



Return on Investment in CTE

State and federal policymakers are making tough decisions on where to direct scarce funding, but outcomes of some studies suggest that career technical education (CTE) is a wise choice if they are seeking a positive return on investment. In fact, the studies provide a clear indication that funding provided for CTE has a broad and positive impact on individuals, businesses and our economy, and government. The effects include increased wages, reduction in government spending on public assistance and increased tax revenues. Below are examples of state return on investment studies that demonstrate the value of CTE and the benefits such programs provide for society.

Oklahoma

In 2006, Oklahoma conducted a study of lifetime income gains of CareerTech's technology center full-time program graduates and their impact on the Oklahoma economy. This study was updated in 2008 to include three job training programs and the Oklahoma Bid Assistance Network.

Benefits to individuals

- Oklahoma workers who have completed CTE training earn an additional \$2 an hour, or nearly 20 percent more, than workers with only a high school diploma.
- The average estimated hourly wage rate for students who completed full-time programs in FY02 was \$10.47, or approximately 12 percent more than the estimated wage rate for workers of similar age but with no education beyond high school.
- Wage rates are higher for adult completers (\$12.46) than for secondary completers (\$7.58).
- Based on all sources of income, CTE-trained workers earn nearly \$4,100 more per year than those with no education beyond high school.

Benefits to the state

- The cost/benefit analysis suggests that each group of full-time certificate program completers generates a total of \$2.4 billion in direct and indirect benefits, including added income over their work life, added tax revenue, and the added output generated by the operations of the full-time programs themselves.
- The largest direct benefit to completers is the \$1.1 billion wage gain, which generates an estimated \$82.6 million in direct added tax revenue to state and local government.
- Sales and income taxes paid by completers to Oklahoma state and local governments is estimated to be \$83 million, or more than \$7,000 per completer over their work life.
- Through multiplier effects, an additional \$74 million is expected to be paid by other workers statewide as their future earnings increase, for a total tax impact of \$157 million over the work life of completers.

Tennessee

In 2006, the Tennessee Department of Labor and Workforce Development, the Tennessee Career and Technical Education Council, and the Tennessee Department of Education Division of Career and Technical Education commissioned a report, *The Economic Impact of Secondary and Post-Secondary*

Career and Technical Education in Tennessee, to look at the economic impact of secondary and postsecondary CTE on individuals and on the economy of the state. One of the questions researched in the report was “What is the public’s return on their investment?”

Benefits to the state

- Secondary and postsecondary CTE in Tennessee has a cost/benefit ratio of 1:1.99, generating nearly double the benefits relative to the costs of operations.
- Secondary and postsecondary CTE produced a turnover ratio of 1:1.01, meaning that for every dollar earned by CTE clients, graduates and completers an additional \$1.01 was generated for the state economy. The total number of jobs created or impacted by the programs was about 7,000.
- The cost/benefit ratio produced by CTE expenditures and earnings was 1:5.37, meaning that for every \$1 expended on secondary and postsecondary CTE \$5.37 is returned to the state economy in direct earnings, increased productivity, and additional labor income and taxes. In total, over 16,000 jobs were created or impacted by those expenditures and earnings.

Washington

In September 2006, the Upjohn Institute released a report, *Net Impact and Benefit-Cost Estimates of the Workforce Development System in Washington State*, authorized by the Workforce Training and Education Coordinating Board (WTECB) of the State of Washington.

Benefits to individuals

- Long-term economic benefits for secondary school students include increases in employment, hourly wage increases by \$0.59 per hour; hours worked increase by 35.5 hours per quarter; and earnings increase by about 13 percent.
- CTE completers who go on to postsecondary education have better economic outcomes than other high school graduates. In the short-term, CTE completers who do not go on to higher education have relatively higher earnings impacts than other high school graduates. But in the longer term, CTE completers who do enroll in higher education have better outcomes.
- In the short term, the average quarterly earnings for community and technical college job preparatory training students increased by about 25 percent and included increased employment impacts of 9.2 percentage points, hourly wage increases of \$2.95, and increased hours per quarter of over 70 hours.
- Over the longer-term, these students earned an average of just over \$900 per quarter more than their comparison group counterparts due to an employment net impact of 6.7 percentage points, an hourly wage impact of \$1.87, and an hours of employment impact of about 40 hours.

Benefits to the state

- The increased earnings gains by community and technical college job preparatory training students were accompanied by a decrease in Temporary Assistance for Needy Families (TANF) receipt, Food Stamps, and Medicaid eligibility.

For more information, you may access an archived webinar on the topic at <http://careertech.org/webinars>. You may also contact Nancy Conneely at the National Association of State Directors of Career Technical Education Consortium, 8484 Georgia Ave, Silver Spring, MD 20910, nconneely@careertech.org

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