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The Return on Investment to Training Programs for Incumbent Workers

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The Return on Investment to Training Programs for Incumbent Workers

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Public Job Training

- Most support goes to non-employed individuals
- Have had customized job training for employed individuals for attraction/expansion purposes
- Now using training for incumbent workers for retention/competitiveness purposes
- Total OJT $\approx$ $50\text{–}60$ billion; subsidized training $\approx$ $600\text{–}800$ million (about 1%)
# Estimated Subsidized Employee Training, by Year (Nominal Dollars)

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<tbody>
<tr>
<td><strong>Upjohn Institute Surveys</strong></td>
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<tr>
<td>Total spending</td>
<td>$ 815.2 M</td>
<td>$ 661.5</td>
<td>$ 613.6</td>
<td>$ 590.9</td>
<td>—</td>
<td>$ 716.6M</td>
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<tr>
<td>Total firms</td>
<td>14,000</td>
<td>16,237</td>
<td>12,679</td>
<td>14,200</td>
<td>—</td>
<td>38,157</td>
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<tr>
<td>Total workers</td>
<td>982,290</td>
<td>972,868</td>
<td>846,716</td>
<td>869,255</td>
<td>—</td>
<td>1,257,321</td>
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<td><strong>Duscha and Graves (2006)</strong></td>
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<tr>
<td>Total budgets</td>
<td>$ 633.5M</td>
<td>$ 607.5</td>
<td>$ 584.4</td>
<td>$ 513.2</td>
<td>$ 552.0</td>
<td>$ 571.3</td>
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<tr>
<td>Total workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>918,250</td>
<td>(40 states)</td>
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</table>
“Average” State Program

- 500+ firms per year
- $20k per firm
- 30 - 40 workers/firm
Massachusetts Workforce Training Fund Grant Program

- Funded by surcharge on state UI tax — $21M
- Started in 1999
- Competitive bids by firms
- Must include 100% match
Massachusetts WTF Average Grant

- $60K
- 18 months
- 100 workers
- Manufacturing sector (65%)
Massachusetts WTF Evaluation
Self-Report

- Improve productivity? 90.8%
- Improve competitiveness? 91.8%
- Other benefits? 91.2%
Massachusetts WTF Study

- Return on Investment
  - Workers
  - Firms
  - Massachusetts
Self-Reported Data

4. Were there any new hires as a direct result of the training program?
   Yes  No

4.a. If yes, how many? _______________

5. Were any layoffs prevented as a direct result of the training Program?
   Yes  No

5.a. If yes, how many? _______________
Self-Reported Data

6. Have you increased (or, within the next six months do you expect to increase) wages as a direct result of this grant?  
   Yes  No

6.a. If yes, what was the average wage increase?
   __________________________

7. Did other employees, not trained through the grant, also receive a wage increase during the same period?  
   Yes  No

7.a. If yes, what was the average increase?
   __________________________
Worker Returns

- 35% of respondents had wage differential (7a-6a)
- Mean = 8%
- Return = [2.8, 8.0]; midpoint = 5.4
Return on Investment — Firms

- Productivity effect
  State average VA/Employee Comp = 1.595
  (equivalent to compensation share = 62.7%)

- Productivity Effect = $176–$503M in Δ Value Added
Return on Investment — Firms

- Employment effect
  3,995 new hires = 1.7% employment growth

- CRTS  $306M in $\Delta$ Value Added

- Total $\Delta$ in VA = $472–$809M
Return on Investment — Firms

- Corporate profit rate on VA = 11.0%
- Profits ↑ by $53-$89M
- Cost (Match) = $49-$73M
- ROI = 16.6% at midpoints
Return on Investment — Massachusetts

- Of 3,995 jobs, 2,784 were export-based
- Multiplier of 2.0 → 5,568 jobs
- MA cost per job = $8,750
Return on Investment — Massachusetts

- State personal income/job = $66,014
- 5,568 jobs $\rightarrow$ +$377M in PI
Return on Investment — Massachusetts

- Productivity effect (above) = $176 – $503M
  = $151 – $431M in PI

- Total personal income $\uparrow$ $518 – $798M

- State revenues $\uparrow$ $77 – $118m (14.77\%)
Return on Investment — Massachusetts

- 5,568 new jobs → 7,022 population growth
- Non-welfare state government expenditures per capita = $4,211
- State expenditure ↑ by $30M
Return on Investment — Massachusetts

- Net revenue = $97 – $88M
- WTF cost = $49M
- 1st year return = 38.9%
Rates of Return

- Worker: 5.4%
- Firm: 16.6%
- Commonwealth: 38.9%
Summary

- Effective economic development tool
  - $8,750/new job created

- High rates of return may imply underinvestment

- Decline in level of funding since 2000-2001
  - 30% drop from 2001 to 2004; however, increases since 2004