Selection Process. Comparing the characteristics of PPREP participants to those of the pre-release population from which they were drawn allows us to assess the impact of the selection criteria and recruitment process. Given that in order to protect public safety, PPREP participants must meet additional selection criteria beyond the minimum eligibility criteria of the state's pre-release centers, we expected that comparisons of criminal histories would

indicate that less serious offenders were being selected for PPREP.² The comparison group (n=1620) was drawn from Pondville Correctional Center and Boston, Park Drive, and South Middlesex Pre-Release Centers. These centers were chosen as similar institutions which generate the highest number of referrals to PPREP. Minimum security facilities were not used in the analysis.

Recidivism Comparison. The analysis of recidivism rates is a means of assessing successful reintegration of inmates into the community. Given that the inmates are not randomly selected for the program we can not confidently infer that differences in recidivism rates between PPREP and other pre-release inmates are attributable only to program effects. They may also be the result of differences in the kinds of inmates who are selected for the program. While a lower recidivism rate for PPREP inmates may or may not be due to the program's positive affect, a higher recidivism rate would indicate that some aspect of the program or selection process is not working properly.

For the purposes of this evaluation, recidivism is defined as reincarceration in a State, Federal, or County facility for a period of 30 days or more during one year following release. Once the PPREP participants and individuals in the comparison group were identified, records were searched for indications that they had been reincarcerated. This involved examining data

² Actually, two sets of comparisons are included in this document. Tables 4, 5, and 6 demonstrate the differences between the two groups that result from program selection. Tables 7, 8, and 9 statistically profile the recidivism analysis groups, and show the effects of excluding from the comparison group inmates with characteristics that do not appear among the PPREP participants.

from a variety of sources, e.g. the Board of Probation's court summary records, and inmate folders at DOC Central Records.³

To better isolate the effects of PPREP selection and participation, the two groups were modified in several ways. First, people from the pre-release comparison group were eliminated from the sample if those with similar characteristics were not in the PPREP sample. For example, since the PPREP selection process did not result in anyone incarcerated for first or second degree murder entering the program, we eliminated first and second degree offenders from the comparison group. Similarly, women were eliminated from the PPREP sample, since none were in the pre-release group. Only those in PPREP and in other pre-release facilities during 1991 were included in the analyses, due to availability of data. Finally, only those persons released directly to the street from PPREP and the pre-release centers were studied, and not those who had been in such programs but were returned to higher custody before release. When all restrictions were applied, there remained 98 PPREP participants and 435 comparison group members.

Cost Analysis. We assess program costs, and examine whether the per capita expenditures are more or less than they are for the DOC's pre-release facilities. Data on per capita costs of PPREP and pre-release centers were collected for the 1991 calendar year.

³ A thorough description of this process may be obtained from the DOC Research Division in the document, "Recidivism: Coding Instructions."

Results

Program Referrals and Participants

Tables 1 through 3 provide a detailed description of the PPREP referral statistics and client outcomes. As can be seen in Table 1, 475 referrals were made during the study period and 184 persons were admitted to the PPREP program. This is an acceptance rate of 39 percent. Only 31 percent of the rejections (cases which entered the screening process but did not result in an admission to PPREP) were due to the selection/screening process. Fourteen percent of the rejected inmates were transferred, discharged or returned to higher custody during screening. Over half of the rejections occurred during the prolonged screening process: 30 percent were paroled, 20 percent changed their mind and 6 percent were denied by their institutions while awaiting decisions on their acceptance to PPREP.

As seen in Table 2, the majority of referrals to PPREP came from MCI-Lancaster, MCI-Shirley, MCI-Plymouth, and South Middlesex Pre-Release Center.

Of the 184 participants, complete release information was obtained on 179. As seen in Table 3, nearly nine of ten PPREP inmates successfully completed the program: 79 percent were paroled, 2 percent were unconditionally discharged, and 6 percent received a good conduct discharge. Two percent of the participants escaped ($n = 4$), 3 percent were returned to a pre-release center, and 8 percent were returned to a higher security prison.

Table 1

**Referrals to PPREP
From April 1990, to February, 1992**

<u>Referral Disposition</u>	<u>N</u>
Total Referrals	475
Accepted into PPREP	184

Reasons for Non-Admission to PPREP

Nature of the offense or criminal history	24 %
Inappropriate sponsor or home	6 %
Transferred or discharged	2 %
Returned to higher custody	12 %
Terminated by the institution	6 %
Terminated by the inmate	20 %
Paroled	30 %

Table 2

Institutional Breakdown Of Referrals

April 1990 through February 1992

<u>INSTITUTION</u>	<u>TOTAL REFERRALS</u>	<u>PERCENT OF TOTAL</u>
Bay State Correctional Ctr.	6	1%
Boston Pre-Release Ctr.	22	5%
Bridgewater Addiction Ctr.	1	0%
MCI-Concord	1	0%
MCI-Framingham/Hodder	30	6%
Hillside Pre-Release Ctr.	11	2%
*MCI-Lancaster	61	13%
Longwood	9	2%
Medfield Prison Project	2	0%
MHHI	18	4%
Northeastern Correctional Ctr.	21	4%
Park Drive Pre-Release	46	10%
*MCI-Plymouth	79	17%
Pondville Correctional Ctr.	19	4%
*MCI-Shirley	58	12%
Southeastern Correctional Ctr.	2	0%
*South Middlesex Pre-Release	79	17%
MCI-Warwick	10	2%
Total	475	100%

* These four pre-release and minimum security institutions generated 59 percent of the referrals to PPREP.

Table 3

Reasons for Participant Termination from the PPREP Program

<u>Reason</u>	<u>Number of PPREP Participants</u>	<u>Percent</u>
Paroled	141	79 %
Discharged	4	2 %
GCD	11	6 %
Returned to Pre-Release	5	3 %
Returned to Higher Custody	14	8 %
Escaped	4	2 %
Total	179	100 %

Analysis of Selection Process

Tables 4 through 6 present descriptive statistics on several characteristics of inmates selected for PPREP and for those in the other pre-release programs during the study period, from April 18, 1990 to May 1, 1992. The variables of interest are of three categories: (1) Social history, which includes age, race, marital status, and education level; (2) Criminal history, consisting of information about past offenses such as age at first arrest, number of prior charges for different kinds of offenses, number of prior incarcerations, and number of parole violations; and (3) Current offense, consisting of governing offense type and current sentence length.

Table 4 presents social history profiles of the two groups. Both were of similar average age (approximately 32 years). A greater proportion of PPREP participants were white (79% for PPREP, 50% for the pre-release group) and married (31% for PPREP, 22% for others). PPREP participants had a slightly higher academic grade level (11.4 years versus 10.7 years for the pre-release group). Women participated in PPREP but were not in the pre-release sample.

Table 5 contains a comparison of current offense characteristics. Those selected for PPREP were significantly less likely to be incarcerated for person or sex offenses, and were more likely to be serving time for drug or property offenses. Consequently, the average sentence length for PPREP was slightly less than that of the comparison group.

Criminal history information about the two groups is presented in Table 6. There are indications that those in PPREP have shorter criminal careers than those in other pre-release programs, with the mean age at first arrest for offenses other than alcohol-related offenses being

Table 4

Demographic Characteristics of PPREP Participants vs Pre-Release

	<u>Pre-Release</u>		<u>PPREP</u>	
Mean Age, n	32.6	1623	32.2	194
Sex	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>
Male	100.0	1623	89.2	173
Female	n/a	n/a	10.8	21
Race				
White	44.5	722	79.4	154
Black	31.4	510	9.8	19
Hispanic	18.2	296	10.3	20
Asian	0.2	3	.5	1
Native American	.1	1	0.0	0
Marital Status				
Married	21.9	356	30.9	60
Separated or Divorced	14.1	230	16.5	32
Single	63.2	945	52.6	102
Widowed	.5	8	0.0	0
Common law	.2	3	0.0	0
Last Grade Completed				
3 or less	.7	11	0.0	0
4	.4	6	0.0	0
5	.3	5	.5	1
6	1.5	24	.0	0
7	2.2	35	.5	1
8	5.1	82	2.1	4
9	8.7	141	3.6	7
10	11.2	182	13.4	26
11	10.9	177	5.7	11
High School Grad	19.9	323	24.7	48
GED	14.8	241	12.9	25
Some College	4.9	94	7.2	14
College Grad	1.4	23	2.6	5
Mean Grade Level*	10.7	1329	11.4	142
Proportion High School and Above	51.2	975	64.8	142

* The mean was computed with "High School Graduate" and "GED" scored as grade 12, "Some College" scored as 13, and "College Graduate" scored as 14.

Table 5

Governing Offense: PPREP Participants vs Pre-Release

	<u>Pre-Release</u>		<u>PPREP</u>	
	<u>Years</u>	<u>N</u>	<u>Years</u>	<u>N</u>
Mean Sentence Length in Years, n⁺⁺				
Minimum Sentence	6.4	1166	6.0	115
Maximum Sentence*	9.9	1572	9.3	194
Committing Institution				
	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>
Concord	25.4	412	32.5	63
Framingham	n/a	n/a	10.8	21
Cedar Junction	74.6	1211	54.6	106
Longwood	n/a	n/a	2.1	4
Governing Offense: General Categories				
Person	43.1	699	32.0	62
Property	15.7	254	22.2	43
Drug	22.6	367	37.6	73
Sex	16.4	266	4.1	8
Other	2.3	37	4.1	8
Person Offenses				
Murder-1st Degree	.2	4	0.0	0
Murder-2nd Degree	2.8	46	0.0	0
Accessory to Murder	.1	2	0.0	0
Manslaughter	4.4	72	2.1	4
Motor Vehicle Homicide	1.2	19	3.1	6
Assault w/Intent	2.7	44	1.0	2
Armed Robbery	14.6	237	12.4	24
Unarmed Robbery	6.4	104	6.2	12
Armed Assault	8.2	133	4.6	9
Unarmed Assault	.9	14	1.0	2
Other	1.5	24	1.5	3
Not Applicable	56.9	924	68.0	132
Property Offenses				
Arson	1.5	24	3.1	6
Burglary-Armed	1.5	24	.5	1
Burglary	7.6	124	5.7	11
Larceny-Person	.8	13	.5	1
Larceny	1.5	25	7.2	14
Vehicle Theft	1.0	16	1.0	2
Other	1.5	24	4.0	8
Not Applicable	84.3	1369	7.8	151

**Table 5
(continued)**

	<u>Pre-Release</u>		<u>PPREP</u>	
Drug Offenses				
Controlled Substance	3.3	54	10.8	21
Class A	5.7	92	2.1	4
Class B	13.4	218	23.7	46
Class D	.2	3	.5	1
Operating Under				
Infl. of Narcotics	0.0	0	0.5	1
Not Applicable	77.4	1256	62.4	121

* Indicates statistically significant difference between PPREP and comparison group.

++ Sample size varies due to missing data in certain categories.

Table 6

Criminal History: PPREP vs Pre-Release

	<u>Pre-Release</u>		<u>PPREP</u>	
	N = 1351		N = 170 ++	
Mean Age at First Arrest	<u>Years</u>	<u>N</u>	<u>Years</u>	<u>N</u>
*Any offense	20.3	1351	21.6	170
Alcohol Related	23.5	347	23.6	55
*Drug Related	23.9	757	26.4	100
*Mean Number of Court Appearances for Any Offense	11.2	1351	9.4	170
Mean Number of Charges For:				
*Person	4.8	1351	3.3	170
Property	8.6	1351	8.9	170
Drug	2.8	1351	2.7	170
*Sex Offenses	.9	1351	.2	170
*Escape Charges	.1	1351	.0	170
Mean Number of Prior Incarcerations				
*County	1.0	1351	.7	170
*State or Federal	.3	1351	.1	170
*Total	1.3	1351	.8	170

* Indicates statistically significant difference between PPREP and pre-release inmates.

++ Sample size varies due to missing data in certain categories.

less for those in PPREP. Participants on average have had fewer court appearances, and fewer charges for person offenses, sex offenses, and escapes. (The differences in number of charges for property and drug offenses are not statistically significant.) PPREP participants also had fewer prior incarcerations than those in the pre-release group.

Recidivism Comparison

As part of our recidivism comparison of inmates from PPREP and the other pre-release programs, we have provided a statistical description in Tables 7 through 9. As discussed above, the goal was to obtain the greatest possible similarity between the PPREP and comparison group in order to further isolate the effects of the program.

The result of removing from each group inmates who were non-comparable is evident in the statistical profiles. For example, the two groups were entirely male, and only those with educational levels greater than the fifth grade remained for this analysis. As seen in Tables 8 and 9, the mean sentence lengths, number of prior charges and court appearances of the groups are very similar, as are the distributions of offense types. Some differences in the social histories of the groups remained, with those in PPREP being slightly older and, in average years of education, slightly more well-educated. In addition, a greater proportion of PPREP participants were married and caucasian. There were also some minor differences in criminal history profiles, with the PPREP group appearing to be a slightly less serious group of offenders.

Overall, the criminal and social profiles are similar on most of the dimensions of data available for examination. What are missing for the pre-release group are measures of social factors. By nature of inclusion in the PPREP program there is present a stable sponsor, an adequate home and work/education potentials. Although the pre-release inmates may also have

Table 7

Demographic Characteristics of PPREP Participants vs Recidivism Comparison Group

	<u>Pre-Release Comparison Group</u>		<u>PPREP</u>	
	<u>Years</u>	<u>N</u>	<u>Years</u>	<u>N</u>
Mean Age, n	33.5	435	34.8	98
	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>
Sex				
Male	100.0	435	100.0	98
Race				
White	51.3	223	79.6	78
Black	29.4	128	10.2	10
Hispanic	19.1	83	9.2	9
Asian	.2	1	1.0	1
Native American	0.0	0	0.0	0
Marital Status				
Married	24.1	105	33.7	33
Separated or Divorced	12.4	54	16.3	16
Single	63.7	277	50.0	49
Widowed	0.0	0	0.0	0
Common law	0.0	0	0.0	0
Last Grade Completed				
3 or less	0.0	0	0.0	0
4	0.0	0	0.0	0
5	.2	1	0.0	0
6	.7	3	0.0	0
7	3.2	14	1.0	1
8	3.7	16	3.1	3
9	8.3	36	1.0	1
10	9.4	41	11.2	11
11	10.8	47	8.2	8
High School Grad	18.4	80	21.4	21
GED	15.6	68	13.3	13
Some College	3.2	14	6.1	6
College Grad	1.1	5	5.1	5
Mean Grade Level*	11.0	325	11.5	69
Proportion High School and Above	51.4	167	65.2	45

* The mean was computed with "High School Graduate" and "GED" scored as grade 12, "Some College" scored as 13, and "College Graduate" scored as 14.

Table 8
Governing Offense: PPREP vs Recidivism Comparison Group*

	<u>Comparison Group</u>		<u>PPREP</u>	
	N=435		N=98 ++	
Mean Sentence Length in Years, n				
Minimum Sentence	7.6	338	7.2	72
Maximum Sentence	8.5	435	8.9	98
	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>
Committing Institution				
Concord	35.2	153	34.7	34
Framingham	0.0	0	0.0	0
Cedar Junction	64.8	282	65.3	64
Longwood	0.0	0	0.0	0
Governing Offense: General Categories				
Person	41.8	182	34.7	34
Property	18.2	79	19.4	19
Drug	22.5	98	35.7	35
Sex	15.4	67	8.2	8
Other	2.1	9	2.0	2
Person Offenses				
Murder-1st Degree	0.0	0	0.0	0
Murder-2nd Degree	0.0	0	0.0	0
Accessory to Murder	0.0	0	0.0	0
Manslaughter	2.8	12	1.0	1
Motor Vehicle Homicide	1.1	5	3.1	3
Assault w/Intent	2.8	12	2.0	2
Armed Robbery	17.2	75	13.3	13
Unarmed Robbery	7.1	31	7.1	7
Armed Assault	7.4	32	4.1	4
Unarmed Assault	1.1	5	1.0	1
Other	2.2	10	3.0	3
Not Applicable	58.2	253	65.3	64
Property Offenses				
Arson	.9	4	4.1	4
Burglary-Armed	.9	4	0.0	0
Burglary	8.5	37	6.1	6
Larceny-Person	.7	3	0.0	0
Larceny	2.3	10	6.1	6
Vehicle Theft	2.1	9	0.0	0
Other	2.8	12	3.0	3
Not Applicable	81.8	356	80.6	79
Drug Offenses				
Controlled Substance	4.6	20	9.2	9
Class A	6.7	29	2.0	2
Class B	11.0	48	24.5	24
Class D	.2	1	0.0	0
Operating Under				
Infl. of Narcotics	0.0	0	0.0	0
Not Applicable	77.5	337	64.3	63

* There are no statistically significant differences between PPREP and the comparison group.

++ Sample size varies due to missing data in certain categories.

Table 9

Criminal History: PPREP vs Recidivism Comparison Group

	Pre-Release Comparison Group		PPREP	
	N = 353		N = 89	
	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>
Mean Age at First Arrest				
*Any Offense	19.5	353	21.4	89
Alcohol Related	22.7	86	23.7	28
*Drug Related	22.9	211	27.5	48
Mean Number of Court Appearances for Any Offense	4.1	435	4.5	98
Mean Number of Charges For:				
Person	4.4	353	3.6	89
Property	8.7	353	7.3	89
Drug	2.9	353	2.2	89
Sex Offenses	.6	353	2.2	89
Escape Charges	.1	353	.1	89
Mean Number of Prior Incarcerations				
*County	.9	353	.5	89
State or Federal	.2	353	.2	89
*Total	1.1	353	.7	89

* Indicates statistically significant difference between PPREP and comparison group.

these experiences on release, the information that would allow evaluation of these factors has not been routinely collected.

The recidivism rate calculated for PPREP participants was significantly lower than for inmates released directly from the department's other pre-release programs: The recidivism rate for those released from PPREP was 15.3 percent, versus 31.1 percent for the comparison group.

Cost Analysis

Although the primary goals of the PPREP program relate to the scheduled and gradual reintegration of criminal offenders into the general community, pragmatic issues must also be considered. Imprisonment is expensive and overcrowding is a chronic problem. The secondary benefits for the Department of Correction from inmate participation in the PPREP Program are cost savings realized by reducing the financial outlay for each inmate, and the potential for increasing vacant bed-space within overcrowded facilities. In order to evaluate cost savings to the DOC realized through the operation of the PPREP Program, this analysis contrasts costs of maintaining an offender in (1) the institutional pre-release centers, (2) the contract pre-release programs, or (3) in PPREP.

Method

To assess relative costs it is necessary to calculate the per unit cost of A (PPREP) versus B (pre-release center) or C (contract pre-release). Although inmates in minimum security settings may be accepted to the PPREP program, they are on pre-release status once they have been

classified to PPREP. Therefore, the pre-release program costs are appropriately compared to the PPREP program costs. The per unit cost of either A or B or C is the total operational cost of imprisonment for one year for one person.

The Budget Office of the DOC Administrative Services calculates an Annual Fiscal Year (FY) Cost Per Inmate for each facility. This number is derived by dividing the total expenditures for that facility, including the overhead, by the average daily population. The overhead costs represent those programs and services that are shared by all inmates, such as Central Administration, the Shattuck Hospital Unit, the Stress Program, the Transportation Unit, the Correctional Officers' Training Academy, the Apprehension Unit and Management Systems. This overhead figure does not include Capital Costs, Industries, Education Services or Health Services.

To assess the cost effectiveness of PPREP, the annual per inmate cost of PPREP will be compared to the average annual cost of housing an inmate in a State pre-release center and to the average annual cost of housing an inmate in a contract pre-release center. The State pre-release cost figure will be the average of the Boston State Pre-Release, South Middlesex Pre-Release, Park Drive Pre-Release and the Lancaster facilities annual per capita cost.⁴ The cost figures for each facility were obtained from the DOC Budget Office. The contract pre-release figures are derived by dividing the number of beds provided into the total contract amount. Mr. J. Bryan Riley, Executive Director of Massachusetts Halfway House, Inc. provided figures for the contract pre-release programs.

⁴ Although other facilities, such as MCI-Shirley and MCI-Plymouth refer inmates to the PPREP program, the minimum and pre-release figures for these institutions could not be separated. Thus, only pre-release figures are used in the analysis.

The budget for the PPREP Program is not generally separated from the operating budget for the Park Drive Pre-Release Unit which has been its host facility. In year one of the PPREP Program (1990), much of the operational cost was supported by Park Drive Pre-Release. In 1991, the Program was moved to the Shattuck Personnel Building, although the budget is still administered by the Park Drive facility. In order to make the cost comparisons as equitable as possible, the budget for the PPREP Program alone was separated from the general budget of Park Drive. Salaries and other operational expenses have been totally or proportionally assigned to the PPREP budget as appropriate. The DOC overhead costs have also been included in the calculations. The ratio of costs per inmate will be compared for calendar year 1991 at which time the PPREP Program was fully and independently operational.

As previously explained, the PPREP Program is planned for three months participation. It is necessary to calculate the number of "person days" in PPREP for 1991 in order to arrive at an annual per capita cost.

Sources of Cost Differences

There are several differences in cost and cost offset between the pre-release and PPREP Programs, some of which can be accommodated in the analysis and some not. For example, Health Care Costs for the inmates will not be included. The DOC contracted for Health Care from a private corporation, Emergency Medical Services Associates (EMSA). Those persons in the pre-release programs are provided medical care as necessary under this contract, therefore this contributes to the unit cost of their care. Most of the PPREP participants, on the other hand,

provide their own health care coverage either through employment or in neighborhood clinics. This health related cost difference is not calculated in our study.⁵

The Electronic Monitoring System requires the rental (or purchase) of a central computer system that monitors the bracelet system for each PPREP participant. The Home Monitor equipment also must be rented. The PPREP Program requires that the participants pay the cost of their home equipment, fifty dollars a week, usually at the start of their home confinement. This money is retained by the PPREP Program and is applied directly to the costs of the monitoring equipment and the supervisory Staff. This is in contrast to the institutional pre-release centers, for while their participants generate money for the DOC centers (twenty-five percent of their salary goes to the pre-release facility) these monies are returned to the Massachusetts General Fund.

Additionally, food, some clothing items, and shelter are included in the institutional pre-release figures, but PPREP participants are responsible for their own daily living expenses. The contract pre-release amounts include food and shelter plus a proportion of the Massachusetts Half-Way House Inc. capital costs.

Expenditures for PPREP in 1991

Using the actual monthly budget of expenditures and income for the PPREP program that was provided by the Park Drive pre-release administration office, the following cost clusters

⁵ The annual per capita cost to the DOC for the health care provided by EMSA for fiscal 1992 was \$2221. For those in PPREP who provide their own health care through their employer or other means, the DOC would save this amount. However, fixed costs of DOC medical services, emergency care, having some inmates not providing all of their own care, and other factors complicates the calculation of the relative medical costs of PPREP versus incarcerated inmates. When coupled with inadequate access to medical data, these factors prevent us from providing an accurate assessment of medical cost savings attributable to PPREP.

Table 10

**PPREP PROGRAM COSTS
January 1, 1991 through December 31, 1991**

I. Monitoring Equipment Costs	<u>Total</u>
Mitsubishi Rental	\$ 21,600.00
Telephone bills	8,689.35
Computer Supplies	3,443.50
Office Supplies	1,291.76
Sub total	<u>\$ 35,024.61</u>
II. Salaries	
The salaries are for full-time PREP Personnel only:	
Director full time + weekend coverage	
Assistant Director full time + weekend coverage	
Secretary	
Field Counselors - 2 full time	
Investigators - 2 full time	
Sub total	<u>\$219,083.20</u>
III. Personnel Expenses	
Beepers	\$ 566.64
Auto Maintenance	1,580.18
Gas for Cars	1,538.40
Police Supplies	547.45
Sub total	<u>\$ 4,222.67</u>
IV. Program Participant Expenses	
Drug Testing	
Sub total	<u>\$ 841.18</u>
Total	<u>\$ 259,171.66</u>

were developed: Those relating to the monitoring equipment costs, salaries for personnel assigned exclusively to the PPREP Program, expenses associated with PPREP personnel, and expenses relating to the program participants. Table 10 presents the sub-group and total expenditures for each cluster.

The rental of the Mitsubishi equipment is \$1,800 a month, the payment of which actually began in May 1991. (The first four months were Pro Bono.) This monthly charge was prorated as though it had been paid every month in 1991. The telephone bills, which average \$725 per month, reflect the activity necessary to monitor the program participants via the telephone.

The salaries of PPREP personnel are reported in the aggregate. The Director's base salary was augmented with an amount that represents forty weekends and ten holidays on standby coverage. The Assistant Director's salary includes an estimated six holidays of coverage. There are also Correction/Duty Officers who contribute time to the PPREP program but whose salaries are covered in the pre-release budget. These salaries are not included in the PPREP costs. No fringe benefits are included for either PPREP or pre-release program cost calculations.

The Investigators and Field Counselors work with participants from the entire state, necessitating the gas and automobile maintenance costs.

Drug testing of the program participants may be scheduled, random or "on suspicion." In 1991, \$841.18 was spent for drug tests. The costs of the tests vary depending on whether single or multiple drug identification is required. The DOC and contract pre-release programs also conduct drug and alcohol testing, the costs of which are included in the per capita costs.

Income from PPREP Participants

From records provided by the PPREP administration, the annual income and average daily

population of the program were calculated. In 1991, a total of 105 persons participated with a mean time of sixty three days each in the program. The total in-program time was 6615 "person days." This number ranges from one week for two people to 4.6 months for another. Four people entered the program twice in 1991. Throughout the year, there was an average daily population of 18.25 participants.

In calendar year 1991, the mean amount paid to the program by PPREP participants was \$333.62. Ten persons did not contribute and one person paid \$800.00. The total amount recovered in 1991 was \$35,030.00.

Calculation of Cost Differences

Tables 11 and 12 present the information necessary to compare costs of the programs and to calculate the cost difference to the DOC for 1991. Table 11 lists the expenditures and the average daily population for the four pre-release facilities: Boston Pre-Release, Park Drive Pre-Release, South Middlesex Pre-Release and Lancaster and for the contract pre-release facilities. Averaged across the facilities, the Table shows a mean expenditure for 1991 of \$1,905,609 which is revised down to \$1,806,019 after accounting for the program cost offset. The average daily population per institution was 146 persons. The pre-release per-capita cost for 1991 was \$12,370.00.

The contract pre-release program accepted referrals and placed inmates from the Department of Correction in the Brooke House and the George F. McGrath House in 1991. The contract negotiated for 1991 between the DOC and the Massachusetts Half-Way Houses, Inc. was for 79 beds at \$34.05 a day or \$12,428.25 per-capita for a year. During 1991, 360 State pre-release inmates used the contract facilities.

Table 11

**PRE-RELEASE PROGRAM COSTS
Calendar Year 1991**

Facility	Expenditures	Program Cost offset	Revised Expenditures	Average Population
Boston Pre-Release	\$1,278,004	\$122,108	\$1,155,896	100
Park Drive Pre-Release	1,225,896	58,875	1,167,021	59
South Middlesex				
Pre-Release	1,559,102	143,246	1,415,856	181
Lancaster Pre-Release	3,559,433	75,131	3,484,302	243
Subtotal	\$7,622,435	\$398,360	\$7,224,075	583
Average Pre-Release	\$1,905,609	\$99,590	\$1,806,019	146

Annual Per Capita Cost..... \$12,370.00

**Contract
Pre-Release**

**Contract
cost**

**Massachusetts
Half-Way House Inc.**

\$34.05 per day

Annual Per Capital Cost..... \$12,428.25

Table 12 shows the calculations that provide a comparison between the two DOC programs. For each offender who voluntarily participates in the Electronic Monitoring Program (rather than remaining in a DOC pre-release or minimum facility) there is an annual per capita savings of \$88.00. With an average daily population of 18.25 participants in PPREP, the operation of this program resulted in a savings of \$1,606 for the year 1991.

Table 12

Calculations for 1991 Per Capita Cost Comparisons for Pre-Release and PPREP

Program	Expenditures	Average Population	Cost Per Inmate	Overhead Cost Per Inmate	Total Cost Per Inmate
Pre-Release	\$ 1,905,609	146	\$12,370	\$2,100	\$14,470.00
Minus Offset	\$ 99,590				
	\$ 1,806,019				
PREP	\$ 259,182				
Minus Offset	\$ 35,030				
	<u>\$ 224,152.00</u>	18.25	\$12,282.00	\$2,100	\$14,382.00
Per Capita Savings for PPREP					\$ 88.00
X 18.25 persons					\$ 1,606.00

Savings to DOC for 1991 due to Electronic Monitoring Program

These calculations demonstrate that, even though there were equipment costs unique to PPREP, the per capita cost is essentially the same as that of the pre-release figures based on a daily population of eighteen participants who continue making offset payments that remain in the DOC budget. The costs or savings of PREP to the DOC will be particularly sensitive to the

number of persons participating in and contributing to the program. According to Tim App, Assistant Deputy Commissioner of Community Corrections, the electronic monitoring equipment now in use has the capacity to accommodate thousands of users. The current PPREP service staff would not need to be expanded until there were 150 participants per year. Table 13 shows the projections of cost and savings for PPREP versus pre-release inmates using the averages generated for the previous tables. On average the participants remain in the program for 63 days and contribute approximately \$334.00 during their participation.

Table 13
Projected Savings for the DOC
Due to Incremental Participation in PPREP

PPREP Cost Minus Offset	Number of Participants Savings	Cost Per Inmate/ No Overhead	Cost Difference PPREP/Pre-Release	DOC
\$224,152	105	\$12,282	\$88.00 x18.25 ADC	\$ 1,606.00
\$219,182	125	\$10,157	\$2,213 x21.58	\$47,757.00
\$212,782	145	\$8,505	\$3,865 x25.00	\$96,625.00

The savings would slow at the 150 participant mark since more staff would be added. This savings cycle would be repeated incrementally as shown in Table 13. Until such program expansion actually occurs it is difficult to project an optimal number of participants since there may be hidden and additional costs not considered in this analysis.

The expenses and income from DOC's pre-release facilities, the contract pre-release program, and PPREP electronic monitoring program have been calculated to show almost identical per-capita costs for the calendar year 1991. The PPREP program is utilization sensitive and will realize savings for the DOC with a higher enrollment even as personnel costs are increased. Savings involved in the use of home confinement will really depend upon the extent to which it is used as an alternative to more expensive options such as secure facilities. If under-utilized, electronic monitoring becomes just one more form of control and is no more cost-effective than other pre-release programs.

Discussion

The profiles of participants versus non-participants demonstrate what can be described as "selection" differences. Participation in the PPREP program required not only a non-violent criminal history and good institutional behavior, but it requires that inmates placed in the program have an approved place to live and a responsible sponsor at that residence. This favors the married and economically secure inmate with work or education already arranged and with a shorter criminal career than those in pre-release centers. The statistics reported in the study (Tables 4 & 5) demonstrate the expected differences. (The significantly larger proportion of white than non-white inmates in the PPREP program is unexplained except that race may serve as a proxy for socio-economic level).

As was discussed in the text, the differences in the recidivism rates of the PPREP and comparison groups are not attributable solely to the program due to the selection process and criteria. The evaluation sampling process minimized many of the differences in criminal history

between these groups. As expected, the comparison group inmates started their criminal careers at a younger age and had a higher number of prior incarcerations. The recidivism rate for those released from PPREP was only half that of the comparison group. There are several plausible explanations for this: (1) Inmates with less of a criminal career have a better chance of successful reintegration into the community, and PPREP inmates had less serious criminal careers than those in other pre-release programs. (2) Social and economic factors, particularly the conditions under which inmates live after release from their term of incarceration (e.g., stability of residence, presence of a spouse, etc.), are important recidivism risk factors, and the selection criteria for PPREP selected those of higher socio-economic levels. (3) The PPREP program assists in the process of reintegration in a way that reduces subsequent criminal behavior. The surest way to determine which of these explanations is correct is to have random selection from a pool of eligible inmates, or to measure and statistically control for factors affecting recidivism which may appear at different levels in the PPREP and control groups.

As for comparative costs, the initial outlay for equipment and inmate management combined with low participation levels makes the maintenance of this program expensive. Each additional inmate participating in the program reduces the cost per inmate, up to the point that more staff and monitoring equipment are needed. The proposed added unit of fifty per year is the recommendation of the Director of the PPREP program. However, the increased case load for the counselors may adversely affect the advantages of the program that contributed to the decreased recidivism rate. The suggestion is made that if the enrollment in PPREP is increased, quality monitors should be incorporated in the management plan.

Electronic monitoring programs provide a means of easing prison overcrowding by having inmates provide their own housing. The benefits of this must be assessed in view of the relative need for beds among security levels. Currently, the Department of Correction's lower security beds are underutilized. While the electronic monitoring program vacates prison beds, the eligibility criteria make it so that only pre-release and minimum beds will be made available due to PPREP, while most overcrowding occurs in the medium security level.