



Research Publication

The Social & Economic Benefits & Costs of Commercial Industries: A foundation study

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Research Officer

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NSW Department of Corrective Services

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Products and services provided by commercial industries:

1. Furniture: office furniture, office chairs, educational furniture, custom hardwood furniture, outdoor furniture, re-upholstery and re-furbishment.
 2. Textiles: health-care linen, hospitality linen, inmate clothing, laundry bags.
 3. Engineering: furniture frames, re-cycled clothing bins, mail boxes, powder coating, trolleys, trailers, security fencing and grills.
 4. Electronics: testing, computer re-cycling, circuit board testing, map digitizing and tele-marketing.
 5. Services: commercial laundries, catering, bakery, packaging and assembly, demountable classroom re-furbishment, timber mills, re-forestation, Indigenous creative works centre and private sector partnerships.
 6. Print: silk screen printing, signage, departmental forms and books, book binding and offset printing.
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The social and economic benefits and costs of commercial industries

Executive summary

In evaluating the merit of government funded programs the expenditure in operating programs needs to be balanced against outcomes. The NSW Department of Corrective Services has a range of correctional centre programs which seek to make a positive contribution to the personal development of inmates. These programs include inmate employment programs provided by Corrective Services Industries (CSI). Inmate employment is available either in

- *service industries*- which consists of all those programs that employ inmates to maintain the self-sufficiency of the correctional system which are not subject to a fee for service (e.g., kitchens, laundries, gardening). This category also includes work undertaken by inmates through community projects,
- *commercial industries* - which consists of all those programs run on a commercial fee for service basis (e.g., sale of products/services to external clients and sale of products/services to the correctional system).

As well as a business outcome commercial industries also have a social and economic

outcome for inmates, the Department and the general public.

This study is a foundation study in that it gathers material together which could form the basis of a more comprehensive study into the social and economic benefits and costs of commercial industries. The objectives of this study were:

- to identify the social and economic benefits and costs of commercial industries;
- to establish if these benefits and costs could be measured, and
- where benefits and costs are measurable the possibility of estimating a monetary value to these.

In gathering information on the benefits and costs of commercial industries it was clear that the material lent itself to division into three main areas: the management of inmates within correctional centres; rehabilitation of offenders; and post-release employment. The opinions of the general public towards inmate employment were also canvassed.

Correctional centre management

The operation of commercial industries within correctional centres makes more employment positions available to inmates than would be the case if service industries were the only form of employment for inmates.

The literature from other correctional jurisdictions provides a substantial amount of anecdotal evidence that commercial industries employment makes a positive contribution to the effective management of inmate behaviour within correctional centres. This anecdotal evidence is supported by empirical findings from north America. The north American studies have found that inmates employed in commercial industries were less likely to receive misconduct reports than inmates who were largely idle (Flanagan et al, 1988; Maguire, 1996; Saylor & Gaes, 1996).

(a) Effects within NSW correctional centres

In NSW all standard correctional centres contain commercial industries. Therefore there is no representative correctional centre to which centres containing commercial industries can be compared on such measures as number of serious incidents or cost of operation. As an alternative means of obtaining information assessments of the effect of commercial industries in correctional centres were sought from Governors. Most of the information contained in this section was obtained through a survey of Governors of NSW correctional centres.

The survey collected information on the effect of commercial industries on inmate management, payment of wages, work performance reports etc. This survey was undertaken by way of a structured self-completion questionnaire sent to the Governors during January 1998.

(i) Inmate management

The survey found there was universal agreement amongst NSW Governors that commercial industries employment was useful in assisting in the good management of inmates. In addition, all Governors responded that commercial industries contributed to a reduction in tension between inmates. More than nine in ten Governors (92%) thought commercial industries also contributed to a reduction in tension between inmates and officers. Governors considered that these effects were largely a result of inmates being constructively occupied and the alleviation of boredom.

Governors' opinions were sought regarding the effect on the centres if employment in commercial industries was not available. All Governors responded that there would be a negative effect on the operation of the centres including an increase in tension with more inmate misbehaviour and subsequently greater pressure on correctional staff.

Governors were presented with a list of factors important to correctional centre management, including serious incidents. Governors were asked the effect of commercial industries employment on these factors (i.e., if there was a positive effect, no effect or a negative effect). Responses nominating a positive effect dominated for most of the factors listed. In cases in which Governors did not nominate a positive effect they were much more likely to nominate no effect than a negative effect. The percentage of Governors nominating a positive effect for the listed factors is below.

- 100% of Governors thought that commercial industries had a positive effect on inmate self-esteem;
- 96% of Governors thought that commercial industries had a positive effect on inmate behaviour;
- 70% or more Governors thought that

commercial industries had positive effects on inmate health and serious incidents (e.g., reducing fights between inmates and the level of inmate self-harm);

- 50% or more Governors considered commercial industries had a positive effect on misconduct reports, stress on correctional officers, property damage and serious incidents (e.g., reducing suicides in custody, assaults on officers and assaults on inmates);
- 35% of Governors thought commercial industries had a positive effect on escape/absconds;
- 26% of Governors thought commercial industries had a positive effect on drug taking;
- 25% of Governors thought commercial industries had a positive effect on turnover of correctional officers;
- 22% of Governors thought commercial industries had a positive effect on correctional officer absenteeism.

The highest number of negative effect responses for any of the above factors was 13%. This was with regard to commercial industries' effect on escape/absconds (i.e., that it increases escape/absconds). Yet as seen above, a greater number, 35% of Governors, thought commercial industries had a positive effect (i.e., reduced) escapes/absconds.

As seen above Governors assessed commercial industry employment as making a positive contribution to inmate behaviour, including a reduction in serious incidents. Therefore it appears that by making employment available in commercial industries correctional centres are more pleasant and safer places in which to live and work. Such an effect would benefit both inmates and correctional centre staff.

If commercial industries does have a positive impact on inmate behaviour it is likely that the general operating costs of correctional centres are reduced. However, due to the lack of baseline data an estimate of these cost-savings cannot be calculated. Baseline data is not available because there is no correctional centre without commercial industries suitable for comparison on costs of operation or occurrence of serious incidents. Thus, the difference commercial industries makes to operating costs or serious incidents is not currently available.

(ii) Effects of the payment of wages

The existence of commercial industries within correctional centres increases the number of inmate employment positions. Without commercial industries unemployment would be higher because employment positions would be limited to those available in service industries. Consequently due to commercial industries greater numbers of inmates have the opportunity to earn a wage. The increased number of waged positions appears to have a number of benefits to NSW correctional centres. Responses from the survey of Governors suggest that:

- wages have a positive influence on inmate behaviour and therefore inmates are less likely to be a management problem;
- inmates have purchasing power with which to address discretionary consumption.

Other benefits from inmate wages are:

- the amount paid out in inmate unemployment payments is reduced; and
- inmates with Victims Compensation Levy (VCL) obligations have the levy deducted at a rate commensurate with their level of earnings. Due to the extra employment positions available within commercial industries, approximately

31% of inmates are paying VCL at the higher waged rate rather than the lower unemployed rate thus leading to quicker resolution to VCL debts.

Of the above benefits emanating from inmate wages the benefit currently quantifiable is the effect of commercial industries on inmate unemployment payments. On the basis of existing information it appears that due to the employment positions available in commercial industries the Department's responsibility for inmate unemployment payments is reduced by approximately \$1 million annually.

(iii) Work performance reports

Governors stated that inmate work performance reports provide information which is used for decisions on security classification, case management, parole reports and other important matters. The additional employment positions due to commercial industries means that work performance reports are available on a greater number of inmates than would otherwise be the case.

(iv) Other financial costs and benefits

When asked about additional costs to their centre from commercial industries 25% of Governors did not respond whilst 38% stated there were no additional costs. Five Governors (21%) stated that commercial industries increased their operating costs, but it was unclear whether these Governors were referring to costs for which they are reimbursed from commercial industries. Four Governors (17%) thought there was at times a need for extra staffing due to commercial industries.

When asked about savings due to the presence of commercial industries 38% of Governors did not respond whilst 42% stated there was no savings. Four Governors (17%) thought there was less overtime.

(v) Factors important to inmate welfare

Lockdowns and reduced time out-of-cells can cause stress to inmates and consequently greater inmate management problems for correctional officers. Governors were asked their opinion of the effect on lockdowns and time out-of-cells if commercial industries employment was not available. According to some Governors, without commercial industries a greater number of lockdowns would occur and inmate time out-of-cells would decrease (42% and 33% respectively). The main explanation given for this was that without commercial industries employment there would be increased inmate misbehaviour and a greater need to implement security measures.

(vi) Effect on major inmate management strategies

Case management, program pathways and the structured day are important inmate management strategies employed across correctional centres in NSW. Governors were asked what the effect would be on these management strategies if commercial industries were not available.

Whilst four Governors (17%) thought case management would not be affected, 58% of Governors thought that case management would be affected. Governors' main reasons for an effect on case management were:

- that there would be less opportunity to review inmate behaviour (38%), and
- that inmates would no longer cooperate with case management (8%).

Whilst six Governors (25%) thought that not having commercial industries available would have no effect on program pathways, 58% of Governors thought that program pathways would be affected. The main explanations given by these Governors who thought program pathways would be affected were:

- that if commercial industries was not available this would limit the choices within program pathways (17%), and
- it would remove an important part of program pathways (17%).

Only two Governors (8%) thought that not having commercial industries available would have no effect on the structured day. However, 79% of Governors thought that it would effect the operation of the structured day. The main responses given by these Governors were that without commercial industries:

- the structured day would not be sustainable (42%), and
- the structured day would be difficult to manage (17%).

(vii) Comparison of education and commercial industries

Commercial industries generate revenue produced from inmate labour. This does not necessarily mean that commercial industries is a less expensive program to operate than programs, such as education, which do not produce any revenue. If a business loss is attained by commercial industries this could be viewed, for comparison purposes, as the cost of operating the program. To determine the economic value of programs the cost of operating programs would need to be balanced against program outcomes such as improved inmate management and the effect on post-release offending behaviour and employment.

In this study there were similarities in Governor's appraisals of the main benefits of education and correctional industries. The most common benefit nominated for education programs was the provision of training to inmates, whilst for commercial industries it was instilling the work ethic (46% respectively). The second most common benefit nominated for education was positive inmate

attitudes and behaviour (38%), whilst for commercial industries it was the provision of training to inmates (33%).

Rehabilitation

This section gathered information on the rehabilitation of offenders. The economic costs of crime are huge. Crime also causes the community considerable anxiety and distress. Although many of the factors which contribute to offending behaviour fall outside the control of correctional systems the containment of offenders does provide opportunities, not otherwise available, to involve offenders in programs considered beneficial to their reintegration into the community.

Current evidence from other jurisdictions gives some support to the view that commercial industries has a positive influence on recidivism. In NSW there is no baseline data which would allow the contribution of commercial industries to recidivism to be determined. This is because there appears to be no representative group of non working inmates which could be used for comparison purposes. In NSW correctional centres all inmates are expected to work if work is available. Inmates who serve a sentence of some duration and have little or no employment during their sentence are likely to be different from inmates in general.

A descriptive analysis undertaken in this report found that commercial industries, by its very nature, has some generic utility with regard to recidivism. The analysis found that many of the characteristics present in successful rehabilitation programs, particularly those regarding social learning and those that address factors associated with criminal behaviour, appear to be present in the commercial industry employment.

Post-release employment

This section gathered information on the post-release employment of offenders.

There is some empirical and anecdotal evidence, from other correctional jurisdictions, that correctional industries can have a positive influence on post-release employment. In NSW, McHutchison (1995) found anecdotal evidence that commercial industries (as well as service industries) provided offenders with work experience which can increase their post release employment opportunities.

In NSW empirical evidence of commercial industries contribution to post release employment cannot be determined due to the lack of baseline data. Baseline data does not exist for the same reasons as stated in the previous section on rehabilitation.

During an inmate's sentence, employment in commercial industries make it possible for inmates to enrol in TAFE courses, complete course modules, and gain accreditation towards registration in apprenticeships.

Employment in commercial industries assists inmates in the development of general employment competencies (i.e., planning and organising activities, communicating information, working in teams, solving problems, etc.). It also provides an opportunity for inmates to develop an understanding of the principles involved in production, customer service, and quality systems management.

Public perception of commercial industries

Public opinion regarding correctional programs is important. If the public believe that such programs are useful then they have greater confidence in the system.

Surveys undertaken in north America (Riley & Rose, 1980; Flanagan, 1989; Johnson, 1994) have found considerable public support for conducting vocational/employment programs within correctional centres.

When surveyed for this study the majority of

NSW Governors (58%) thought that the general public were unconditionally supportive of commercial industries.

The Department commissioned, for inclusion in this study, a survey from AC Nielson Pty Ltd in November 1998 to ascertain the NSW general public's opinion on the employment of inmates in correctional centres.

A very high number of the general public agreed that it was a good thing that inmates were expected to work (93%). A high number also agreed that employment in commercial industries was likely to provide inmates with work skills (91%).

Lower percentages of the general public agreed that employment impacted positively on inmate behaviour. Seventy seven percent agreed that working in commercial industries is likely to improve the behaviour of inmates whilst in gaol. A much lower percentage (47%) agreed that prisoners with work experience are less likely to offend again after release. This last question produced a 'no' response of 31% and a 'don't know' response of 22% suggesting that there is a substantial number in the community who do not believe, or are uncertain, that work experience leads to less offending after release.

Conclusion

As seen above, commercial industries are viewed by Governors of correctional centres as clearly contributing a broad range of benefits to correctional centres within NSW. It is likely that these benefits, particularly the effect on inmate management, provide substantial cost-savings to the NSW correctional system. The extent of these cost-savings cannot be determined due to the lack of baseline data. The contribution commercial industries makes towards rehabilitation and post-release employment is still unclear. Empirical evidence of positive outcomes in these areas would further increase the estimate of cost-savings to the Department and

the community generally.

Recommendations

Resulting from this foundation study recommendations for further investigation are as follows:

- ▶ that the information in this study be made available to specialists in economic analysis as a basis to further develop the social and economic benefits and costs of correctional industries;
- ▶ to explore the suitability of using data on unemployed inmates as baseline data for comparisons on rehabilitation and post release employment; and
- ▶ to refer this report for the information and attention of the Correctional Industries Consultative Council of NSW with regard to the future development of commercial industries.

Introduction

Public sector organisations are increasingly being required to monitor their effectiveness in delivering services (Adnum, 1993). This greater accountability in the public sector has led departments to investigate the means of effectively measuring the performance of both the services provided and staff. Evaluation in the form of periodic program evaluation or routinely collected performance indicators are becoming increasingly more common.

With the corporatisation and commercialisation of government departments in Australia, there have been moves to evaluate the performance of programs using techniques which are more financial or economic in nature. Decision making regarding the provision of programs very often, relies on their justification on economic grounds.

In Australia, statistics on corrective service operations are compiled annually in the Report of Government Services (SCRCSSP, 1998). By facilitating comparisons between jurisdictions within Australia this information is intended to promote performance improvement. In the USA the American Correctional Association (ACA) is undertaking a project which seeks to establish appropriate performance standards for correctional centres¹ (Miller, 1998).

The NSW Department of Corrective Services has a range of correctional centre programs which have the objective of positively influencing the personal development of inmates. These programs include inmate employment programs provided by Corrective Services Industries (CSI). Inmate employment is available either in:

- *service industries* - which consist of all those programs that employ inmates to

maintain the self-sufficiency of the correctional system which are not subject to a fee for service (e.g., kitchens, laundries, gardening). This category also includes work undertaken by inmates through community projects, or

- *commercial industries* - consists of all this programs run on a commercial fee for service basis (e.g., sale of products/services to external clients and sale of products/services to the correctional system).

As at October 1998, 34% of inmates worked in service industries whilst 31% worked in commercial industries. Of those not working 16% were classified as unemployed (i.e., willing to work but no employment position currently available). Most of the other inmates were remand inmates. Only 2% of inmates were described as non-workers (i.e., not willing to work). It can be seen that without commercial industries employment far fewer employment positions would be available for inmates.

For a full description of commercial industry operations in NSW correctional centres please see page ii.

In recent decades commercially focused industries have become an integral part of correctional centres, both in Australia and overseas. Evaluations of commercial industries have largely investigated its influence on post-release employment, recidivism and inmate management.

In accordance with the move in the public sector towards greater accountability this study investigates the social and economic benefits and costs of commercial industries in NSW. This study, undertaken by the

Research and Statistics Unit, is a foundation study in that it gathers together information which could form the basis of a more comprehensive study.

Commercial industries are unique among correctional programs in that the expense of operating the program is offset, to some degree, by the revenue generated from the labour of the inmates participating in the program. The economic outcome from the business operations can be a profit or loss.

In determining an economic value for commercial industry programs, the profit or loss from the business operations would need to be combined with the net social benefits emanating from, but external to, the business operations. Net social benefits are the value of the non-business benefits of the operation less the non-business costs.

The social benefits and costs from inmate commercial industries employment would appear to include those which relate to: correctional centre management, the rehabilitation of offenders and their post-release employment as well as the impact of the business operations on the local community. This study will address the first three areas. In addition, the opinions of the general public towards inmate employment are also examined.

The social benefits and costs from commercial industry operations would vary between correctional centres. This is because correctional centres themselves vary from each other in many ways.

Due to this variation, a precise estimate of the monetary value of benefits or costs to correctional centres from commercial industries would require that they be calculated separately for each centre before being aggregated to a total for the State.

The total correctional centre net social benefits would need to be combined with the net benefits to rehabilitation and post-release employment in order to arrive at a figure representing overall net social benefits.

Once overall net social benefits are determined this would need to be combined with the business profit or loss in order to reflect an economic value for commercial industries.

There are a number of techniques which allow the cost of programs to be related to the economic outcomes. For example:

- net present value² = present value of benefits (i.e., revenue + net social benefit) - present value of cost of operation;
- cost benefit ratio = present value of benefits (i.e., revenue + net social benefit) / present value of cost of operation; (Payne, 1982)
- ROI (return on investment) = ((profit or loss + net social benefit) / cost of operation) x 100 (Phillips, 1996).

Aims of this study

This study investigates the effect of commercial industries on inmates, correctional centres and the community in order to:

- identify the social and economic benefits and costs of commercial industries;
- establish if these benefits and costs can be measured, and
- where benefits and costs are measurable the possibility of estimating a monetary value.

Overall methodology

The methodology for this study consisted of, identifying relevant material through a literature search, the undertaking of interviews and a survey of Governors of NSW correctional centres.

The literature search was undertaken using the facilities and staff at the Department's library at the Corrective Services Academy, Brush Farm and the University of Technology, Ultimo. Overseas organisations with interests in inmate rehabilitation were contacted for assistance in locating relevant material. The organisations which responded are listed in Annex IV.

The survey of NSW Governors was undertaken to obtain detailed information on the influence of commercial industries within correctional centres.

Layout of this report

This report presents information under four main headings, Correctional Centre Management, Rehabilitation, Post-release Employment and Public Opinion.

Each section is designed to contain all relevant material pertinent to these areas including background information, analysis of research and implications for achieving the objectives of this study, and implications for further research.

The section titled Correctional Centre Management looks at existing research on the effect of commercial industries within correctional centres. Results of the survey of Governors undertaken as part of this present study are presented as a sub-section within this section. This sub-section looked at 'commercial industries' influence on: effective correctional centre management and the

level of serious incidents, inmate wages, inmate work performance reports, level of lock-downs and out-of-cell-hours, major inmate management strategies (case management, program pathways, and the structured day) and a comparison of commercial industries with education.

The section titled 'Rehabilitation' looks at the research literature which has examined the effect of commercial industries on recidivism. This section also analyses commercial industries consistency with best practice principles on rehabilitation.

The section titled 'Post-release Employment' looks at the research literature which has examined the effect of commercial industries on post-release employment. In addition, this section examines the generic employment skills provided by commercial industries.

The section on 'Public Opinion' looks at the evidence on public attitudes to inmate employment and commercial industries. The results of a survey of the general public in NSW, commissioned for this study, are included in this section.

The final section is the 'Discussion' section which recapitulates some of the main findings of the report.

Correctional Centre Management

This section looks at the impact of commercial industries on effective correctional centre management.

Correctional centres are unique environments. The confinement of inmates occurs against the inmate's wishes, whilst correctional officers have the responsibility to ensure confinement continues until the expiration of an inmate's sentence (Jacobs & Kraft, 1978).

There have been many theories over the years as to the effect of incarceration on inmates. The deprivation model asserts that incarceration leads to institutional dependency because it undermines abilities for autonomous decision making. This effect it is claimed is counter-productive for post-release success (Goodstein & Wright, 1989). Later research contends that inmates are not necessarily harmed by incarceration, that the effects are mediated through the inmate's personality type (Bonta & Gendreau, 1990).

A major concern of correctional centre managers is inmate violence. Fleisher (1989) in reviewing numerous studies into violence in correctional systems concluded that inmates commit violent acts because they are violent people, and also because the system produces violence:

"convicts who feel powerless, mistreated, idle, bored, sexually frustrated and cramped commit violent acts" (Fleisher, 1989, p.197).

Wright (1994) suggests that greater inmate misbehaviour occurs when there is a lack of activity and social stimulation (as cited in Braswell et al, 1994).

These assertions imply that the worst effects of incarceration could be improved by pro-

viding inmates with constructive activity. There is now increasing evidence that employment in commercial industries has a beneficial effect on inmate behaviour. This evidence is examined below.

(a) Research on the effects on inmate behaviour

There is a growing amount of evidence that commercial industries contribute to the effective management of correctional centres.

Inmates themselves are in favour of working during their sentence. In a study undertaken in Victoria in 1980, 98% of inmate respondents expressed a desire to work in prison (Filla, 1980). This finding is supported by research in NSW. McHutchison (1991, 1995) found anecdotal evidence that inmates wanted to work.

In an earlier study in NSW, Dickins (1986) found that 79% of inmates interviewed said they liked their work. In a study (Edgar, 1995) undertaken in New Zealand 91% of inmates expressed a desire to work whilst in prison. The desire by inmates to work, may be partly motivated by their attempts to deal with the boredom and monotony of incarceration. Meeting inmates' desire to work should assist in producing a less stressful atmosphere within correctional centres.

McHutchison (1991, 1995) also found evidence that employment distracted inmates from dwelling on distressing personal issues. Inmates contemplating self harm or suicide are likely to be in need of specialised treatment by mental health professionals. However, it is likely that keeping inmates active through employment may assist in preventing some susceptible inmates from experi-

encing a deterioration in their mental state.

McHutchison (1991) also found evidence that inmates who became skilled employees in commercial industries gained status and respect from fellow inmates and officers. Commercial industries therefore provide, among other benefits, the opportunity for inmates to obtain status through positive means rather than through negative means such as violence.

The 'them and us' attitude held by inmates toward correctional officers can be modified by employment in commercial industries. McHutchison (1991) found evidence that some inmates held industrial officers in high regard and used them as role models.

Other authors who have provided anecdotal evidence which support commercial industry/vocational programs as a useful inmate management tool are: Edgar, 1995; Verdeyen, 1995; Ohio Department of Rehabilitation and Correction, 1995; Stambaugh, & Miller, 1994; Dwyer & McNally, 1993; Flanagan T. & Maguire K., 1993; Elliott, 1988; Grieser, 1988; Gleason, 1986; Guynes & Grieser, 1986; Wilkie, 1986.

Empirical evidence supporting the value of commercial industries as a management tool has been found in a number of studies from North America. These studies are described below.

Flanagan et al (1988) examined 1981-1982 records of inmates in New York State. Rule violations were used as an indicator of institutional adjustment and an annual disciplinary infraction rate was calculated for each inmate. Using a multiple regression analysis infraction rates of commercial industry participants were compared with non-participants. Commercial industry participation was found to be significantly associated with lower annual disciplinary infraction rates.

This finding persisted even when differences in characteristics between the groups were taken into account.

A study by Maguire (1996) drew on data from the above study undertaken with inmates in New York State. Inmates who had been employed for at least six consecutive months in 1981-1982 were compared with a control group who had not participated in commercial industry during this time. The infraction rates of the two groups were compared before and after the industry group was employed in the commercial industry. The commercial industries group was found to be less likely to commit infractions than the control group even before they were employed in commercial industries. To overcome this problem only inmates with a high level of infractions were included in the sample so that there was no significant difference between the groups at time 1. When infractions were analysed after commercial industry participation, industry participants were found to incur significantly fewer infractions than control group members. Such a finding supports a view that commercial industry participation may positively affect the behaviour of inmates with previously high levels of infractions.

Saylor & Gaes (1996) undertook a study titled, Post-release Employment Project (PREP). This study was designed to evaluate the impact of prison work and vocational training on offenders during and after their release. Data were collected on more than 7,000 offenders between 1983 and 1987. Inmates who participated in work, vocational training or apprenticeship programs were less likely than the comparison group inmates to receive a misconduct report during their last year of incarceration. When program participants did receive misconduct reports they were less likely than the comparison group to be of a serious nature (Detention Reporter, 1996).

A study undertaken in the US by Criminal Justice Associates (1985) surveyed governors, and chairpersons of State legislatures. Seventy two percent of the Governors characterised inmate employment as essential, the remainder saw it as being very important. Sixty four per cent of the legislators described work as essential, 33% thought it was very important and 3% (one respondent) thought it was somewhat important.

Governors and legislators were also asked to rank the importance of four different types of work: unpaid hard labour, institutional support work, paid productive employment, and public works. Both Governors and legislatures ranked paid productive employment as the most important type of work and unpaid labour as the least important type of work. All thought the most important benefit of expanding inmate employment opportunities through private sector involvement was a reduction in inmate idleness.

Thus there is growing anecdotal and empirical evidence that commercial industries benefit inmate management.

(b) Measuring the effect

Although there is increasing interest in the performance measurement of many government 'not for profit services' it is an area which as yet is not well developed. In the United States Miller et al (1997) has addressed the measurement of the performance of commercial industries on correctional centres. In their paper, Miller et al (1997) suggest that the influence of commercial industries on inmate behaviour could be measured by:

- total number of inmate rule violations;
- total number of incidents of violence between inmates;

- total number of incidents of damage to the facility or equipment by inmates (Miller et al, 1997).

However, quantifying the change in these factors due to commercial industries requires comparison data. This would be available in NSW if there was a representative correctional centre which did not contain commercial industry operations. However, this is not the case as all standard correctional centres have commercial industries.

If commercial industries contribute to positive inmate behaviour this is likely to result in cost-savings to correctional facilities. These cost-savings would include a reduction in supervision costs; less costly containment due to some inmates placed in lower security classifications and, as also suggested by Miller et al, the earlier release of some inmates due to their improved behaviour. Cost-savings due to early release may be calculated if there is a direct link between commercial industry employment and early release (e.g., if inmates on the basis of their time employed in commercial industries, were given pro rata reductions in their sentence).

In NSW there is no direct link between time employed in commercial industries and assessment for parole. Inmates not on fixed terms are assessed for parole on the basis of a range of criteria including their behaviour during their sentence. Nevertheless, if commercial industries assists positive inmate behaviour then there is an indirect link between commercial industry employment and early release. Additionally, the improved behaviour induced by commercial industry employment may also assist fixed term and non-fixed term inmates in not committing further offences during their sentence. This would avoid the imposition of further charges and further sentences on inmates before their original sentences expire.

The Ohio Department of Rehabilitation and Correction (1996) undertook a study into the economic benefits of Ohio Penal Industries (OPI). The internal economic benefits were calculated to include inmate wages, the costs of alternative programming, and the savings due to a reduction in recidivism. Savings due to a reduction in recidivism were itemised to include operation costs, construction costs, and justice system processing costs. Funke (1996) in analysing these benefits to the State concluded that OPI produced \$7 million in annual savings in systems costs.

Grieser (1988) investigated the economic impact of Corcraft Industries in New York. Among other benefits Grieser stated that Corcraft Industries, because it was an inmate program which financed its own cost of operation, saved the State millions of dollars in alternative programming.

The anecdotal and empirical evidence suggests that commercial industry employment is a useful means of effectively managing inmates. In NSW McHutchison (1991, 1995) found some evidence that commercial industries impacted positively on the attitudes of inmates. However, this previous work did not directly address the influence of commercial industries on effective correctional centre management. This current study specifically investigates this issue. The next section of this report seeks to identify the benefits and costs of commercial industries operations on correctional centres in NSW. The possibilities of both measuring these factors and imputing a monetary value are also addressed.

(c) Effects within NSW correctional centres

What is the effect of commercial industries operations on the management of inmates within correctional centres in NSW? This question could be answered most readily if

similar centres with and without correctional industries could be compared on overall measures such as operating costs, and the level of serious incidents (i.e., level of assaults etc). However, because commercial industries is an integral part of the NSW correctional system's operations there is no correctional centre which could be used for comparative purposes. Therefore another means of acquiring information on commercial industries' impact on correctional centre management was needed.

The means chosen for this study was a survey of the Governors of NSW correctional centres. It was considered that Governors were the 'on the ground' experts in correctional centre management, and therefore the best means of obtaining reliable information.

The aim of the survey was to gather relevant information with which to identify the benefits and costs associated with commercial industries operations within correctional centres; information on how these could be measured; and the possibility of estimating a monetary value for these costs and benefits. It was intended also that this survey should provide material which could form the basis of further research in the area.

Governors were questioned about the effect of commercial industries on inmate management, serious incidents, payment of inmate wages, inmate work performance reports, level of lock-downs and out-of-cell-hours, major inmate management strategies (case management, program pathways, and the structured day) and a comparison of commercial industries with education. Most of the information in this section came from the survey questionnaire. The questionnaire was piloted on two Governors.

A self-completion questionnaire together with a covering letter was mailed to 25 Governors of NSW correctional centres on

the 21 January 1998. On 12 February (1998) the offices of the Governors who had not responded were contacted by telephone. Following this, Governors who had not responded within one week were faxed on the 20 February 1998. Further reminders were sent by facsimile on 5th and 11th March 1998.

Responses were received from 24 correctional centre Governors. One correctional centre (Maitland Correctional Centre) had closed during the period of the study. Therefore the response rate to the survey was 100%.

Of the 24 correctional centres surveyed, two centres, Cooma Correctional Centre and Norma Parker Correctional Centre, had closed their commercial industries because the centres were due to be closed. As the Governors of these centres responded to most questions in the survey and their centres had contained commercial industries in the recent past they were included with the other responses. The Governors' responses to the questions in the survey are below.

In interpreting the tables below it needs to be remembered that many of the questions were open ended requiring written responses from Governors. The number of factors raised by Governors in response to each question varied. Due to the multiple responses from some Governors the total number of responses in tables will sometimes aggregate to more than 24. In addition, factors included in the tables may have achieved a greater response frequency if Governors had been presented with those same factors in a check list. All tables compiled from open ended questions are identified immediately below the table.

In the questionnaire the term "correctional industries" is used as many Correctional Officers/Governors use this terminology when referring to "commercial industries".

(i) Inmate management

All Governors in the survey nominated the overall influence of commercial industries on their centre as positive. This suggests there are net benefits to all correctional centres from commercial industry operations.

Governors were asked their opinions on the usefulness of a range of correctional centre programs and activities (see Table 1). This question included a scale from 'strongly agree' to 'strongly disagree'.

It can be seen in Table 1 that Governors considered the programs and activities listed as very useful in the management of inmates. Two thirds or more Governors selected the 'strongly agree' category in regards to the usefulness of commercial industries, psychological services, welfare services and education.

Looking at commercial industries in particular, all Governors nominated the 'strongly agree' or 'agree' category when questioned on the usefulness of commercial industries. This would suggest that there is unanimity amongst Governors that commercial industries is a valuable means of managing inmates.

Table 1 established that commercial industries assists in the good management of inmates. To gain greater understanding on the influence of commercial industries on the management of inmates, information was sought on the effect of commercial industries on relationships between inmates, and between inmates and officers.

Governors were asked, "*By providing daily activity, do correctional [commercial] industries contribute to the reduction of tension between inmates?*".

Table 1: Usefulness of programs or activities in assisting in inmate management.

	Strongly agree %	Agree %	Unsure %	Disagree %	Strongly disagree %
	n=24				
Alcohol & Other Drug Services	46	46	8	0	0
Arts & Crafts	8	75	8	4	4
Chaplaincy	38	54	4	4	0
Commercial Industries	83	17	0	0	0
Education	67	25	8	0	0
Health Promotion	38	42	17	0	0
Indigenous Services	29	54	17	0	0
Psychological Services	75	25	0	0	0
Welfare Services	79	17	4	0	0
Sport	33	58	8	0	0
Other	17	0	0	0	0

Question: The following programs or activities (as per list in table) are very useful in assisting in the good management of inmates?

Notes:

- One response was missing from the Health promotion row.
- Where other rows do not add up to 100% this is caused by rounding.
- There were only 4 responses in the 'other' category.

All Governors responded 'Yes' to this question.

Governors were also asked, "By providing daily activity, do correctional [commercial] industries contribute to a reduction of tensions between inmates and officers?"

Twenty two Governors (92%) responded 'Yes' whilst two responded 'No'.

Governors were also asked why they thought commercial industries led to a reduction in tensions. Responses to this question predominantly referred to the benefits of commercial industries in keeping inmates occupied and reducing boredom. For responses to this question see Tables 17 and 18 in Annex I.

Governors were asked to list the positive impacts of commercial industries on the operation and order of the centres. The most common responses to this question (as seen

Table 19, Annex I) were as follows:

- structures the day,
- positive attitude and behaviour,
- keeps inmates occupied,
- training in vocational skills and developing and maintaining a work ethic.

Governors were further asked, "If correctional [commercial] industries were not available in your centre, what do you think this would do with regard to the operation of the centre?"

All Governors referred to a negative impact on the centre. The main reason given was 'boredom' which would lead to an increase in tension with subsequently greater inmate misbehaviour and greater pressure on custodial staff. Examples of some responses are below.

"Inmates require work programmes which relieve boredom and tension and provide self esteem. In areas of unemployment inmate assaults and

disturbances are more common. The worth of industry programmes within a correctional centre can not be stated enough.”

“Negative effect overall, there would be increases in centre crimes (particularly pilfering, stealing etc). Higher levels of aggression and assaults, increase in standover tactics, higher levels of officer sick leave and workers compensation.”

“Yards would have to be reinstated to provide control; structured day would cease.”

Clearly Governors view commercial industries employment as valuable in the management of inmates. If this positive effect is substantial it would be likely that the presence of commercial industries reduces the cost of operation of correctional centres. The level of cost-savings cannot be determined as there is no standard correctional centre without commercial industries with which to compare the operating costs. The following section explores the possibility of assessing an economic impact through utilising factors which have indicative value with regard to correctional centre management.

► *Indicators of commercial industries influence*

It has been ascertained above that, according to Governors, commercial industries has a beneficial impact on the management of inmates within correctional centres generally. As stated above the overall cost-savings cannot be determined. It was considered that if an association between factors relevant to good correctional centre management, such as level of serious incidents, and commercial industries could be established this could provide an alternative route of determining the economic benefit of commercial industries within correctional centres. A list of factors important to correctional centre management was constructed (see Table 2 below). Some of these factors are referred to as serious incidents (Depart-

mental Operations Manual, 1999).

A list of the factors along with a scale from ‘positive effect’ through to ‘negative effect’ was presented to Governors (see Table 2). As can be seen Governors were much more likely to nominate a positive effect from commercial industries on the factors listed than a negative effect. When a factor was nominated as being negatively effected by commercial industries this was outweighed by the number of responses nominating positive effects for those same factors.

The factors with the highest percentage of responses nominating a positive effect were self esteem of inmates (100%) and the behaviour of inmates (96%). Seventy percent or more Governors considered that commercial industries had positive effects on the health of inmates, fights between inmates and level of inmate self-harm.

Fifty percent or more Governors considered commercial industries had a positive effect on misconduct reports, stress on custodial officers, property damage and serious incidents (i.e., suicides in custody, assaults on officers and assaults on inmates).

The factor which had highest percentage of negative effect responses from commercial industries (13%) was escapes/absconds. Yet as seen above, a greater number of Governors thought commercial industries had no effect on escapes/absconds (49%) or a positive effect on escapes/absconds (35%).

The Governor’s nominating a positive effect on escape/absconds may consider that work and wages makes incarceration more tolerable and therefore inmates less motivated to escape.

The Governors nominating a negative effect on escape/absconds from commercial

Table 2: Effect of commercial industries on correctional centre management

Factors	Positive effect %	No effect %	Negative effect %
n=24			
Self esteem of inmates	100	0	0
Behaviour of inmates generally**	96	4	0
Health of inmates	78	22	0
Fights between inmates*	74	26	0
Level of inmate self harm*	70	30	0
Assaults on inmates*	63	34	0
Misconduct reports*	65	26	9
Assaults on officers*	61	35	0
Stress on custodial officers	61	30	9
Property damage	52	48	0
Suicides in custody*	50	50	0
Escapes/absconds*	35	49	13
Drug taking**	26	70	0
Turnover of custodial officers	25	71	4
Absenteeism of custodial officers	22	74	4

Question: What effect do you consider the presence of correctional [commercial] industries has on the following? (Factors as per list above).

Notes:

- * Statistics on these factors are kept by Research and Statistics Unit.
- ** Misconduct reports could be used for information on these factors.
- There was one response missing from several rows. These were *assaults on officers; escapes/ absconds; and drug taking*. Where other rows do not add up to 100% this is due to rounding.

industries may consider that there are increased opportunities for escape during the delivery and dispatching of goods to business units and the fact that some commercial industries business units are situated outside the main gates of some centres.

The results in Table 2 gives further credence to commercial industries as positively influencing effective correctional centre management.

► *Towards measurement of indicators*

To measure the influence of commercial industries on the factors listed in Table 2 above, the difference in incidence due to commercial industries would need to be calculated. The Research and Statistics Unit collects statistics on those factors marked

with an asterisk. However, the means to distinguish any change in incidence due to commercial industries is not presently possible. This of course, has implications for the determination of any cost-savings due to commercial industry's impact on inmate management.

► *Determining the effect on cost-savings*

The beneficial effects of commercial industries employment on inmate behaviour are likely to reduce the costs of operating correctional centres. As previously stated, directly determining the overall cost-savings is not possible. This is because there is no suitable correctional centre which could be used for comparison of operating costs. The use of factors in Table 2 to indirectly estimate cost-savings is impeded also due the

lack of a suitable comparison data.

A further obstacle, at this stage, in calculating cost-savings is that the Department does not calculate the cost of serious incidents. For example, the average cost to the Department arising from assaults on inmates (Ken Muir, 1998). In determining the financial impact of an incident all the costs which flow from that incident would need to be included. For example, depending on the severity, an assault on an inmate could involve the cost of medical attention, the cost of transporting and escorting the inmate to hospital, correctional officers' time in investigating the incident and writing reports on the incident, the payment of the base rate wage entitlements to an incapacitated inmate, the risk of a breach of 'duty of care' claim against the Department from the inmate victim.

The beneficial effects of commercial industries employment on inmate behaviour may also mean that some inmates are able to acquire lower security classifications or parole earlier than otherwise would be the case. It is not possible to estimate the cost-savings this confers on the Department. This is because it is not known how many inmates achieve lower security classification or earlier parole due to the positive impact of commercial industries on their behaviour.

► *Possibilities of further research*

The measurement of commercial industries' contribution to correctional centre management could be possible through the following means:

- obtaining Governors perceptions of the variation in levels of incidents due to commercial industries involvement. This is problematic as Governors may not be able to provide, from their own observations, reliable rate differentials

attributable to commercial industries;

- there may exist within other jurisdictions within Australia the circumstances which allow for a study based on the experimental design method (i.e. other jurisdictions may have comparable correctional centres containing and not containing commercial industries);
 - statistics kept by commercial industries show that the level of unemployment varies between correctional centres in NSW. The existence of a correlation between the level of unemployment within centres and the incidence of serious incidents could be tested.
- *Summary - management of inmates*

The responses by Governors to the above questions suggest that commercial industries makes a considerable positive contribution towards effective correctional centre management. It appears likely that the contribution of commercial industries would reduce the cost of managing correctional centres. An estimate of these cost-savings to correctional centres cannot be calculated at this stage due to the lack of base-line data.

(ii) Inmate wages

In the NSW correctional system, inmates can be employed in either *service industries* or *commercial industries*. All employed inmates are paid wages. The inmate wage system is common to all NSW correctional centres. Different wage rates apply according to category of skill level. Wage rates are based on a minimum working week of 30 hours (Department Operations Manual).

When there are no employment vacancies within a correctional centre inmates without work but willing to be employed are classified as unemployed. Unemployed inmates

are entitled to receive unemployment payments from the correctional centre until an employment position becomes available.

As would be expected unemployment payments are lower than the wages received by employed inmates. Inmates that are not willing to work, referred to as non-workers, do not receive any payment from correctional centres.

Commercial industries operations increase the number of employment positions above that which would be available if services was the only source of employment within correctional centres. Therefore commercial industries makes it possible for greater numbers of inmates to generate a wage income (i.e., an income higher than inmate unemployment payments).

Payments to inmates are paid into their individual accounts administered by the Department. Inmates can draw on money in their account to purchase a range of items during regular buy-ups.

► *Effect of wages on inmate management*

In order to gain an understanding of what effect the provision of wages has on correctional centres, Governors were asked some general questions about the effect of wages.

Governors were asked the positive effects from the provision of wages. Table 21 (Annex I) shows the type of effects the Governors identified (n=24). The most frequently cited effect identified by Governors was that wages allowed inmates to purchase their own consumer items (58%). Nine Governors (38%) referred to the motivation wages created for inmates, whilst 25% identified post-release benefits by stating that the payment of wages allowed inmates to practice budgeting.

Governors were also asked, "What negative effects, if any, do the provision of wages to inmates, have on your centre?"

Fourteen (58%) Governors responded that there were no negative effects. Four (17%) stated that jealousy could arise when inmates were on different levels of pay, whilst 8% of Governors mentioned the possibility of inmates being stood over by other inmates.

To gain further information on the effect of wages, Governors were questioned on the general atmosphere within correctional centres if inmates were not paid wages. The responses to this question are summarised in Table 3 below.

Table 3: General atmosphere in centres if wages not paid.

Type of response	No.	%
Management more difficult due to greater misbehaviour	15	63
Lower or no performance at work	9	38
Increase in stealing or standover	5	21
Decline in inmate morale or self esteem	4	17
Pressure on outside sources (e.g., family)	2	8
Other	3	13

Question: If inmates were not paid wages, what do you think this would do to the general atmosphere in your correctional centre?

Note: This table contains multiple responses.

As can be seen in Table 3, 63% of Governors responded that management would be more difficult due to greater inmate misbehaviour if inmates were not paid wages. Thirty eight percent of Governors considered that there would be a lowering of performance in the workplace, whilst 21% thought there would be an increase in steal-

ing or stand overs.

The results in Table 3 suggest that if inmates were not paid wages the management of inmates would be more difficult. Therefore commercial industries as well as contributing to the better management of inmates by keeping them occupied (as we saw in the previous section) also appears to contribute to better management through the provision of wages.

► *Effects of wages on inmate requirements*

Inmates in NSW correctional centres, are allowed to spend \$45 per week on groceries and/or foodstuffs including tobacco. They are allowed also to purchase basic toiletries and incidentals. The \$45 a week limit can be exceeded if the additional amount is spent on toiletries and incidentals. Wages provide inmates with income to purchase items of their own choosing. If inmates are willing to work but there are no vacancies they are entitled to unemployment payments. Unemployment payments at \$10.50 per week are lower than average inmate wages (approximately \$30 per week as at October 1998). Therefore, commercial industries increases the ability of some inmates to finance discretionary expenditure. If commercial industries was not available the Department may come under pressure to provide a greater range or number of free items in addition to what is current standard issue.

Governors were asked, "If inmates were not paid wages, do you think there would be pressure from inmates and/or others advocating on their behalf, for the provision of items in addition to that which is current standard issue?"

All Governors responded 'Yes' to this question. Governors were then questioned on the types of items correctional centres would be called upon to provide to inmates. The

responses to this question are in Table 4 below.

As can be seen in Table 4, fifteen Governors (63%) thought pressure would mount for the provision of cigarettes. Although this is unlikely, due to health concerns and 'duty of care' responsibilities, pressure for provision of other items may be more successful.

If income was not available to inmates through wages, additions to standard issue would depend on the political pressure exerted. It is hypothetical to predict at this point what if any items may be provided if wage income from commercial industries was not available. Therefore, an attempt will not be made to estimate the current cost-savings to the Department from inmates financing some of their own requirements.

Table 4: Items inmates would seek to have provided

Type of item	Number	%
Cigarettes	15	63
Additional food	11	46
Toiletries	9	38
Clothing	5	21
Electrical Goods	5	21
Footwear	4	17
Telephone	4	17
Art & craft material	4	17

Question: If yes, what items do you think inmates and/or their advocates would seek to have provided?

Note: This table contains multiple responses.

► *Effect on unemployment payments*

More amenable to measurement, at this time, is the cost-savings from a lower frequency of inmate unemployment payments. Without commercial industries fewer em-

ployment positions would be available in correctional centres. Therefore without correctional industries greater numbers of inmates would be unemployed and entitled to unemployment payments. Unlike wages paid to inmates employed in commercial industries or services, expenditure on unemployment payments is not recompensed back to the Department through the productivity of the effected inmates' labour.

Correctional industries keeps statistics on the number of inmates employed in their operations. As at October 1998, 2078 inmates were employed in commercial industries'. Without these employment positions, unemployment payments would be required for most of these inmates. Currently unemployment payments are \$10.50 per week. Therefore $2078 \times \$10.50 = \$21,819$ per week or \$1,134,588 per annum for the additional unemployed inmates. Providing inmates are allocated employment within commercial industries on the basis of sound business principles, it would seem reasonable to claim that commercial industries saves the Department approximately \$1 million in unemployment payments.

► *Victims compensation*

In accordance with section 12(4) of the Victim's Compensation Act (Regulations), compulsory deductions of the Victims Compensation Levy (VCL) from inmate earnings is undertaken during their sentence. This occurs by way of automatic deduction from the Pcash Inmate Accounts System. The levy is only deducted if inmates are serving a term of imprisonment for the actual offence for which the levy is payable (Department Operations Procedure Manual, 1998). Once the money is collected the Department forwards it to the Victims Compensation Fund administered by the Attorney General's Department. In the financial year 1996-97 the Department collected \$256,081

from inmates for the Victims Compensation Fund (Finance Branch, 1998).

Commercial industries employed inmates can be identified on the Pcash system through an employment report. However, the system at this stage does not allow this information to be cross referenced against inmates paying the compensation levy (Administration, Cessnock, 1998). Therefore the amount of VCL being paid by inmates employed in commercial industries cannot be determined.

A scale is used to determine the level of VCL deductions. The level of deductions rises with the level of inmate earnings (Department Operations Procedures Manual, 1998). According to the VCL scale an inmate earning \$10.50 per week (the unemployment rate) has \$1.00 per week deducted from their earnings. Inmates on an average commercial industries wage earn approximately \$30 per week. VCL deductions from earnings at this level are \$3.50 per week. As commercial industries employed inmates are approximately 31% of the sentenced inmate population it could be assumed, for our purposes here, that approximately 31% of sentenced inmates liable for VCL are employed in commercial industries. If employment was not available these inmates would be unemployed and paying their levy at \$1 per week rather than an average of \$3.50. Therefore commercial industries employment allows approximately 31% of inmates liable for VCL to repay their VCL liabilities more quickly than otherwise would be the case.

Victims have also benefited from direct grants to victim support groups. In 1998 Corrective Services Industries (CSI) made a direct grant out of earnings to the victim support group Enough is Enough.

► *Summary - wages*

The provision of wages by commercial industries appears to have four main benefits to the NSW correctional system:

- inmates are less of a problem to manage;
- inmates have purchasing power with which to address discretionary consumption possibly reducing the pressure for the Department to provide additional items free to inmates;
- the numbers of inmates eligible for unemployment payments is less than what would otherwise be the case, and
- compulsory deductions of VCL occur at a higher rate from wage income than unemployment payments.

At this stage it is only possible to measure the effect of commercial industries on unemployment payments. On the basis of existing information it appears commercial industries saves the Department approximately \$1 million in inmate unemployment payments.

(iii) Work performance reports

During an inmate's sentence, work performance reports which record the inmate's behaviour in the work place are kept by correctional centres. If commercial industries business units were not available to employ inmates, fewer employment positions would be available to inmates. Subsequently the work performance of many inmates could not be evaluated.

To investigate the utility, if any, that work performance reports have for the correctional system Governors were asked, "Does your centre use inmate work performance reports for any purpose?".

Twenty-two Governors (92%) responded 'Yes' to this questions. Governors were then asked the purposes to which inmate work performance reports were put. Table 5 shows the responses to this question.

It can be seen in Table 5 that work performance reports are frequently used (usually along with other indications of behaviour) to review and make decisions concerning inmates. Without commercial industries employment many inmates would not have the opportunity to have work performance included in assessments. It may be that a lack of information on work performance could disadvantage some inmates at important proceedings or may be perceived to disadvantage them.

Commercial industries provides a benefit in that information on work performance is available on a greater number of inmates than would otherwise be possible.

Table 5: Uses of inmate work performance reports.

Purpose used	No.	%
Case management	15	63
Classification	14	58
Parole reports	10	42
Allocation and continuation of employment	4	17
Program Review Committee	4	17
Serious Offenders Review Board	4	17
Weekend and day leave	3	12
Court reports	2	8
Disciplinary proceedings	2	8
Question: If yes, for what purpose/s are the work performance reports used?		
Note: This table contains multiple responses.		

(iv) Other financial costs and benefits

In endeavouring to place a monetary value on the contribution of commercial industries to the NSW correctional system all the costs and benefits would need to be included. Governors were asked about additional financial costs incurred by their centre due to the presence of commercial industries. Only 75% of Governors responded to this question. As seen in Table 22 (in Annex I) 38% Governors stated that there were no additional costs. Twenty-one percent of Governors stated that the presence of commercial industries increased their operating costs, whilst 17% suggested that the presence of commercial industries required their centres to have extra staffing at times.

Table 22 needs to be interpreted with care. Twenty five percent of Governors did not respond to this question. Also some Governors may have been referring to costs for which they are reimbursed in their budget allocation.

Governors were also asked about the expenses their centre saved due to the presence of commercial industries. Sixty three percent of Governors responded to this question. As can be seen in Table 23 (in Annex I) the number of Governors identifying specific savings in expenses due to the presence of commercial industries was low. Forty two percent of Governors stated there were no savings. Four (17%) Governors thought there was less overtime due to commercial industries whilst 8% Governors responded that they saved some maintenance expenses due to commercial industries.

Governors were asked about the effect on their operating budget if commercial industries were not in their centre. As can be seen in Table 6, 17% of Governors responded that there would be no effect. Twenty nine percent stated that there would be a need for

more staff or overtime, whilst 17% thought they would need to spend more on other things to reduce idleness and 13% thought there would be more costs with regard to vandalism and damage.

Table 6: Effect on operating budget if commercial industries not available.

Type of response	No.	%
No effect	4	17
More staff needed or overtime	7	29
Expenditure on extras to reduce idleness	4	17
More vandalism and damage	3	13
Higher unemployment payments	2	8
Maintenance increased	2	8
Other	5	20

Question: In your opinion if correctional [commercial] industries were not available in your centre, would this effect items in your operating budget in any way?

Note: Two Governors did not respond to this question. This table contains multiple responses.

Table 6 uncovered some evidence that there may be a need for an increase in staff numbers if commercial industries was not available. Further evidence on this matter was provided to a question which specifically asked about changes in staff levels. Responses to this question are shown in Table 7.

Governors were asked what the effect on the number of correctional officers would be if commercial industries was not available. As can be seen in Table 7, 50% of the Governors thought there would be a need for an increase in staff numbers if commercial industries was not available in their centres. Seven (29%) Governors thought that a decrease in staff would be needed whilst 13% thought there would be no change and eight were unsure.

Table 7: Effect on the number of correctional officers if commercial industries not available

Effect on the number of correctional officers							
Increase		Decrease		No change		Unsure	
No	%	No	%	No	%	No	%
12	50	7	29	3	13	2	8

Question: If correctional [commercial] industries were not available would, in your opinion, the number of correctional officers staff in your centre need to: increase, decrease, no change, or unsure.

Notes: This question was not interpreted uniformly by Governors. The question would have been improved if it had enquired about difference in total staff hours (i.e., one Governor responded that there would be no increase in staff but an increase in overtime). The question did not make it clear that it was the difference in the overall number of officers which was sought. One Governor said he would need an increase in custodial officers to replace the commercial industries officers. The information provided here and that provided in response to other questions would need to be verified at the correctional centre level.

Some examples of Governors explanations for an increase in staff numbers are below.

“Higher sick leave, greater tension, higher supervision.”

“More supervision required for all forms of activities and security.”

“I would expect to have inmates spread over more locations increasing the number of supervising staff.”

“Due to numbers on compound, staff would need to increase.”

“Inmate/staff ratio in correctional industries different to general supervision in pods.”

Responses by some Governors in both Table 6 and Table 7 suggest that an increase in staff numbers would be needed in some correctional centres if commercial industries was not available. Some Governors (29%) thought correctional officer numbers would need to decrease.

To determine cost-saving from the effect of commercial industries on staffing levels reliable evidence on the difference in staff hours (both ordinary time and over time) needs to be obtained then this difference

could be multiplied by the wages per hour for the rank of officers required.

(v) Factors important to inmate welfare

When lockdowns occur this poses greater restriction on the movement of inmates within correctional centres. Recently, some concern regarding the level of lockdowns at some centres has been expressed by an official visitor. Another factor important to inmate well being is time-out-of-cells. In the national indicators on government services inmate ‘out-of-cell-hours’ is used as a means of determining the level of inmate well-being within correctional centres (SCRC-SSP, 1998, p.423).

Does commercial industries have an effect on lockdowns and time-out-of-cells? In order to answer this question Governors were asked to consider the effect on lockdowns and inmate time-out-of-cells if commercial industries were not available in their centres.

As can be seen in Table 8, whilst 42% of Governors believed that lockdowns would increase, 46% Governors considered that there would be no change in the number of

Table 8: Effect on lockdowns and time-out-of-cell if commercial industries not available.

Effect on the number of lock-downs							
Increase		Decrease		No change		Unsure	
No	%	No	%	No	%	No	%
10	42	0	0	11	46	3	13
Effect on time-out-of-cells							
Increase		Decrease		No change		Unsure	
No	%	No	%	No	%	No	%
0	0	8	32	15	63	0	0
<p>Question: In your opinion, if industries were not available would the frequency of lock-downs be likely to increase; decrease; no change; unsure.</p> <p>Question: In your opinion, if correctional [commercial] industries were not available would inmate time out of cells need to: increase; decrease; no change; unsure</p> <p>Note: There was one response missing from question effect on time-out-of-cells.</p>							

lockdowns if commercial industries were not available. Explanations offered by Governors for an increase in lockdowns were:

- for security reasons (i.e., in order to maintain control) (25%). For example:

“Pressure and tension on supervising staff due to lack of constructive activity.”

“Increase of negative behaviours amongst unsupervised/bored inmates.”

- due to the sick leave policy (8%).

Mannus Correctional Centre and Emu Plains Correctional Centre stated that there would be no change in the number of lockdowns as, due to the nature of their centres, lockdowns were not possible.

Fifteen (63%) Governors thought that there would be no change in inmate time-out-of-cells if commercial industries was not available. However, 32% of Governors thought there would be a decrease. Governors stated

that if commercial industries was not available, time-out-of-cells would depend on the ability to provide alternative activities to alleviate inmate boredom (25%) and that maintaining existing inmate time-out-of-cells was dependent on adequate staffing levels (17%).

Commercial industries appears, for at least some correctional centres, to have a positive effect on the number of lockdowns and time-out-of-cells. Increased lockdowns or reduced time-out-of-cells can cause stress to inmates and consequently greater inmate management problems for correctional officers. Thus through this avenue too commercial industries contributes to the better management of inmates.

(vi) Effect on major management strategies

Case management, program pathways and the structured day are important management strategies employed across correctional centres in NSW. In order to gain an understanding of the influence of commercial

industries on these major inmate management strategies, Governors were asked the effect on these if commercial industries was not available. The responses to these questions are in Tables 9, 10 and 11 below.

Case management is an approach to the management of offenders in custody. It involves the development of case plans for inmates which address the attitudes and skills inmates will need for their successful reintegration into the community. Case plans may include plans on education, recreation, employment and other programs. Case plans are devised for newly sentenced inmates, and reviewed at determined intervals (Operations Procedures Manual, 1998).

Table 9: Effect on case management if commercial industries not available

Effect of case management	No.	%
Little or no effect	4	17
Less opportunity to review behaviour	9	38
Inmates would not cooperate with case management	2	8
Other	3	13
<p>Question: If Industries were not available what effect, if any, would this have on case management?</p> <p>Note: Six Governors did not respond to this question. This table contains multiple responses.</p>		

Governors were asked the effect on case management. As seen in Table 9, whilst 17% of Governors thought there would be little or no effect 38% of Governors thought that case management would be effected as there would be less opportunity to review behaviour. As stated in the section on work performance reports one of the benefits that commercial industries provides to correctional centres is the opportunity to review

inmate behaviour in a work setting.

Program pathways is an operational strategy aimed at providing continuity in education and training for inmates. Governors were asked about the effect on program pathways if commercial industries was not available. Responses to this question are in Table 10.

As can be seen in Table 10, 25% of Governors also thought there would be no effect on program pathways if commercial industries was not available. However, 17% of Governors thought that the choices within program pathways would be limited if commercial industries was not available, whilst 17% of Governors considered an important part of the program would be removed.

Table 10: Effect on program pathways if commercial industries not available

Effect on program pathways	No.	%
Little or no effect	6	25
Limit choices within program pathways alternatives	4	17
Removal of important part of program pathways	4	17
Other employment would need to be available	2	8
Cannot assess work performance	2	4
Removes training and the work ethic	2	8
<p>Question: If [commercial] industries were not available what effect, if any, would this have on program pathways?</p> <p>Note: Four Governors did not respond to this question. This table contained multiple responses.</p>		

The structured day is a strategy to manage and develop inmates through productive use of their time. The structured day consists of three components, work, education and

leisure. Governors were asked the effect on the structured day if commercial industries were not available. Their responses are presented in Table 11.

As can be seen in Table 11, 42% of Governors responded that the structured day would not be sustainable without commercial industries. Seventeen percent of Governors responded that the structured day would be difficult to manage and 13% of Governors stated that commercial industries would need to be replaced by other programs.

As seen by the results in this section whilst the responses were strongly in support of the structured day, most Governors also thought commercial industries had an important part to play in case management and program pathways.

Table 11: Effect on the structured day if commercial industries not available

Effect on structured day	No	%
No effect	2	8
Structured day not sustainable	10	42
Structure day difficult to manage	4	17
Commercial industry needs to be replaced by other programs	3	13
Other	2	8

Question: If correctional [commercial] industries were not available what effect, if any, would this have on the implementation of the structured day?

Note: Three Governors did not respond to this question. This was an open ended question.

(vii) Comparison of education with commercial industries

Evidence of the importance of the provision of activity for inmates can be seen by the responses in Table 12 below. As can be

seen in Table 12 nearly all Governors (88%) thought that some other activity would be needed if commercial industries was not available.

Table 12: If commercial industries not available should there be other activity

Yes		No		Unsure	
No	%	No	%	No	%
21	88	1	4	1	4

Question: If correctional [commercial] industries were not available would you consider that some other activity should be available in its place?

Note: One Governor did not respond in any of the categories above as he did not think any other program could replace commercial industries. It is possible that some of the other Governors felt the same way but still answered the question as directed.

Governors (88%) who responded 'yes' to the above question were asked, "What other activity would you consider the most appropriate?".

Suggestions from Governors on alternatives to commercial industries reveal a preference for situations in which inmates learn skills. Most Governors (63%) nominated educational/vocational programs as the best replacement for commercial industries. Other activities mentioned by Governors were sport or leisure and craft (46%) and psychological programs (8%).

As was seen at the beginning of this section (see Table 1) 100% of Governors either 'strongly agreed' or 'agreed' that commercial industries were a useful means of managing inmates. The numbers were slightly lower with regards to education with 92% of Governors responding in the 'strongly agree' or 'agree' category whilst 8% were unsure. It is clear from this response that both these programs play an important role in NSW correctional centres.

Table 13: Main benefits of education and commercial industries

Main benefits	Education		Commercial industries	
	Number	%	Number	%
Training prepares for future - addresses deficits	11	46	8	33
Occupies time meaningfully	6	25	6	25
Positive attitude/ behaviour	9	38	6	25
Work ethic	0	0	11	46
Essential to structured day program pathways	3	13	3	13
Profits	0	0	3	13
Income for inmates	0	0	4	17
Positive interaction with community members	1	4	3	13
Assists lower classification	2	8	0	0
Other	1	4	1	4

Question: What do you think are the **main benefits**, if any, **accruing to your centre**, of having educational programs available to inmates?

Question: What do you think are the **main benefits**, if any, **accruing to your centre**, of providing work for inmates within correctional [commercial] industries?

Note: Some Governors appeared to interpret this question as inquiring about the benefits for inmates. This was a multiple response question.

Table 14: Main disadvantages of Education and commercial industries

Main disadvantages	Education		Commercial industries	
	No	%	No	%
No disadvantage	12	50	13	54
Cost of texts	3	13	0	0
Conflict between education and commercial industries	3	13	3	13
Problems with continuity	2	8	0	0
Not enough work	0	0	2	8
Other	4	17	5	21

Question: What do you think are the **main disadvantages**, if any, **occurring to your centre**, of having educational programs available to inmates?

Question: What do you think are the **main disadvantages**, if any, **accruing to your centre**, of providing work for inmates within commercial industries? This was a multiple response question.

To gain some initial understanding on the similarities and differences between the effect of education and commercial industries programs on correctional centres, identical questions were put to Governors. These questions asked Governors the main benefits and disadvantages flowing from the availability of education and commercial industries within correctional centres.

It can be seen in Table 13 that one of the more common responses from Governors regarding the main benefits of education and commercial industries programs to their centre was the training provided (with 46% and 33% respectively). Equal numbers of Governors (25%) responded that education and commercial industries occupied time meaningfully. Whilst 38% of Governors thought that education contributed to a positive attitude and behaviour on the part of inmates, 25% Governors nominated this for commercial industries.

As seen in Table 13, major differences between the two programs are due to the difference in nature of the programs. For example, with regard to commercial industries, 46% Governors nominated the learning of the work ethic, whilst 13% nominated profits and 17% nominated income for inmates as main benefits whilst none of these factors were nominated for education.

Governors were asked the main disadvantages for their centres by having education and commercial industries programs available. As seen in Table 14 approximately half the Governors responded that there were no disadvantages to their centres from education or commercial industries programs.

Whatever the type of inmate program, resources are required to make a program operational. Could the land and buildings currently used by commercial industries be better employed in some other activity? To

determine this question Governors were asked if commercial industries land or buildings could be better utilised for another purpose. The responses to this question are in Table 15 below.

Table 15: Could land or buildings be better utilised.

Yes		No		Unsure	
Number	%	Number	%	Number	%
2	8	20	83	2	8
<p>Question: In your opinion, could the land or buildings currently occupied by correctional [commercial] industries be better utilised for another purpose?</p>					

As can be seen in Table 15 the majority of Governors (83%) responded that commercial industries land and buildings could not be better utilised for another purpose. The two Governors who responded 'yes' to this question suggested the resources could be better used for vocational training or hobbies, or office space.

If programs such as education and correctional industries have been instituted to achieve similar objectives then a comparison could be made as to their effectiveness in meeting those objectives.

In NSW correctional centres both education and commercial industries provide constructive activity for inmates which assists in correctional centre management. Despite the essential differences, education and commercial industries are likely to complement and support each other. If either program was not available this may have a detrimental effect on inmate management.

Rehabilitation

A considerable amount of international literature uses recidivism as an outcome measure in evaluating the effectiveness of inmate development programs. The interest in recidivism is understandable as crime causes a great deal of personal distress in the community. The financial/economic costs of criminal activities are also enormous. Walker (1992, 1996) using police and victim survey data as well as other material sought to answer the question, "How much does crime cost the Australian economy?", Walker stated:

"The costs of crime include not only property losses and/or medical costs incurred during the actual incident and its immediate aftermath. They include the costs of long-term and wide-ranging consequences of the incident, the costs of preventive efforts made to reduce the future incidence of severity of such crimes, and they include the costs of the criminal justice system set up to deal with the offenders (Walker, 1996 p.1)."

In Walker's (1996) study the estimated costs sustained due to the commission of crime varied with the category of crime. An aggregated cost for all categories was between \$10.9-12.9 billion. In addition to these costs, expenses associated with the operation of the criminal justice system were: policing and law enforcement \$2.9 billion; courts and administration of justice \$817m; Corrective Services \$747m and other agencies \$2 billion. Therefore Walker concluded that a conservative overall estimate of crime is at least \$18 billion per annum.

It can be seen criminal activity consumes a huge amount of public expenditure; according to Walker's estimates 4% of Australia's GDP. Large financial savings to the community could be achieved if a significant number of offenders were dissuaded from

continuing with criminal activity.

Although, as suggested above, the reduction of recidivism is a worthy goal to strive for, the ability of correctional systems to reduce recidivism is unlikely to ever be an absolute one. Many of the factors which contribute to recidivism fall outside the influence of correctional centres (Broadhurst & Maller, 1990). Research indicates that various factors relate to criminal activity including offender characteristics such as age, criminal history (Thompson, 1995) and treatment in childhood (Weatherburn & Lind, 1997).

Furthermore, changes in inmate behaviour after participation in programs may not necessarily be transposed into a lessening of recidivism. Maguire (1995) in his meta analysis of correctional treatment evaluations found that the level of change in offender behaviour, after participation in programs, was much stronger on behavioural tests than the change detected later in measures of recidivism. Therefore it would appear that changes in offender behaviour due to participation in programs are not always sustainable and/or the social circumstances that offenders find themselves in after release are so powerful that they expunge the improvements. This explanation is supported by Gendreau who stated that the influence of family, friends and community will always be a greater influence on offenders than correctional centre treatment programs (Gendreau and Paparozzi, 1995).

Although it may be optimistic to expect correctional systems to reverse the many factors that lead to criminal offending,³ the containment of offenders within the correctional system does provide opportunities, not otherwise likely to be available, to involve offenders in programs which may have a

beneficial effect on their behaviour.

The New South Wales Department of Corrective Services stated in the Annual Report (1996/97) that reducing offending behaviour was one of its goals. The annual report states that the Department has a:

“duty to assist offenders to re-integrate successfully into the community.”

This section of the report will investigate evidence pertaining to commercial industries and its contribution to rehabilitation.

Research studies reviewed below are those which have:

- directly investigated the influence of commercial industries on recidivism, and
- conducted comprehensive reviews of the literature with regard to the effectiveness of inmate development programs on recidivism.

(a) Commercial industry programs

Part of the support for correctional employment programs emanates from the belief that such programs are beneficial in reforming offenders. However, much of the support relies on anecdotal evidence. Research studies into the influence of commercial industries on recidivism are few in number. This author reviewed the existing research literature in a previous report McHutchison (1995). Some studies Maguire et al, 1988; Basinger, 1985; Johnson, 1984; Markely et al, 1983; did not find evidence that correctional employment lead to a reduction in recidivism. However, several studies Wirth, 1993; Saylor & Gaes, 1992; Utah Government Task Force, 1984; Gleason, 1978; Gasser, 1964; found some evidence that commercial industry experience can lead to

a reduction in recidivism. The McHutchison (1995) study into NSW offenders was not able to determine if commercial industries participation led to a reduction in recidivism. This was because there was no appropriate comparison group against which the performance of commercial industries participants could be compared. However, on the basis of the literature review McHutchison (1995) concluded:

“when the general lack of success of other programs which aim to rehabilitate inmates is considered, there seems to be some reason for optimism regarding correctional [commercial] industries (p.12).”

Since McHutchison (1995) reviewed the existing literature further developments have occurred and the results of newly conducted studies have become available.

In the United States Saylor & Gaes (1995) designed the Federal Prison Industries study to evaluate the impact of correctional centre employment experience and vocational training on the behaviour of offenders following release. The evaluation began in 1983 and data were collected through to October 1987 on more than 7000 offenders. The offenders in the study group (offenders who participated in commercial industries and/or vocational training) were matched with offenders in the comparison group on criminal history, pre-prison work experience, education and most serious offence. Preliminary findings were reported in 1991. The study group were found to be less likely to have supervision orders revoked in the first year after release.

Saylor & Gaes (1995) were interested to discover if this difference in the study and comparison group in recidivism would be sustained over a longer time period. They undertook further investigation of levels of recidivism when offenders involved in the

study had been released for 8 to 12 years. It was found that male offenders who had been employed in commercial industries had survival times 20% longer after release than the comparison group. This was largely due to the study groups lower rate of conviction for new offences.

A Canadian study, Motiuk & Belcourt (1996) sought to answer the question, "Does continuous commercial industry participation near release impact on offender post-release recidivism?" The study sample consisted of 269 male offenders who were employed by CORCAN (Correctional Industries of Canada) for a minimum of six uninterrupted months one month prior to release. All were released for a minimum of one year. Most of the offenders worked for CORCAN in either fabrication, industries or agriculture, although some offenders did painting, micro-filming, welding and print-work.

At the time of the study, offenders had been released for a period of one to three years with an average of 1.5 years. CORCAN participants who had been released on full parole (a low risk group) had a return to custody 6.4% lower than the national average for offenders released to parole. However, there was no difference for offenders released on statutory release (a high risk group).

Some qualification is required regarding Motiuk & Belcourt's findings. The report lacked important information. The study does not say whether both groups had been released for the same length of time. The longer offenders are released the greater the possibility of reoffending.

Secondly, offenders were required to have six continuous months of employment in CORCAN to be selected for the study group.

It could be assumed that inmates with poor behaviour would not be able to maintain employment within CORCAN for this period. Therefore the study group may be already biased towards the better behaved inmates.

A study by the Ohio Bureau of Planning and Evaluation (1995) evaluated the impact of inmate participation in Ohio Penal Industries (OPI) on recidivism. The sample consisted of 744 offenders who had been employed in OPI for ninety days or more and released during 1991-1992. The comparison group consisted of a cohort of 7,839 released during the same period who had not participated in OPI. As participation in OPI is restricted to inmates with a reading score of 6 or higher on a standardised test the comparison group was restricted to offenders with the same test score.

Recidivism was defined as a recommitment to the Ohio prison system within two years. Recidivism could be due to violation of parole conditions or a new conviction. The rate of recidivism for the OPI group was 5% less than the rate of recidivism for the comparison (non-OPI participants). The positive impact of participation in OPI appeared larger for males, Afro-Americans, offenders aged between 26 to 40 at release, and those sentenced for violent and drug offences.

The value of this study is reduced by the lack of information available in the report. The authors of the report themselves caution that some other factor other than participation in OPI may have influenced the variation in recidivism rates. Such likelihood of bias is always a possibility in research studies in which subjects are not randomly assigned to groups. No explanation was given for the low level of inmate participation in OPI. The authors state that the only constraint to employment in OPI is the require-

ment for a reading score above 6. Yet only approximately 10% of inmates participated in OPI. Alternatives to employment in OPI are not explained and the rewards and impediments of working in OPI are not canvassed. If inmates were selected, or selected themselves out, for participation in OPI they may have characteristics different from the general inmate population. Therefore the results of this study may not be reliable as they may have been due in part to the presence of existing differences in inmate characteristics.

The OPI study could have been further improved if the analysis of data had included a regression analysis. Recidivism outcomes for OPI participants and non-OPI participants are cross referenced against many factors such as job skill level, gender, race, age, etc. A regression analysis would have allowed the order of importance of these factors to be determined.

Also the report drew attention to the finding that OPI participants viewed as "high skilled" had a lower recidivism rate than other OPI participants. Yet there was no attempt to explain why this pattern was not also reflected in a lower rate of recidivism for the "medium skilled" against the "lower skilled".

A study undertaken by the State of New York Department of Correctional Services into the Wallkill Optical Program lends support to the value of employment programs in reducing recidivism (Canestrini, 1993). This program provides training and experience in the production of eyeglasses which are made available to correctional population and citizens entitled to Medicaid. One hundred and eighteen inmates who had participated in the program and were released from 1986 and 1993 were included in the study. All participants in the study had

been released for 12 months or more. To provide a comparison group, 94,863, first time offenders, were tracked from the time of their release to July 1993.

The program participants had a substantially lower rate of recidivism than the comparison group. At 12 months after release approximately 3% of program participants had returned to custody compared to 11% of the comparison group. At 90 months after release the program participants had a recidivism rate of 34% compared to a 55% probability of recidivism for the comparison group.

This study also needs to be viewed with caution. The report of the study made no mention of the process undertaken to select inmates for employment in the Wallkill Optical Program. It may be that inmates included in the program were included because they possessed attributes which set them apart from other inmates. Therefore Wallkill inmates may have been different before they were employed in the program. Additionally, there is no indication if any of the 94,863 inmates who formed the comparison group were employed in other work programs. Most inmates in US correctional centres work⁴ therefore the employment of some of the inmates in the control group in other programs is likely. This study may simply reveal the success of the Wallkill Optical program against other inmate employment programs.

The findings in the above studies support a hypothesis that employment in commercial industry can lead to a reduction in recidivism. However, with the exception of Saylor & Gaes (1992,1995) there are serious deficiencies in the methodology of the studies and/or a lack of information in the reports. These inadequacies limit the value of the studies in advancing knowledge concern-

ing the effect of commercial industries on recidivism.

The body of knowledge regarding the influence of commercial industries on recidivism is growing but still far from definitive. Current evidence gives some support to the view that commercial industries is a factor in reducing reoffending. Nevertheless, this could always be contradicted by future research.

It is still not possible to say, even within a broad range, the rate at which participation in commercial industries reduces recidivism. Studies undertaken in other jurisdictions do not obtain results which are in any sense uniform. It also needs to be remembered that the commercial industries as well as the correctional centre environment in other jurisdictions may not be comparable to NSW. Research in NSW has not been able to determine a rate because there is no appropriate control group against which the performance of commercial industries participants could be measured.

As reliable data on the rate of recidivism is not available other avenues for measuring the value of commercial industries contribution to rehabilitation need to be explored. An apparent means would be to measure, through descriptive information, the extent to which commercial industries complies with 'best practice' principles regarding rehabilitation programs.

(b) Principles associated with rehabilitative effectiveness

Over the last two decades there has been considerable attention given to identifying inmate programs which are effective in reducing recidivism (i.e., programs which lead to a significant reduction in recidivism following inmate participation). Martinson

(1974) reviewed the body of literature on recidivism published between 1945 and 1967 and reported that "nothing works" (Goodstein & Mackenzie, 1989 p.25). Since Martinson's pronouncement greater knowledge has become available. There is now recognition that treatment programs with certain characteristics can be effective in reducing recidivism. These are cognitive behavioural programs, that is programs aimed at producing a change in the thinking of inmates with the intention that they have a corresponding influence on inmate behaviour were the most successful (Vennard et al, 1997; Kennedy & Serin, 1997; McGuire, 1995; Antonowicz & Ross, 1994). Of the cognitive behavioural programs those based on the social learning model, which inculcated pro-social skills and addressed criminogenic factors that is factors which research suggests relate to criminal behaviour, have been found to be the most successful (Gendreau, 1996; Antonowicz & Ross, 1994; Kennedy & Serin, 1997 McLaren, 1992; Gendreau & Ross, 1979).

Whilst programs which address specific offending behaviour are essential commercial industries by its nature appears to have some consistency with best practice in rehabilitation.

The experience of inmates within commercial industries appears to replicate principles involved in social learning (social learning is one of the more successful cognitive behavioural based rehabilitation programs) and involve learning experiences which address criminogenic needs. For an analysis of this please see Annex II.

▸ Measurement of recidivism

This report looked at research which directly investigated the influence of commercial industries on recidivism. This report also

looked at research which had ascertained the characteristics of successful rehabilitation programs. The findings in both these sections provided some evidence which supports the view that rehabilitation is a benefit emanating from inmate employment in commercial industries.

However, the measurement of commercial industries' contribution to recidivism is problematic as there is no ready control group of non-working inmates with which commercial industries contribution can be compared⁵. Research in NSW has not been able to determine a percentage change in recidivism from commercial industries involvement (McHutchison, 1995). This is because in NSW all sentenced inmates are expected to work. McHutchison (1995) found no difference in rates of recidivism between offenders employed in commercial industries and offenders employed in services. Both these areas of employment were found to provide experience which could be later used in obtaining employment after release (McHutchison, 1995).

Results from other jurisdictions are of limited assistance in determining a rate for NSW at this stage. Studies undertaken in other jurisdictions do not show consistent results with regard to recidivism. Also, commercial industries in other jurisdictions may not be comparable with commercial industries in NSW. The social environment into which inmates are released may also differ. Therefore results from other studies do not seem useful either as a benchmark against which the recidivism rate of commercial industries participants could be compared nor as a means to calculate an estimate for NSW.

As time progresses there will be growth in knowledge on the influence of commercial industries on recidivism and how it is mediated through other variables. With comput-

ers as powerful as they now are it is possible to track offenders over many years. It may eventually be possible to state, within a range, the percentage change (if any) in recidivism due to commercial industries. However, unless the methodological problems of determining a recidivism rate in NSW is overcome, rates from other jurisdictions would provide the only means of estimating a rate. Once reliable information from other jurisdictions is available this could be used to calculate an estimate for NSW. Such an estimate could be used in the calculation of cost-savings from the rehabilitation of commercial industries participants.

If the use of an estimate based on a rate from another jurisdiction is utilised, it would be essential to establish some comparability between that jurisdiction and NSW. For credibility a conservative rate would need to be applied (i.e., a rate at the lower end of the range or a rate less a percentage). Whenever an estimate based on such a rate was used the qualifications pertaining to the estimate would need to be stated.

► *Cost-savings from reduction in recidivism*

For cost-savings to be calculated reliable evidence on the percentage reduction in recidivism is needed. If a reasonably reliable rate for NSW becomes available then an estimate of the cost-saving could be determined by multiplying the number of offenders rehabilitated by savings on inmate containment costs; or costs to the criminal justice system generally; or the full range of costs associated with criminal behaviour. There have been some attempts to model offender behaviour including prevalence and frequency of offending as well as recidivism probabilities (Broadhurst & Maller, 1991). Therefore it appears possible that models of offender behaviour could be simulated, the costs of offending behaviour estimated and

a corresponding estimate of the annual cost-savings of truncating a criminal career calculated to a present value.

Once measurement has progressed to determining the cost-savings of programs (both in terms of correctional centre management rehabilitation, etc.) then a measure of economic outcome could be calculated such as ROI.

As yet a reliable estimate of the number of offenders rehabilitated through employment in commercial industries is not available.

An alternative means of estimating commercial industries contribution to rehabilitation would be to use descriptive information to measure the extent to which commercial industries is consistent with current 'best practice' principles in rehabilitation. The preliminary analysis undertaken in this study in Annex II suggests there is some consistency between an inmate's experience in commercial industries and best practice principles in rehabilitation (such as social learning and attention to criminogenic needs).

Post-release employment

A number of research studies have addressed the effects of commercial industries on post-release employment. McHutchison (1995) conducted a review of the available literature. This review found some positive results from studies undertaken in north America, Gleason, 1978; Johnson, 1984 and Saylor & Gaes, 1992. Another study, Markley et al (1983), found no difference between the industry group and a comparison group on subsequent employment success. A UK study, Simon & Corbett (1995), concluded that correctional centre work and training had no effect on the offenders chances of gaining work after release once their presentence work record and skill were taken into account. However, the validity of the results of the Simon & Corbett study were jeopardised due to the high level of attrition of subjects from the sample over the course of the study.

The above research studies were conducted in north America and the UK. Research studies undertaken in jurisdictions outside NSW are unlikely to be representative of the situation in NSW. Firstly, the type and operation of commercial industries as well as the correctional centre environments themselves could differ markedly. The socio-economic climate inmates are released into also varies. For instance, the rate of unemployment in the United States (US) is approximately four percent. This is much lower than the Australian rate of 8.1% (Sydney Morning Herald, 11th May 1998). Therefore it may be that the general population of offenders in north America may have easier access to employment post-release. They may also be more highly motivated to locate employment as countries such as the US do not have a social welfare system as comprehensive as the Australian system.

In NSW McHutchison (1995) undertook research into the influence of commercial industries on offenders post-release employment experiences. Empirical findings could not be made as there was no appropriate control group against which the post-release employment of the commercial industries group could be compared. However, McHutchison did find anecdotal evidence which suggested that commercial industries (as well as service industries) provided offenders with work experience which can increase their employment opportunities or improve their existing abilities in their usual area of work after release.

Measurement of post-release employment

The cost-savings from commercial industries' contribution to post-release employment cannot currently be determined. If a reliable employment rate did become available then it would appear possible to determine broad estimates of the cost-savings due to commercial industries. The gaining of full time employment has the dual effect of eradicating the offenders eligibility for unemployment benefits, whilst at the same time raising their tax liabilities. In determining the cost-savings due to commercial industries allowances or assumptions would need to be made to account for the possibility that in some instances the employment position taken by the offender may otherwise have been taken by another unemployed person.

Due to the present lack of data the difference commercial industries makes to post-release employment is not available. Another means of measuring commercial industries performance is through the use of descriptive information.

Descriptive measurement - employment

As in the case of recidivism measuring the contribution commercial industries makes to post-release employment can currently only be undertaken through analysis of descriptive information.

The most suitable means of achieving this appears to be investigating the extent to which commercial industries complies with best practice principles regarding commercial industry/vocational training programs.

The post-release employment of offenders is reliant on many factors including the levels of activity in the Australian economy and the intentions and motivation of the offenders themselves. While the correctional system has inmates with various levels of achievement, the overall level of literacy numeracy and education is low (Thompson, 1997). Some inmates have little or no employment experience (Edgar, 1995 p36). Therefore, an opportunity for inmates to gain experience in a genuine work setting should benefit their employment prospects.

In recent years there has been growing understanding amongst educationalists that the value of employees to employers relies on the employees possessing basic competencies. It is believed that once employees have basic competencies they are ready to participate in employment and develop more specialised skills. A national survey in the United States, Malizio et al (1984) asked employers what they saw as the most important qualities for low educated employees. The most common responses were:

- to complete job assignments;
- follow spoken instructions;
- getting along with people;
- reading and understanding information, and
- following written instructions (as cited

in Semmens, 1992).

In recent years educationalists concerned with adult education in Australia have moved towards developing students ability in areas of competence. This it is believed provides students with generic skills considered essential for effective participation in employment. The 'key competencies' developed by Mayer (1992) are now included in the curriculum used by AEVTI (Adult Education and Vocational Training Institute) in the education of inmates. A summary of the key competencies are below:

- collecting, analysing and organising information;
- planning and organising activities;
- communicating ideas and information;
- working with others and in teams;
- using mathematical ideas and techniques solving problems;
- using technology, and
- identifying, analysing and applying the practices of culture (Adult Education in the Community).

Employment in commercial industries provides inmates with the environment to develop basic employment skills which are generalizable to other areas of employment (Judith Walker, Judith Walker and Associates 1998).

Inmates may also develop other general competencies useful in employment which are not included in the 'key competencies'. For example, following instructions, an appreciation of appropriate responses to authority figures, learning to handle tools, to follow safety rules, experience in quality systems management (McHutchison, 1991, 1995).

As well as generic employment skills commercial industries provides the opportunity for inmates to develop specific industrial

skills. This is because by participating in employment inmates can also learn the specific industry skills required by the commercial industries business unit in which they work (McHutchison, 1991).

For inmates, wishing to undertake vocational courses through TAFE, commercial industries work based experience is essential to be eligible for enrolment. Furthermore, commercial industries employment provides inmates with the opportunity to complete modules as well as gain accreditation towards registration in apprenticeships.

AEVTI did not have data on the numbers of inmates undertaking TAFE courses connected to their commercial industries work. However, if such information was considered necessary it may be obtainable by contacting all Senior Education Officers at each correctional centre.

Whilst offenders, after release, may gain employment in an industry which is not in the area they worked in commercial industries, much of their experience would still appear to be valuable because they have had the opportunity to develop the 'key competencies' and other skills which can be generalized from one employment position to another. As well as the generic employment competencies employment within commercial industries provides the opportunity for inmates to also develop specific industry skills.

Public opinion

Public perception of commercial industries.

Public opinion with regard to correctional programs is important. If the public believe that programs undertaken in correctional centres are useful or appropriate then they have greater confidence in the system. Public opinion can influence the level of political support for programs.

What is the present state of public opinion with regard to commercial industries? Some studies undertaken in north America have sought to determine public opinion regarding rehabilitation programs in correctional centres including vocational and/or employment programs. A brief description of these studies follows.

Riley & Rose (1980) questioned 1,211 members of the public. Ninety seven percent of the respondents thought that the goal of corrections should be rehabilitation. Increased emphasis on vocational training was supported by 94.5% (as cited in McLaren, 1992, p.115).

In a 1982 gallup poll 94% of the American public felt that it was a good idea to require prisoners to learn a skill or trade. Eighty three percent thought that employment constructing buildings or on providing goods and services was a was a good idea (as cited in Flanagan, 1989 and Flanagan & Maguire, 1993).

Johnson (1994) conducted a telephone survey in Kentucky in order to gauge the public's attitude towards rehabilitation and punishment. Fifty six per cent of the respondents nominated the rehabilitation of offenders the most important goal of corrections. When presented with a choice between hard

labour and educational and vocational training, the majority of the respondents (68.09%) chose educational and vocational training as the better policy for dealing with inmates. Eighteen percent of respondents chose hard labour and 14% were unsure.

It would appear from these three studies that, at least in north America, correctional programs which impart employment skills are viewed as appropriate programs by the general public. Research seeking similar information does not appear to have been previously conducted in Australian jurisdictions.

This present study sought to gather such information. Firstly a question on public opinion was included in the survey of Governors (other results from this survey are in the section titled Correctional Centre Management). Secondly, the Department commissioned a survey of the NSW general public to ascertain the public's opinions on the employment of inmates in correctional centres.

Table 16: Governor's opinions of the attitude of the general public.

Attitudes of general public	Number of responses	%
Supportive	14	58
Supportive as long as it doesn't take jobs from outside workers	5	21
Little knowledge	4	17
Support varies	2	8
Not supported	1	4
<p>Question: In your opinion, what is the attitude of the general public towards the employment of inmates in correctional centres?</p> <p>Notes: This table contained multiple responses.</p>		

Governor's responses

In the survey of Governors, Governors were asked their opinion on the general public's attitudes towards commercial industries. The results to this question are in Table 16.

As can be seen in Table 16, 58% of Governors thought the public were supportive of commercial industries; whilst 21% of Governors thought the general public was supportive as long as commercial industries' activities did not take jobs from outside workers. Seventeen percent of Governors thought that the general public had little knowledge of commercial industries.

Survey of the General Public

To gain information on the NSW's public opinion of commercial industries a survey was commissioned from AC Nielsen Research Pty Ltd, a market research company. The Department provided AC Nielsen with four questions which the company included as part of its regular omnibus survey.

Methodology

AC Nielson Research selects their sample of Australian households by computer generated random telephone numbers. Interviewers read questions straight from computer screens and enter respondent's answers immediately into the computer.

A total sample of 508 persons (253 males and 255 females) were interviewed. This number was weighted to represent the population of NSW. Interviewing was undertaken on the weekend of 6-8 November, 1998.

Survey questions

Four questions were put to the general public. The following preamble preceded the

questions.

Prisoners in gaol have the opportunity and an obligation to participate in a variety of programs. The aim is to encourage them to lead more productive law abiding lives and to lessen the likelihood of their returning to gaol.

The four questions which followed this preamble are listed below in the results of survey section. There were three response categories: 'yes', 'no' and 'don't know'. These response categories were cross classified with six variables - sex, age group, marital status, work status, occupation and area (see Annex III).

Results of survey of the general public

Tables presenting the results of the survey of the general public are in Annex III. A description of the results is given below underneath the question asked.

Q.1 In NSW prisoners are expected to work. Do you think this is a good thing?

There was a 'yes' response of 93% to this question, whilst 4% responded 'no' and 3% responded 'don't know'.

There was little variation in responses to this question within the six variables which were cross referenced with the responses. The highest variation in 'yes' responses was recorded within the *occupation* variable. Respondents in the 'upper blue collar' category had a 'yes' response of 89% whereas the 'lower blue collar' category had a 'yes' response of 96%.

Q.2 Working in correctional [commercial] industries is likely to improve the behaviour of prisoners while in gaol. Do

you agree?

As can be seen in ACN Table 2 in Annex III, 77% of the sample responded 'yes' to this question, 11% responded 'no' and 12% 'don't know'.

Of the variables the *marital status* variable contained marked variation in the level of 'yes' responses across the categories from a high of 90% in the 'married no children' category to a low of 72% in the 'single 35 years plus' category.

Q.3. Regular employment in correctional [commercial] industries is likely to provide prisoners with work skills. Do you agree?

As seen in ACN Table 3, Annex III this question drew a 'yes' response of 91%, a 'no' response of 6% and a 'don't know' response of 3%.

Again there was some spread in responses across the *marital status* variable from a high of 98% for the 'married no children' category to a low of 85% in the 'single 35 years plus' category.

Q.4. Prisoners who have work experience are less likely to offend again after they are released. Do you agree?

As can be seen in ACN Table 4, Annex III, 47% the respondents answered 'yes' to this question whilst 31% gave a 'no' response and 22% a 'don't know' response.

Responses varied to this question between categories within a number of the variables. In the responses to the previous questions there was almost uniformity in responses for males and females. However, in response to question four whilst 52% of 'males' responded 'yes', only 43% of 'females' did so. This lower 'yes' response for females was

reflected in the other variables which had categories in which females were likely to dominate, (i.e., in the *marital status* variable in the 'home duties' category and in the *occupation* variable 'no occupation' category).

Within the *age* variable the 'yes' response varied from 37% in the 18-24 category to 51% for the 25-39 category. The *age* variable was the only variable in which a category had a higher 'no' response than a 'yes' response. This was in the 18-24 age group which had a 'yes' response of 37% but a 'no' response of 52%. The 18-24 age group also had the lowest don't know response (12%) across all the categories in the other variables.

There was considerable variation in responses in the *marital status* variable. The 'yes' responses varied from 39% in the 'married children left home' category to 54% in the 'single 35 years plus' category.

The responses in the *area* variable differed between Sydney and the non-metropolitan area. The 'yes' response for Sydney was 52% whilst for the non-metropolitan area it was 39%.

Discussion of the general public survey

Responses from the general public were very positive with regard to questions 1 and 3 in that nearly all the general public believed that inmate employment was a good thing and that regular employment in commercial industries is likely to provide inmates with work skills (93% and 91% respectively). However, despite this, respondents did not necessarily think that employment impacted positively on inmate behaviour. Whilst 77% of respondents thought employment in commercial industries would improve inmates behaviour during incarceration only 47% thought work experience would reduce

offending after release.

Question four produced a great deal of variation in the responses across the categories within the variables. It is difficult to account for the variation in responses to question four. This question produced a high 'don't know' response. In some categories the 'don't know' response was higher than the 'no' response. The predominant conclusion which can be drawn from question four is that there is a lack of certainty within the community that work experience will lead to less offending. However, this lack of certainty is more dominant in some groups than others.

Discussion

Corrective Services Industries (CSI) operates commercially oriented business units within NSW correctional centres. Due to employment within commercial industries there is a higher number of inmate employment positions than would be the case if employment positions were limited to those available in service industries.

This study is the first stage in an investigation of the social and economic benefits and costs of commercial industries in NSW.

This study undertook a comprehensive analysis of the effects of commercial industries employment on correctional centres. The survey results in this study from NSW Governors provide substantial evidence that commercial industries has a positive effect on inmate behaviour. These findings are also supported by previous anecdotal and/or empirical research from both NSW and other jurisdictions.

Idleness produces significant managerial and security problems for correctional centres. By providing meaningful daily activity commercial industries offers the means to reduce tensions. The contribution commercial industries makes to the behaviour of inmates means NSW correctional centres are safer and more pleasant places to live and work, benefiting both inmates and correctional officers.

These positive effects are likely to bestow considerable cost-savings to the NSW correctional system through lower operating costs and lower levels of serious incidents.

Cost savings may also occur because the beneficial effects on inmate behaviour may mean that some inmates are able to acquire lower security classifications or parole

earlier than otherwise would be the case.

The above cost savings cannot be quantified at this stage. This is because the lack of base-line data prevents the extent of commercial industries's influence from being determined.

Other correctional centre benefits from commercial industries were:

- a greater number of inmates are able to earn wages;
- a greater number of inmates have work performance reports;
- according to some Governors a greater number of lockdowns would be required and inmate time-out-of-cells would decrease if not for the positive influence commercial industries has on inmate behaviour;
- commercial industries was also found to have an important part to play in major inmate management strategies such as case management, program pathways and particularly the structured day.

This study also sought to ascertain if there were any costs (i.e., negative impacts) on correctional centres from commercial industries operations. Although only a few Governors nominated negative effects this does not mean that these negative effects are not important to the individual correctional centres concerned. Correctional centres differ from each other, consequently net benefits need to be determined at the correctional centre level.

All Governors nominated the overall influ-

ence of commercial industries on their centre as positive suggesting that commercial industries has net benefits for all centres.

If commercial industries were not available alternative activity would be required for inmates. A benefit of commercial industries programs is that such programs generate revenue which can refund the costs of the program. This does not mean that in comparison with other programs commercial industries programs will always have the highest economic value. If commercial industry programs make a financial loss from their business operations then (for simple comparison with other programs) this could be viewed as the cost of operating the commercial industries program. If this cost (i.e., business loss) is higher than the cost of operating other programs then it is a more expensive program to operate than other programs. However, to determine the economic value of programs the net social benefits in terms of inmate management and post release offender behaviour would also need to be taken into account.

There is some evidence linking commercial industries with post-release employment and reduced recidivism. The evidence for this is not as conclusive as the evidence linking commercial industries with improved inmate behaviour.

All Governors surveyed in this study thought that commercial industries employment had a positive influence on inmates self esteem. It may be that when offenders are strongly committed to not reoffending positive experiences gained from commercial industries employment assists them in this goal.

A survey of the general public carried out by AC Nielson shows a very high level of support in NSW for the employment of inmates. Ninety three percent thought it was a good thing. This is consistent with the

high level of public support in north American jurisdictions.

Although 91% of the general public agreed that regular employment in commercial industries would provide inmates with work skills there was a great deal of scepticism regarding the influence of this on offenders post release. Only 47% of the general public believed that work experience would lead to less offending after release.

Whilst 77% of the general public thought that working in commercial industries is likely to improve the behaviour of inmates 96% of Governors surveyed thought that it did so (Table 2). Bearing in mind that this question was not put to the two groups uniformly, the difference in responses may be a reflection of the first hand experience of the Governors.

In conclusion the usefulness of commercial industries as an effective means of managing inmates is now well substantiated. It is likely that this effect brings significant cost-savings to the Department. If conclusive evidence establishes that commercial industries employment has a positive influence on post-release offender behaviour and employment then the cost-savings could be substantial.

Endnotes

1. Correspondence from R. Miller, Project Director, BJA Jail Work and Industry Centre, US Department of Justice to the author during 1998.
2. Present value: if the benefits (or costs) are projected forward over a period of years then the time value of money needs to be included in the equation.
3. Expectations for rehabilitating offenders are placed predominantly on the correctional system. There is a perception held by politicians, a substantial number of individuals working in the correctional centres themselves, as well as the general public that correctional centres have failed if offenders commit further offences.

Such expectations are not entirely fair nor reasonable. Offenders are received into the Department's correctional system as adults when values and patterns of behaviour are very much formed. Generally incarcerated for a relatively short period of time offenders are released to the environment from which they came.

A great deal of criminal activity is undertaken in order to generate an income. Despite the stress, risks of injury and apprehension, illegitimate "work" is still attractive to some individuals. Illegal activities offer the potential for high financial rewards, short working hours, opportunity to be one's own boss and relative independence and freedom from authority and restraint (Gill, 1997; McHutchison, 1991).

Once habituated to the material and psychological rewards of the criminal lifestyle it may be difficult to divert offenders to other modes of living. Rather than persevere in pursuing legitimate employment offenders are likely to revert to the illegitimate work with which they are familiar. Offenders with severe drug habits are unlikely to be able to finance that habit through legitimate employment nor perform to an acceptable standard to maintain employment.

4. Harlow C. W., Comparing Federal and State Prison Inmates, 1991. September 1994 NCJ-145864
5. Research in NSW has not been able to determine a percentage change in recidivism from commercial industries involvement (McHutchison, 1995). This is because in NSW all sentenced inmates are expected to work. McHutchison (1995) found no difference in rates of recidivism between offenders employed in

commercial industries and offenders employed in service industries. Both these areas of employment were found to provide experience which could be latter used in obtaining employment after release (McHutchison, 1995).

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ANNEX I - SURVEY OF GOVERNORS

Section A: Inmate Management

Table 17: Reasons for daily activity in commercial industries reducing tension between inmates

Factors	Number	%
Keeps inmates occupied - reduction in boredom	15	63
Sense of achievement -self esteem	5	21
Work as a team	4	17
Motivates	2	8
Reduces misbehaviour	3	13
Question: <i>If you answered yes or no, why do you think this is so?</i>		
Note: This table contains multiple responses.		

Table 18: Reasons for daily activity in commercial industries reducing tension between inmates and officers

Causes of a reduction in tension	Number	%
Keeps inmates occupied- reduction in boredom	9	38
Correctional industries interaction promotes cooperation	4	17
Gives wing officers and inmates a break from each other	4	17
Officers who work with inmates develop better management skills	2	8
Inmate self worth - sense of achievement	2	8
Normalises environment	2	8
Question: <i>If yes or no why do you think this is so?</i>		
Notes: This table contains multiple responses.		

Table 19: Positive impacts of commercial industries

(a) The operation of the Institution		
	Number	%
Structured day -integral part of operations -smooth running	10	42
Keeps inmates occupied-employed	9	38
Teaches vocational skills -work ethic	8	33
Wages	4	17
Inmates self esteem	3	13
Gets inmates out of accommodation areas	2	8
Other	8	33
(b) General order within the Institution		
Positive attitudes and behaviour	12	50
Keeps inmates occupied	5	21
Rehabilitation -work ethic skills	2	8
Wages	2	8
Routine structured day	2	8
Other	3	13
Question: <i>What if any positive impact do commercial industries have on the following? (a) The operation of the institution (b) General order within the institution.</i>		
Note: This table contains multiple responses.		

Table 20: Negative impacts of commercial industries

(a) The operation of the Institution		
Negative Impacts	Number	%
None	17	71
Increase in contraband	2	8
Can conflict with other activities	2	8
Lack of skill of inmates or officers	2	8
Need to account for goods & equipment	1	4
(b) General order within the Institution		
None	17	21
Pressure not to close shops during staff shortages	1	4
Tension between those who work and those that don't	1	4
Conflict between industry provider and centre	1	4
Question: <i>What if any negative impacts do commercial industries have on the following? (a) The operation of the institution (b) General order within the institution.</i>		
Notes: Two Governors did not response to question (a) Four Governors did not respond to question (b). This table contains multiple responses..		

Section B- Wages

Table 21: Positive effects from the provision of wages

Positive effects	Number	%
Purchase own requirements	14	58
Motivation	9	38
Practice budgeting	6	25
Reduces tension	2	8
Rely on own funds not family etc	2	8
Other	5	8
<p>Question: <i>What positive effects, if any, do you consider the provision of wages to inmates, have on your centre?</i></p> <p>Note: This table contains multiple responses.</p>		

Section C - Other costs and benefits

Table 22: Financial costs due to presence of commercial industries

Type of cost	Number	%
No additional costs	9	38
Operating costs	5	21
Extra staffing at times e.g., when overseers sick and after hours operations	4	17
<p>Question: <i>What additional financial costs if any, does your centre incur because of the presence of [commercial] industries?</i></p> <p>Note: There was no response from 6 Governors. Two centres did not have commercial industries. Operating costs referred to by Governors may be those for which their centre is reimbursed. This table contains multiple responses.</p>		

Table 23: Expenses saved due to commercial industries

Expense saved	Number	%
No savings	10	42
less overtime	4	17
Maintenance	2	8
Other	2	8
<p>Question: <i>What expenses if any does your centre save due to the presence of [commercial] industries?</i></p> <p>Note: There was no response from 9 Governors to this question. This table contains multiple responses.</p>		

Table 24: Benefits to correctional centres from the presence of commercial industries

Benefits	Number	%
Community projects	6	25
Maintenance of equipment	5	21
Assist with maintenance of centre	4	17
Sponsorship of special events eg children's day	4	17
Public relations	3	13
<p>Question: <i>Does your centre receive any other benefits from the presence of correctional [commercial] industries within your correctional centre (e.g., sponsorship, community projects or maintenance of equipment etc)?</i></p> <p>Note: This table contains multiple responses.</p>		

Section D

Question:	Governors were asked, <i>“Is there anything else you would like to bring to our attention regarding the influence of correctional [commercial] industries on the operation of your centre?”</i>
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Some Governors did not respond to this question. The responses of the 12 Governors who did respond are in full below:

- Industries have been the lynch pin of this centre and have been the catalyst for change.
- Its a useful alternative to the management of inmates and correction centres.
- Nothing except that the correctional industries corporate objectives and the use of lost time figures needs to be annualized in the context of a centres total operation. Also the correctional industries accounting methods need to be adjusted to take into account all the costs associated with their operation.
- Correctional industries are vital to the operation of this centre.
- Only that as an institution it is an integral part of our organisation structure.
- I cannot explain enough the importance of the work ethic in the rehabilitation process.
- We are fortunate in having a well integrated an co-operative industries section.
- Correctional industries are a vital part of any correctional centre. However it is even more important to a minimum centre where employment is essential.
- I reiterate the importance of correctional industry in the overall efficiency of correctional management.
- Some industries have some tasks which could not be described as meaningful work (i.e, providing satisfaction) perhaps more complex industries and tasks could be incorporated.
- Continued upgrading of facilities that is presently being undertaken..
- Industries are extremely important at EPCC I would like a new meaningful, not stereotyped, industry within the compound as there is not enough work available at the moment.

Question:	Governors were asked, <i>What community work, if any, are inmates in your centre (other than PDC & work release inmates) currently undertaking outside the correctional centre?</i>
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The community work stated by Governors is listed below.

- Painting and maintenance of community halls including, scout halls, church halls, schools, hospitals.
- Maintenance of community grounds including, pony club, show grounds, cemetery, parks, national parks.
- Disaster relief.
- Field days.
- Assisting with agriculture experiments.
- Roadside cleaning.
- Assistance during special events including Australia Day.
- Cubby house for local pre school.
- Sign for Bush Fire Brigade.
- Land care.
- Mobile out reach.

ANNEX II - REHABILITATION

(i) Social learning

The social learning model proposes that criminal behaviour is acquired through learning in a social context and therefore changing that behaviour requires learning positive social values in a social context (Eysenck & Gudjonsson, 1991). One of the main proponents of the social learning model; Bandura (1986) states that there is an interactive triad between a person their behaviour and the environment. The main components of the social learning model are that it is interactive, takes place in a social setting and has components of role playing, modelling and rewards through positive reinforcement (Eysenck & Gudjonsson, 1991 p. 208).

Placing offenders in an experiential framework, as they are in commercial industries would appear consistent with social learning. This is because employment in commercial industries places inmates in a real life social situation in which inmates undertake the role of worker. The social context within commercial industry also prescribes pro-social values (i.e., cooperative behaviour, accepting of responsibility, compliance with instructions, and experience at operating as part of a team). It also addresses criminogenic factors (see below). The inmate learns the connection between his performance and productive outcomes.

According to Bandura, behaviour is learned not only through one's own actions, but by observing the behaviour of others and the consequences the behaviour has for them. This is referred to as modelling (Bandura, 1986). Modelling, states Bandura, is one of the most powerful means of transmitting values (p.47). In commercial industries the industrial officers can operate as role models for inmates (McHutchison, 1991). Other inmates can also operate as role models, particularly inmates given the responsibility for instructing fellow inmates (McHutchison, 1991). Social learning theory implies that observing the behaviour of others and the reinforcement this behaviour receives,

encourages the observer to behave accordingly (Monte, 1987 p.572). Employment in commercial industries would appear to provide an opportunity for inmates to model desirable behaviour.

Employment in commercial industry is positively reinforced by a range of actual and potential reinforcers such as, wages, extra visits, employment reports which assist in gaining lower security classification and parole, and positive feedback from officers and other inmates etc. The psychological literature states that the greater the range of positive reinforcers the more powerful the learning experience. Due to the range of reinforcements available to inmates employed in commercial industry the learning experience should be a more powerful one both in terms of the learning of pro-social attitudes as well as generic and specific employment skills.

Commercial industries, by its very nature is a learning environment for inmates. It appears likely that this learning environment is consistent with the social learning model as inmates undertake the role of workers engaged in legitimate enterprise; have opportunities to model desirable behaviour and a range of rewards are present to reinforce positive behaviour. What is learned in this learning environment is crucial and it would appear that commercial industries also by its nature does provide some learning experiences which counteract criminogenic tendencies.

(ii) Criminogenic factors

Criminogenic factors are factors which research has established are associated with offending behaviour. According to the Auditor-General of Canada (1996) criminogenic factors open to change are:

- **Employment** - lack of education or skills to gain or maintain employment;
- **Marital/family** - lack of ability to maintain

positive relationships;

- **Associates/social interaction** - associates encourage criminal behaviour and or substance abuse;
- **Substance abuse** - many offenders have significant problems with drugs or alcohol;
- **Community functioning** - many offenders have difficulty in managing their finances and leisure time;
- **Personal/emotional orientation** - many offenders have serious problems with impulsive behaviours, controlling anger and solving problems;
- **Attitude** - many offenders maintain attitudes that are anti-social and/or anti-female.

An analysis was undertaken to see if commercial industries contributes positively to any of the criminogenic factors listed above. This analysis undertaken below, uses the above headings.

Employment: employment in commercial industries provides inmates with the opportunity to learn generic employment skills and in some cases specialised industry skills (see section on employment).

Community functioning: remuneration from employment and the opportunity for discretionary spending through buy-ups means inmates gain experience in managing their own finances during their sentences.

Personal/emotional orientation and attitude: correctional industry participation would appear to expose inmates to experiences which would assist them in increasing their self discipline. In their employment inmates are: accountable for their work; are required to focus on the job at hand; learn to interact with others in a constructive way; deal with minor frustrations and problem solving; and are required to comply with instructions from authority figures

(McHutchison, 1991).

The above analysis does suggest that commercial industry may make some beneficial contribution towards addressing factors associated with criminal behaviour such as lack of employment skills, negative personal/emotional orientation, and attitude and lack of competency in community functioning.

Commercial industries appears to have positive implications for recidivism. This section of the report looked at research which examined inmate programs generally to ascertain the characteristics of successful programs. Many of the characteristics present in successful rehabilitation programs, particularly social learning principles and the targeting of criminogenic needs, appear to be present in the commercial industry environment. Whilst programs which address specific offending behaviour (e.g., sex offences, drug offences, etc.) are essential, commercial industries, by its very nature, appears to have generic utility with regard to rehabilitation.

TABLE 1 Q1. PRISONERS ARE EXPECTED TO WORK
WEIGHTS: WEIGHTED TO 1998 POPULATION IN ,000'S
FILTERS: ALL 18+ in SYD/NSW

	SEX		AGE GROUP				MARITAL STATUS					WORK STATUS			RESPONDENT OCCUPATION					AREA	
	Male	Female	18-24	25-39	40-54	55 PLUS	MARRI-ED NO CHILD-REN	MARRI-ED /SINGL-E CHILD-REN AT HOME	MARRI-ED -ED CHILD LEFT HOME	SINGLE UNDER 35 YEARS PLUS	SINGLE 35 YEARS PLUS	FULL /PART TIME	HOME DUTIES	STUD -ENT /RETI-R -ED /UNEMP	LOWER BLUE	UPPER BLUE	LOWER WHITE	UPPER WHITE	NO OCCUP	SYDNEY	REST NSW /ACT
RESPONDENTS	508	253	75	178	128	127	33	176	79	125	94	317	49	142	54	93	101	64	196	355	153
WTD. RESP.	4786	2347	617	1488	1305	1375	306	1613	894	1021	939	2891	457	1438	509	877	876	581	1943	2997	1789
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Yes	4453	2197	564	1388	1231	1270	298	1513	824	933	885	2690	416	1346	487	783	840	545	1797	2830	1623
	93%	94%	91%	93%	94%	92%	97%	94%	92%	91%	94%	93%	91%	94%	96%	89%	96%	94%	93%	94%	91%
No	190	97	26	42	62	61	8	54	61	35	32	121	32	37		53	28	27	83	98	92
	4%	4%	4%	3%	5%	4%	3%	3%	7%	3%	3%	4%	7%	3%	6%	3%	5%	4%	4%	3%	5%
Don't know	143	53	28	59	13	43		46	8	53	22	80	9	54	22	42	8	9	63	69	74
	3%	2%	5%	4%	1%	3%		3%	1%	5%	2%	3%	2%	4%	4%	5%	1%	1%	3%	2%	4%

ANNEX III:
PUBLIC OPINION SURVEY

TABLE 2 Q2. WORKING IN CORRECTIONAL INDUSTRIES IS LIKELY TO IMPROVE BEHAVIOUR OF PRISONERS IN GAOL
WEIGHTS: WEIGHTED TO 1998 POPULATION IN ,000'S
FILTERS: ALL 18+ in SYD/NSW

TOTAL	SEX		AGE GROUP				MARITAL STATUS					WORK STATUS			RESPONDENT OCCUPATION					AREA		
	Male	Female	18-24	25-39	40-54	55 PLUS	MARRI-ED NO CHILD-REN	MARRI-SINGL-E	MARRI-ED CHILD-REN	SINGLE UNDER 35 YEARS	SINGLE 35 YEARS PLUS	FULL /PART TIME	HOME DUTIES	STUD -ENT /RETIR-ED /UNEMP	LOWER BLUE	UPPER BLUE	LOWER WHITE	UPPER WHITE	NO OCCUP	SYDNEY	REST NSW /ACT	
RESPONDENTS	508	253	255	75	178	128	127	33	176	79	125	94	317	49	142	54	93	101	64	196	355	153
WTD. RESP.	4786	2347	2439	617	1488	1305	1375	306	1613	894	1021	939	2891	457	1438	509	877	876	581	1943	2997	1789
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Yes	3691	1803	1888	489	1203	991	1009	275	1267	649	828	672	2255	358	1078	379	683	723	445	1462	2409	1282
	77%	77%	77%	79%	81%	76%	73%	90%	79%	73%	81%	72%	78%	78%	75%	74%	78%	82%	77%	75%	80%	72%
No	541	264	277	75	135	166	165	13	172	96	106	154	360	75	106	65	74	97	101	203	323	218
	11%	11%	11%	12%	9%	13%	12%	4%	11%	11%	10%	16%	12%	17%	7%	13%	8%	11%	17%	10%	11%	12%
Don't know	554	280	274	53	151	149	201	18	174	149	87	113	276	24	254	65	120	56	35	278	265	288
	12%	12%	11%	9%	10%	11%	15%	6%	11%	17%	8%	12%	10%	5%	18%	13%	14%	6%	6%	14%	9%	16%

TABLE 3 Q3. REGULAR EMPLOYMENT IN CORRECTIONAL INDUSTRIES IS LIKELY TO PROVIDE PRISONERS WITH WORK SKILLS
WEIGHTS: WEIGHTED TO 1998 POPULATION IN ,000'S
FILTERS: ALL 18+ in SYD/NSW

	SEX		AGE GROUP				MARITAL STATUS					WORK STATUS			RESPONDENT OCCUPATION					AREA		
	Male	Female	18-24	25-39	40-54	55 PLUS	MARRI -ED NO CHILD -REN	MARRI /SINGL -E CHILD -REN AT HOME	MARRI -ED CHILD -REN LEFT HOME	SINGLE UNDER 35 YEARS PLUS	SINGLE 35 YEARS PLUS	FULL /PART TIME	HOME DUTIES	STUD -ENT /RETIR -ED /UNEMP	LOWER BLUE	UPPER BLUE	LOWER WHITE	UPPER WHITE	NO OCCUP	SYDNEY	REST NSW /ACT	
RESPONDENTS	508	253	255	75	178	128	127	33	176	79	125	94	317	49	142	54	93	101	64	196	355	153
WTD. RESP.	4786	2347	2439	617	1488	1305	1375	306	1613	894	1021	939	2891	457	1438	509	877	876	581	1943	2997	1789
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Yes	4351	2124	2228	565	1405	1162	1219	298	1523	777	950	803	2642	408	1301	466	784	841	516	1744	2779	1572
	91%	90%	91%	92%	94%	89%	89%	98%	94%	87%	93%	85%	91%	89%	90%	92%	89%	96%	89%	90%	93%	88%
No	287	156	132	20	67	101	99	7	74	50	38	117	179	35	73	22	63	24	57	121	160	127
	6%	7%	5%	3%	5%	8%	7%	2%	5%	6%	4%	12%	6%	8%	5%	4%	7%	3%	10%	6%	5%	7%
Don't know	147	68	79	32	16	42	57	16	66	32	19	19	70	13	64	21	30	11	8	78	58	89
	3%	3%	3%	5%	1%	3%	4%	1%	7%	3%	2%	2%	2%	3%	4%	4%	3%	1%	1%	4%	2%	5%

TABLE 4 Q4. PRISONERS WHO HAVE WORK EXPERIENCE ARE LESS LIKELY TO OFFEND AGAIN ONCE RELEASED
WEIGHTS: WEIGHTED TO 1998 POPULATION IN ,000'S
FILTERS: ALL 18+ in SYD/NSW

	SEX		AGE GROUP				MARITAL STATUS					WORK STATUS			RESPONDENT OCCUPATION					AREA		
	Male	Female	18-24	25-39	40-54	55 PLUS	MARRI-ED NO CHILD-REN	MARRI-ED /SINGL-E CHILD-REN AT HOME	MARRI-ED -REN LEFT HOME	SINGLE UNDER 35 YEARS PLUS	SINGLE 35 YEARS PLUS	FULL /PART TIME	HOME DUTIES	STUD -ENT /RETIR -ED /UNEMP	LOWER BLUE	UPPER BLUE	LOWER WHITE	UPPER WHITE	NO OCCUP	SYDNEY	REST NSW /ACT	
RESPONDENTS	508	253	255	75	178	128	127	33	176	79	125	94	317	49	142	54	93	101	64	196	355	153
WTD. RESP.	4786	2347	2439	617	1488	1305	1375	306	1613	894	1021	939	2891	457	1438	509	877	876	581	1943	2997	1789
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Yes	2266	1226	1039	227	755	640	644	137	843	350	429	506	1384	185	697	215	419	452	272	908	1569	697
	47%	52%	43%	37%	51%	49%	47%	45%	52%	39%	42%	54%	48%	40%	48%	42%	48%	52%	47%	47%	52%	39%
No	1463	631	832	319	403	329	413	103	378	294	421	267	959	115	389	134	327	303	175	525	856	607
	31%	27%	34%	52%	27%	25%	30%	34%	23%	33%	41%	28%	33%	25%	27%	26%	37%	35%	30%	27%	29%	34%
Don't know	1057	490	567	71	331	337	318	65	392	250	171	166	547	157	353	160	131	121	134	510	572	484
	22%	21%	23%	12%	22%	26%	23%	21%	24%	28%	17%	18%	19%	34%	25%	31%	15%	14%	23%	26%	19%	27%

ANNEX IV - OVERSEAS RESPONDENTS

The individuals listed below in alphabetical order responded to a request for literature for this study. Their assistance is gratefully acknowledged.

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