

# **The Economic and Workforce Development Program's Cost- Benefits and Return on Investment**

**A Presentation to the Economic Development Program**

**Advisory Committee by**

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**September 29, 2010**

**A Chapter in TSI's Performance and Effectiveness  
Evaluation of the Economic and Workforce Development  
Program, California Community Colleges,**

**Chancellor's Office**



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# Components of the EWDP Performance and Effectiveness Evaluation

- Used standard performance evaluation tools to review the program's conceptualization and design, its goal-setting process and management.
- Performed four Cost/Benefit analyses to assess program outcomes relative to the cost of services provided.
- Assessed alignment of program theory, processes, outputs, and outcomes relative to legislative intent
- Conducted 5 surveys: Grant Monitors, IDs, Grant Administrators, EDPAC, and clients
- Summarized the results into specific conclusions about strengths and weaknesses
- Made specific recommendations for strategies to improve program effectiveness.

*The evaluation was completed in July and is under review.*

“Only by analyzing what drives growth and competitiveness in different sectors of the economy—and tailoring the policy response and executing policy in close collaboration with the private sector—can governments boost their odds of intervening effectively.” McKenzie Global Consulting

From 2000-01 to 2008-09, EWDP served:

- 399,000 incumbent workers
- 497,000 students.
- At least 44,200 job placements were made.
- The program served 392,000 businesses. (EWDP Annual Reports)

Were EWDP services effective and did taxpayers receive a reasonable return on their investment?

# Three Cost/Benefit and ROI Studies

Dr. David Gallo, TSI's Chief Economist, and Professor of Economics, Emeritus, California State University at Chico, developed the approach and conducted the C/B and ROI research. Lisa Morana, TSI, was his Research Assistant

The two studies to be reviewed in some detail are the one's most closely related to intent of the program:

- Employee/Worker Training
- Program Business Assistance

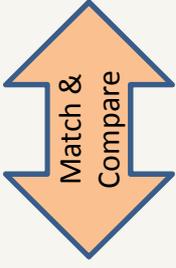
I'll make some summary comments about the Nursing Plan Enrollment Growth Program

TSI's evaluation focused on the program as a whole and did not compare initiative performance

# How Dr. Gallo Did the Analysis

## EWDP Services

DCS Sample of  
Employee/Workers or Businesses



## Control Group

Matching Sample of  
Employees/Workers of Business  
Using Standard Government  
Sources Following Each over  
2 or 3 years

Difference  
in \$s or  
Growth?

Program Cost  
Dollar vs Wage or  
Other Dollar Result

State and local tax revenues were  
calculated as: average income,  
sales, and excise taxes paid for  
employee income levels

# Employee/Worker Training Cost-Benefit Analysis

## Initiatives:

- Those providing direct assistance to prepare workers to enter the job market, upgrade the skills of those currently employed, or help prepare individuals for new careers in multiple industries

## Calculation of Benefits:

- Calculated from the increase in income for those receiving training compared to the average growth in wages from 2004-2006 for the control group which was all California employees
- Benefits are the increase in state and local income, sales, and excise tax revenues (public benefits) paid to government entities within California

**Costs:** The percent of total State costs of the program going to employee/worker training

# Sample and Analysis

- A DCS sample of 3,405 trainees was developed by the Chancellor's Office
- Only individuals who reported SSNs who received training in 2003-04
- Represented just 12.5 percent of the 27,316 employee/workers trained
- The costs and benefits determined for the sample are extrapolated to all EWDP trainees for 2003-04
- The SSN's were submitted by the Chancellor's Office to the California Employment Development Department (EDD) and the Unemployment Insurance database (UI) was used to determine total wages for 2003-04 to 2006.

## Total Benefits of EWDP Employee/Worker Training

	2004	2005	2006
Wage Benefits: <u>Sampled Trainees</u>	\$4,514,189	\$6,808,	\$9,207,842
Wage Benefits: <u>All</u> 2003-04 <u>Trainees</u>	\$36,214,266	\$54,618,930	\$73,868,259
State and Local Revenue benefits: <u>Sampled Trainees</u>	\$338,564	\$510,628	\$690,588
State and Local Revenue Benefits: <u>All</u> 2003-04 <u>Trainees</u>	\$2,716,070	\$4,096,420	\$5,540,119
Total Wage Benefits: 2004-06			\$164,701,455
Total State and Local Revenue Benefits: 2004-06			\$12,352,609

## Benefit-Cost Ratios for EWDP Employee/Worker Training in 2003-04

Benefit Measure	Benefit	Cost	Benefit-Cost Ratio	Units
Increase in Wages: 2004-06	\$164,701,455	\$16,078,652	\$10.24	\$ of Wages per \$ of State EWDP Spending
Increase in California State and Local Tax Revenues: 2004-06	\$12,352,609	\$16,078,652	\$0.77	\$ of State & Local Revenues per \$ of State Spending

# Summary of Results

- Workforce Training programs generated significant increases in the incomes of typically low income or unemployed workers.
- As a result of 2003-04 program expenditures, they collectively received an additional \$164.70 million in wages
- Returned a total of \$12.35 million in revenues to state and local governments within California for the three years following their training
- \$10.24 in wages were paid to trainees for each dollar California spent on the program in 2003-04
- The higher wages returned \$0.77 per state dollar in the form of state and local revenues within three years of program expenditures
- This benefit calculation does not include the state's budget savings realized from no longer having to pay unemployment, social welfare or other support.

# Program Business Assistance Initiatives

## **Initiative studied :**

Assisted firms with developing international markets for their products; obtaining financing; creating jobs; and developing other essential management and marketing skills. (Excludes SBDCs)

## **Calculation of Benefits:**

- Increase in employment for the assisted businesses relative to a control group (Sample and control are matched by firm size).
- The base year for the analysis is 2005. Benefits are estimated for next two years
- Estimated impacts are adjusted downward by the expected failure rate for business establishments.
- The net increase in employee income compared to the control is used to estimate the revenue benefits to California state and local government.

**Costs:** The percent of total State costs of the program going to business assistance

# Sample and Analysis

## **Business Sample:**

- A sample of 2,244 EWDP served businesses were drawn from the 2005-06 DCS file
- The file was sorted to:
  - Eliminate duplicates
  - Eliminate non-profits and government employers from the sample
- Businesses utilizing EWDP services are predominantly small firms
  - Seventy-eight percent of the sampled businesses have fewer than 50 employees, and
  - over 53 percent have fewer than ten employees

## **Analysis:**

- EWDP did not record EIN numbers so the EDD and FTB data bases could not be used
- The DUNS number from the Dun & Bradstreet database was determined if possible
- The DUNS number and the National Establishments Time Series database (NETS) produced firm employment, sales, and other data
  - Firms without DUNS numbers, or firm with DUNS numbers that were not in the NETS database were dropped.
- A final sample size of 516 businesses was used in the analysis
- A control sample was developed using EDD data on employment and number of business establishments by size
  - Employment growth rates for all California establishments , weighted by firm size, were calculated for the 2005-06 and 2006-07 time periods
  - These control group growth rates are compared to those of firms receiving EWDP assistance to derive employment benefits from EWDP training over the following two years

## Benefits per Business Receiving EWDP Assistance: 2005-06 Budget Year

	2005	2005-06	2006-07
<u>Employment Growth per EWDP-Assisted Firm</u>		1.65%	0.06%
<u>Employment Growth per California Business Establishment</u>		-0.42%	-0.82%
<u>Difference</u>		2.08%	0.88%
<u>Employment for Firms Assisted by EWDP</u>	28,787	29,263	29,280
<u>Employment: No EWDP Assistance:</u>	28,787	28,665	28,431
<u>Weighted CA Average</u>		598	849
<u>Net Gain due to EWDP Assistance</u>		\$43,429	\$45,309
<u>Mean Annual Wage</u>		\$67,085	\$99,421
<u>Benefits per EWDP-Assisted Business</u>			
<u>Total Benefits for the 2005-07 Period per EWDP-Assisted Business</u>			\$166,506

## Total Benefits of EWDP Business Assistance: 2005-06

### Budget Year

	2005	2006	2007
Total Businesses Assisted	2,244	2,244	2,244
Benefits per Assisted Business		\$67,085	\$99,421
Total Unadjusted Benefits		\$150,537,777	\$223,100,684
Loss of Benefits from Establishment Failures		\$7,270,975	\$22,071,995
Net Benefits for All EWDP-Assisted Firms		\$143,266,802	\$201,028,688
Cumulative Total through 2007			\$344,295,491

## Employment Growth Rates Following EWDP Business Assistance by Firm Size

Firm Size (Employees)	Employment Growth Rate		
	2005 Employment	2005-06	2006-07
<b>All</b>	28787	1.65%	0.06%
<b>0-99</b>	8162	3.10%	-0.51%
<b>0-49</b>	3659	49.08%	3.10%
<b>0-19</b>	3265	4.78%	-5.12%
<b>0-9</b>	1089	16.53%	26.87%

**Table 7: Total State and Local Revenue Increases due to EWDP Business Assistance: 2005-06 Budget Year**

	2006	2007	2006-07 Total
<b>Total Annual Increase in Employee Income: All EWDP-Assisted Businesses</b>	\$143,266,802	\$201,028,688	\$344,295,491
<b>Percentage of Income Paid in Income, Sales, and Excise Taxes</b>	5.85%	5.79%	
<b>Increase in State and Local Revenues</b>	\$8,377,358	\$11,630,505	\$20,007,864

## Cost-Benefit Ratios for EWDP Business Assistance: 2005-06

Benefit Measure	Benefit	Cost	Benefit-Cost Ratio
Increase in Wages: 2005-06 & 2006-07	\$344,295,491	\$10,136,305	\$33.97
Increase in California State and Local Tax Revenues: 2005-06 & 2006-07	\$20,007,864	\$10,136,305	\$1.97

# Summary of Results

- Increases in business wages and the resulting taxes more than covered the cost to the taxpayer
- Every dollar spent for business assistance in 2005-06 produced an additional \$33.97 in wages
- For Example, If EWDP spent \$1,000 training 10 workers in a business, then those workers would collectively earn a total of \$33,970 dollars in additional wages over the following two years
- The additional income resulted in increased income and sales tax revenues per \$1 EWDP expenditure to California state and local governments of \$1.97
- For example, a total of \$1,970 in additional state and local taxes would be paid from those increased wages that resulted from the \$1,000 in EWDP services in the two years following the training

# Nursing Plan Enrollment Growth Program

- Determined the total private and public benefits resulting from the program from 2006-07, 2007-08, and 2008-09
- The total public and private benefits were \$1.525 billion and \$215.26 million, respectively over a nurse's 30 year working life
- For each \$1,000 EWDP spent on the nurse retention program, the trainees earn \$15,170 dollars in additional wages in the next 30 years
- The same \$1,000 expenditure yields public benefits as higher state and local revenues and a reduced cost of training future nurses
- Total Public benefits are \$2.14 for each tax payer dollar spent
- If the recent program achievements are sustained because nurse training capacity is in place through 2014, each dollar the state has spent and will spend on nurse education will result in an additional \$16.19 in private benefits and \$2.28 in public benefits for the years 2009-2014

# The Public is Getting A Big Bang for Its Buck

## Benefit-Ratios for Three EWD Programs

Program	EWDP Business Assistance Initiatives and Collaboratives	Nurse Retention Program	Employee/Worker Training*
Private Benefit-Cost Ratio: Wages per Dollar of State Funding	\$33.97	\$15.17	\$10.24
Public Benefit-Cost Ratio: State and Local Taxes per Dollar of State Funding	\$1.97	\$2.14	\$0.77
Data Sources	National Establishments Times Series Database	Program Enrollment Data and EDD Salary Data	EDD Unemployment Insurance Database
Time Horizon for Benefit Calculations	Two Years	30-year Nursing Career	Three Years
Budget Year	2005-06	2002-2008	2003-04

