



# Washington State Department of Corrections

## **Does Participation in Washington's Correctional Industries Increase Employment and Reduce Recidivism?**

### **Principal Author**

**Michael Evans**, DOC Senior Research Manager

Research Analyst

Susan Koenig

October 2011

---

## **Abstract**

Substantial barriers to legal employment exist for former prison offenders after their release. Finding a job with a livable wage and keeping the job are more difficult due to their previous criminal histories and lower education levels compared to the general population; however, 40.1 percent of offenders participating in the Correctional Industries (CI) were employed one year after release in 2007 and recidivated at a rate of 34.5 percent. In contrast, offenders with similar demographic characteristics who were not in CI were employed at 29.1 percent one year after release and had a 45 percent recidivism rate. Holding a job is an important signal that an individual is moving toward a crime-free life. Not only are these individuals working and crime-free, they are also taxpayers and consumers who help the local economies grow.

## **Does Participation in Washington’s Correctional Industries Increase Employment and Reduce Recidivism Outcomes?**

This article will evaluate Washington’s Department of Corrections (DOC) Correctional Industries (CI) program for impacts on employment outcomes of incarcerated former offenders after release, along with recidivism outcomes impacts for a retrospective analysis.

Substantial barriers to legal employment exist for former prison offenders after their release. Finding a job with a livable wage and keeping the job are more difficult due to their previous criminal histories, having fewer job skills, and having lower education levels than the general population.

### **Correctional Industries in Washington Department of Corrections**

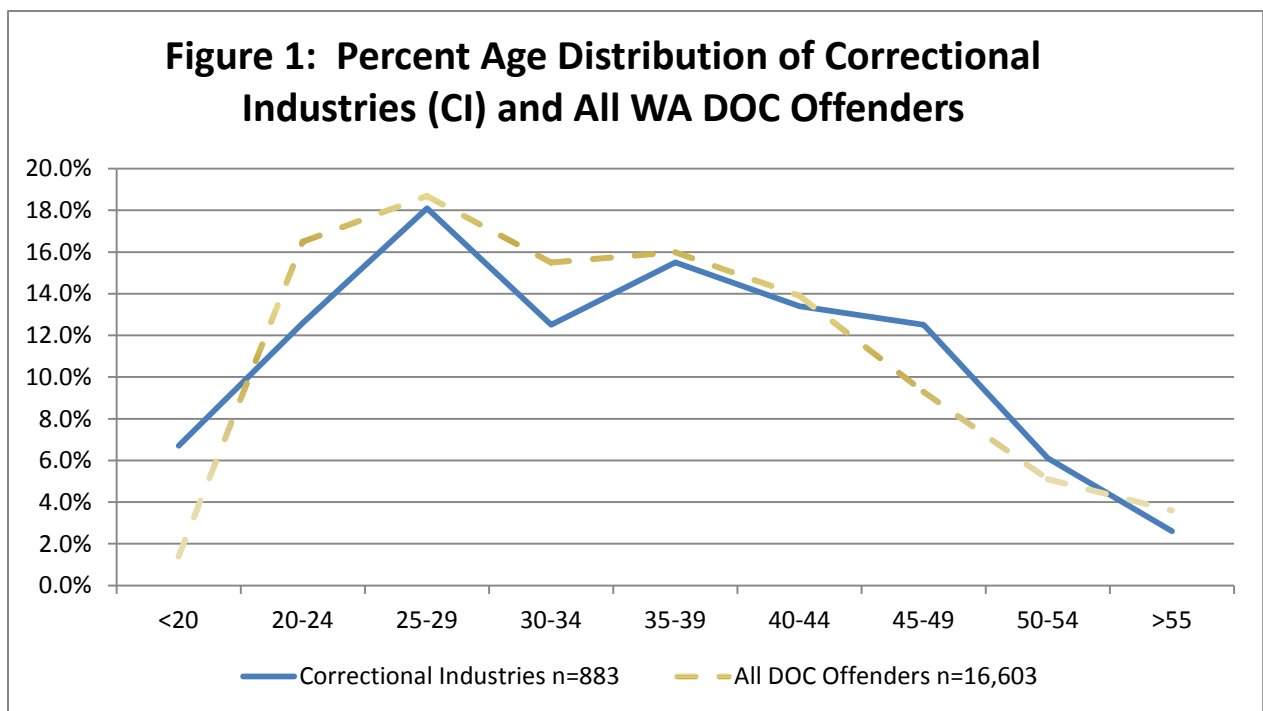
Washington’s Correctional Industries (CI) program was created in 1981 (RCW 72.09.090; <http://apps.leg.wa.gov/rcw/default.aspx?cite=72.09.090>), although the idea of putting offenders to work is as old as the first territorial penitentiary built in Walla Walla in 1886. CI provides over 1,600 jobs to offenders that include furniture factory, manufacture of license plates, food factory, building trades, print shop, mattress recycling, sign printing, uniform manufacturing, and optical. Offenders wages earned through CI are used to pay court-ordered fees, child support, crime victim’s compensation, and cost of incarceration.

### **Previous Research on Correctional Industries**

The Washington State Institute for Public Policy (WSIPP) looked at what works for adult corrections and showed a low of 5.9 percent to a high of 36 percent reduction in recidivism and a \$4.63 benefit for each dollar of cost for Correctional Industries (CI) (see <http://www.wsipp.wa.gov/rptfiles/05-01-1202.pdf>, <http://www.wsipp.wa.gov/rptfiles/06-10-1201.pdf> and <http://www.wsipp.wa.gov/rptfiles/11-07-1201.pdf>).

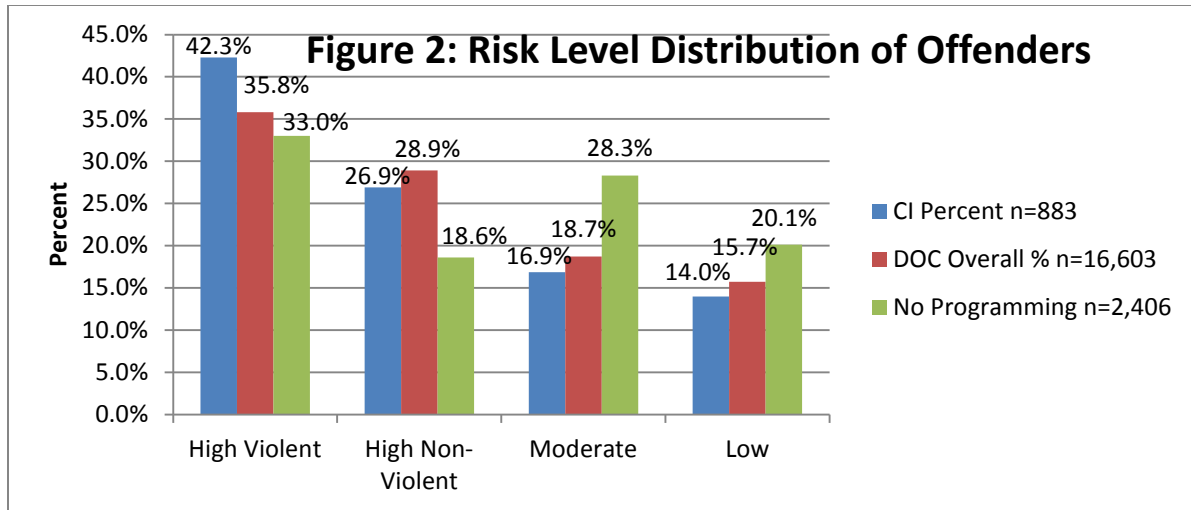
## Characteristics of General Prison Population versus Correctional Industry Offenders

Before looking at Correctional Industries impact, we need to look at the characteristics of those offenders participating compared to those of the general prison population. Only 5.3 percent of offenders participate in CI. Of these, the percent age distribution of offenders in CI is distinctly different for those under 20 and between 45 to 49 years of age (see figure 1) compared to the general prison population, where CI has a larger group of younger and older offenders participating.



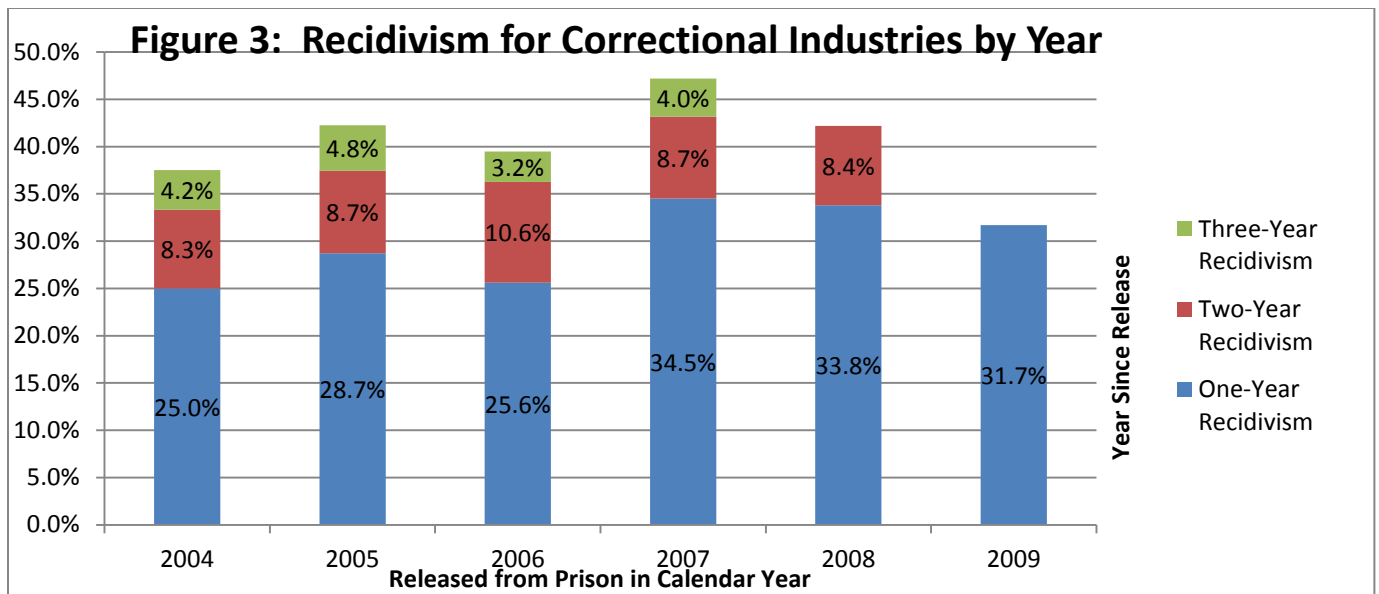
Source: Offender Management Network Information (OMNI)

Risk level to reoffend is also different between CI and the general prison population, along with those offenders with no programming which is used as a control group later in the article (see figure 2). There are more high risk to reoffend offenders in CI compared to the overall population and those offenders with no programming-which has a higher proportion of low risk offenders. The older participants tend to be low risk to reoffend but usually have longer sentences or a life sentence and are not released which affects recidivism rates (<http://www.wsipp.wa.gov/pub.asp?docid=11-01-1201>).



### Overall Recidivism and Employment Outcomes

Three-Year recidivism outcomes for CI peaked in 2007 at 47.2 percent (See Figure 3), but much of this increase over time is due to changes in the population characteristics of the offenders in CI; where the criteria to get into CI have started to drop off older low risk offenders and increase the number of younger high risk offenders to reoffend coming into CI and eventually released from prison.

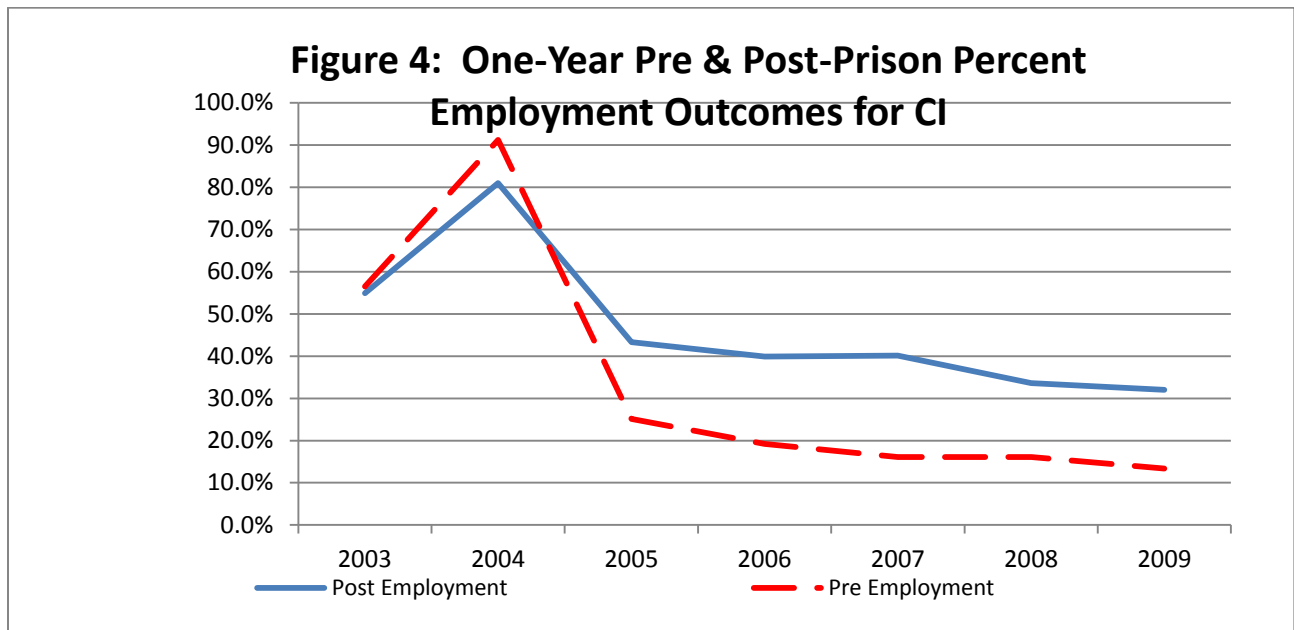


	2004	2005	2006	2007	2008	2009
<b>One-Year Recidivism</b>	<b>25.0%</b>	<b>28.7%</b>	<b>25.6%</b>	<b>34.5%</b>	<b>33.8%</b>	<b>31.7%</b>
<b>Two-Year Recidivism</b>	<b>33.3%</b>	<b>37.4%</b>	<b>36.2%</b>	<b>43.2%</b>	<b>42.2%</b>	<b>---</b>
<b>Three-Year Recidivism</b>	<b>37.5%</b>	<b>42.2%</b>	<b>39.5%</b>	<b>47.2%</b>	<b>---</b>	<b>---</b>
<b>Number of Offenders</b>	<b>140</b>	<b>731</b>	<b>992</b>	<b>1,092</b>	<b>1,076</b>	<b>883</b>

Recidivism is only one outcome measure; employment outcomes for offenders can be evaluated after offenders are released too, (See

<http://www.doc.wa.gov/aboutdoc/measuresstatistics/researchinternalstudies.asp>

Refer to, “Tracking Washington State Offenders Pilot Study: Do Education Programs Affect Employment Outcomes”), which is an alternative outcome for these high risk offenders taking employment and education programs.



\*Source Employment Data: Employment Security Department, Labor Market and Economic Analysis

In 2005, 26 percent of Washington CI offenders were employed one year prior to their admission to prison, compared with 42 percent one year after release from prison (See Figure 4) with 28.7 percent recidivating (See Figure 3). By the great recession in 2009, only 14 percent of the CI offenders were employed one year prior to admission to prison, and 32 percent were employed one year after release from prison. Of the 68 percent who were not employed one year after release from prison, 31.7 percent recidivated. Employment outcomes for the general offender population are much lower (See table 1 and <http://www.doc.wa.gov/aboutdoc/measuresstatistics/researchinternalstudies.asp>, “Tracking Washington State Offenders Pilot Study: Do Education Programs Affect Employment Outcomes”).

**Table 1: Employment and Recidivism Outcomes for All Offenders Released During 2001 and 2008 Recessions (n=6,331 and 8,156).**

	<b>Employment One-Year Before</b> Admission to Prison	<b>Employment One-Year After</b> Release from Prison	<b>Recidivism Rate</b> <b>One-Year After Release</b>
<b>2001 Recession</b>	72%	40%	12.1%
<b>2008 Recession</b>	33%	10%	8.8%

The largest percentage (15.9%) of former offenders work in the waste services industry with 20.8 percent of former CI offenders in this same industry, while 12.5 and 18.9 percent work in the manufacturing sectors, respectively. Having a larger distribution of offenders in these industries makes sense, since CI provides training in furniture manufacturing, facilities support, cleaning services, waste collection and recycling occupations. Over nine percent work in other service industry which is comprised of furniture repair, laundry services, and general maintenance (See Table 2).

**Table 2: Percent Employed by Industry for All WA Offenders and Correctional Industries in 2008**

<b>Industry Description</b>	<b>All Offenders</b>	<b>Correctional Industries</b>
Agriculture, Forestry, Fishing and Hunting	3.0%	1.6%
Mining	0.2%	0.0%
Utilities	0.2%	0.0%
Construction	15.9%	15.4%
<b>Manufacturing</b>	<b>12.5%</b>	<b>18.9%</b>
Wholesale Trade	4.5%	1.9%
Retail Trade	11.0%	12.0%
Transportation and Warehousing	4.1%	3.1%
Information	0.9%	0.0%
Finance and Insurance	0.7%	0.0%
Real Estate and Rental and Leasing	1.7%	1.6%
Professional and Technical Services	2.5%	1.9%
Management of companies and enterprises	0.2%	0.0%
<b>Administrative and Waste Services</b>	<b>15.9%</b>	<b>20.8%</b>
Educational Services	1.3%	0.0%
Health care and Social Assistance	4.8%	4.1%
Arts, Entertainment and Recreation	2.5%	0.0%
Accommodation and Food Services	11.5%	9.4%
<b>Other services, except public administration</b>	<b>4.6%</b>	<b>9.4%</b>
Public Administration	1.9%	0.0%
<b>Significant Difference</b>	<b>100%</b>	<b>100%</b>

## **Outcome Results of Correctional Industries Program Compared to Control Group**

In order to compare program's recidivism and employment rates, a group of offenders with similar demographic and offense characteristics (e.g. age, gender, race/ethnicity, risk level, criminal history, sentence length, education level, etc.) outcomes who did not participate in CI and released from prison in the same year-are compared to those that have education and employment programming for a more equitable comparison, or in this case CI. The CI program requires offenders who participate have a high school degree or equivalent.

In our previous employment article

<http://www.doc.wa.gov/aboutdoc/measuresstatistics/researchinternalstudies.asp>

“Tracking Washington State Offenders Pilot Study: Do Education Programs Affect Employment Outcomes”), we looked at employment outcomes in general for all offenders for context and comparison purposes then looked at Walla Walla education program compared to a control (comparison) group with similar characteristics. Our results here are similar, where 40.1 percent of offenders were employed one year after release (16.1% employed one year before prison), compared to 29.1 percent employment of all offenders who were not in the program (See Table 3).

The recidivism rate one year after release for offenders in CI was 34.5 percent compared to 45.0 percent for all offenders with similar demographic characteristics not in the program (control group), and 47.2 percent and 61.4 percent for three year recidivism rates, respectively.



**Table 3: Employment and Recidivism Outcomes in 2008 and 2010 one and three years after prison release in 2007 for those participating in Correctional Industries versus those who did not participate-control group (n=1,092 and 422;\* statistically valid at 99% Confidence Level and +/- 1% Error Level).**

	<b>Participated in Correctional Industries Program</b>	<b>Did Not Participate in Correctional Industries Program-Control Group</b>
<b>Percent Employed One-Year</b> After Prison Release	40.1%	29.1%
<b>Percent Employed Three-Years</b> After Prison Release	34.9%	8.2%
<b>Percent Recidivating One-Year</b> After Prison Release	34.5%	45.0%
<b>Percent Recidivating Three-Years</b> After Prison Release	47.2%	61.4%

### **Successful Employment and Recidivism Outcomes**

Offenders who are employed after release are less likely to recidivate (Baer 2006). Holding a job is an important signal that the individual is moving toward a crime-free life. Not only are these individuals working and crime-free, they are also taxpayers and consumers who help the local economies grow.

This research does not contain information into causes for employment outcomes or break out the amount of affect education and CI programming each have, rather it is intended to summarize employment outcomes of WA offenders and provide a starting point for future research. Identifying factors to predict better employment outcomes and lower recidivism rates will help DOC manage and understand program needs. Future research on in-prison work assignments, job training and vocational programs would help evaluate and determine the effectiveness of Washington pre and post-prison employment programs. Do offender employment programs help offenders from recidivating, remain attached to the labor market, maintain work hours and make livable wages?

## **Appendix:**

### **Evaluation Design and Methodology**

We use linked quarterly Unemployment Insurance (UI) administrative employer/employee (Wage Record) files from the Employment Security Department to the DOC offender database to develop a time series (longitudinal) data on the aggregated characteristics of the offenders and jobs. We also link to other offender administrative databases (i.e., Offender Needs Assessment (ONA), risk assessment, programs, etc.) to provide aggregated demographic cross-sectional data on offender and employer characteristics (Industry). Employment Security Department earnings data exclude self employment, federal employment, and unreported earnings (see employment article appendix for more detail; <http://www.doc.wa.gov/aboutdoc/measuresstatistics/researchinternalstudies.asp>,

“Tracking Washington State Offenders Pilot Study: Do Education Programs Affect Employment Outcomes”).

After matching employment and recidivism outcomes for all offenders, offenders who participated in CI were broken out and compared to a statistically validated control group of offenders with similar demographic and risk characteristics not in the program (e.g. age, gender, race/ethnicity, risk level, criminal history, sentence length, education level, etc.). Recidivism is based on last year of program and release from prison. Offenders are typically sentenced to a minimum of one year and a day, with the average length slightly over two years. Offenders with high need and risk start programming soon after entering prison, and start re-entry programming towards the end of their sentence.

## References:

- Anderson, S.V. (1995b). "Evaluation of the Impact of Participation in Ohio Penal Industries on Recidivism." Columbus, OH: Office of Management Information Systems Bureau of Planning and Evaluation, Ohio Department of Rehabilitation and Correction.
- S. Aos, P. Phipps, R. Barnoski, & R. Lieb (2004). "The Comparative Costs and Benefits of Programs to Reduce Crime." V. 4.0 Olympia: Washington State Institute for Public Policy.
- S. Aos, M. Miller, & E. Drake (2006). "Evidence-Based Adult Corrections Programs: What Works and What Does Not." Olympia: Washington State Institute for Public Policy.
- Washington State Employment Security Department, Labor Market and Economic Analysis, Quarterly Census of Employment and Wages.
- Drake, E. (2003). "Class 1 Impacts: Work during incarceration and its effects on post-prison employment patterns and recidivism." Olympia: Washington Department of Corrections.
- Morenoff & Harding (2008). MI study, "Neighborhoods, Recidivism, and Employment Among Returning Prisoners." National Institute of Justice.
- Jeff Grogger (2009). "Bounding the Effects of Social Experiments Accounting for Attrition in Administrative Data." Working Papers NBER June 2009.
- Traci Burch (2010). "Using Government Data to Study Current and Former Felons." Sentencing Project.
- Bruce Western and Becky Pettit (2010). "Collateral Costs: Incarceration's Effect on Economic Mobility," The PEW Charitable Trusts
- Mason Burley & Jim Mayfield (2010). "Factors related to employment and housing outcomes of public mental health consumers in Washington State." Olympia: Washington State Institute of Public Policy, Document No 10-08-3401.
- Jeremy Travis (2003). Speech Transcript, "In thinking about "What Works," what works best?" The Margaret Mead Address at the National Conference of the International Community Corrections Association, Urban Institute Justice Policy Center.
- Christy A. Visher, Laura Winterfield and Mark Coggeshall (2005). "Ex-Offender employment programs and recidivism: A meta-analysis." *Journal of Experimental Criminology*, 1: 295-315.
- Christy Visher, Sara Debus and Jennifer Yahner (2008). "Employment after Prison: A Longitudinal Study of Releases in Three States." Research Brief, Urban Institute Justice Policy Center.
- John Pawasarat (2007). "Barriers to Employment: Prison Time." Employment and Training Institute, University of Wisconsin-Milwaukee.
- Amy Solomon, Kelly Dedel Johnson, Jeremy Travis, and Elizabeth McBride (2004). "From Prison to Work: The Employment Dimensions of Prison Reentry." Research Report, Urban Institute Justice Policy Center.

---

Maguire, K.E., Flanagan, T.J., & Thornberry, T.P. (1988). "Prison labor and recidivism." *Journal of Quantitative Criminology*, 4(1): 3-18.

MacKenzie, D.L. (2005). "What works in corrections? Reducing the criminal activity of offenders" Chapter 6 Vocational Education and Work Programs.

Saylor, W.G. & Gaes, G.G. (1996). "PREP: A study of "rehabilitating" inmates through industrial work participation, and vocational and apprenticeship training." Washington DC: U.S. Federal Bureau of Prisons.

Smith, C.J., Bechtel, J., Patrick, A., Wilson-Gentry, L. (2005). "Correctional Industries preparing inmates for re-entry: Recidivism & post-release employment.