



## Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #367

### **Jobs Tax Credit (Income and Franchise Taxes)**

[LFB 2009-11 Budget Summary: Page 269, #22]

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#### **CURRENT LAW**

Under current income and franchise tax provisions, persons may deduct as an ordinary and necessary expenses paid or incurred in carrying on a trade or business, a reasonable allowance for salaries and other compensation for personal services actually rendered. Amounts an employer pays or incurs for training are generally deductible as business expenses. Businesses that conduct operations in an enterprise zone that are certified by the Department of Commerce can claim the refundable enterprise zones tax credit, which includes a supplemental credit based on eligible training costs. The Business Development in Wisconsin Tax Incentives program was created by 2009 Wisconsin Act 2. The program provides income and franchise tax credits to eligible persons conducting specified types of economic development projects in the state, including job creation and employee training projects. Under the program, Commerce has a total of \$65.29 million in tax credits to allocate to eligible projects.

#### **GOVERNOR**

Create a refundable jobs tax credit under the individual income and corporate income and franchise taxes, for tax years beginning after December 31, 2011. The jobs tax credit would equal up to 10% of the wages paid to an eligible employee and/or the amount of costs incurred to undertake training activities in a tax year. In order to claim the credit, a person would have to be certified by Commerce. Since it would first apply to tax years beginning after December 31, 2011, the jobs tax credit would not have a fiscal effect during the 2009-11 biennium. It is estimated that the credit would increase general fund expenditures by \$4,500,000 in 2012-13, and \$10,000,000 annually thereafter.

## **DISCUSSION POINTS**

There are two programs that, under current law, provide jobs tax credits and tax credits for employee training programs similar to the jobs tax credit proposed in Assembly Bill 75 -- the enterprise zone program and the Business Development in Wisconsin Tax Incentives Program, created under 2009 Wisconsin Act 2.

### **Enterprise Zone Program**

1. The enterprise zone program provides a refundable jobs tax credit to eligible businesses that operate in a zone. The enterprise zone program was created by 2005 Wisconsin Act 361. However, the program was substantially modified by provisions included in 2009 Wisconsin Act 11. Act 11 modified the enterprise zones refundable tax credit so that it is similar to the jobs tax credit included in the bill. Under the enterprise zone program, Commerce is authorized to designate up to 10 areas in the state as enterprise zones. A zone designation cannot last more than 12 years. Eligible businesses that conduct operations in an enterprise zone that are certified by Commerce can claim the refundable enterprise zones jobs tax credit, which is provided under the state individual income and corporate income and franchise taxes. Under current law, the enterprise zones jobs tax credit is calculated as follows:

a. Determine the lesser of: (1) the number of full-time employees that are employed in an enterprise zone whose annual wages are greater than \$20,000 in a tier I county or municipality, or greater than \$30,000 in a tier II county or municipality in the tax year minus the number of full-time employees that are employed in the enterprise zone in the base year whose annual wages are greater than \$20,000 in a tier I county or municipality, or greater than \$30,000 in a tier II county or municipality in the base year; or (2) the number of full-time employees in the state whose annual wages are greater than \$20,000 in a tier I county or municipality, or greater than \$30,000 in a tier II county or municipality in the tax year minus the number of full-time employees in the state whose annual wages are greater than \$20,000 in a tier 1 county or municipality, or greater than \$30,000 in a tier II county or municipality in the base year.

b. Determine the claimant's average zone payroll by dividing total wages for full-time employees in the zone whose annual wages are greater than \$20,000 in a tier I county or municipality, or greater than \$30,000 in a tier II county or municipality for the tax year by the number of those employees.

c. For employees in a tier I county subtract \$20,000 from the average wage determined under " b," and for employees in a tier II county or municipality subtract \$30,000 from the average wage determined under " b."

d. Multiply the amount determined under "c" (average wage in excess of \$20,000 in a tier I county or municipality, or greater than \$30,000 in a tier II county or municipality a year) by the number determined under "a" (net number of new employees hired in the zone).

e. Multiply by the percentage determined by the Department of Commerce, up to a maximum of 7%.

A refundable tax credit is provided equal to the percentage up to 7%, as determined by Commerce, of the claimant's zone payroll paid in the tax year to full-time employees who are employed in the enterprise zone in the tax year and whose annual wages are greater than \$20,000 in a tier I county or municipality, or greater than \$30,000 in a tier II county or municipality, not including the wages paid to employees that are used to claim the enterprise zones jobs credit. The total number of employees have to equal or be greater than the number of employees in the base year. (The tax year prior to the year in which the enterprise zone was created.) Credit claims are limited to five consecutive years.

A claimant may claim a credit equal to the amount paid in the tax year to upgrade or improve the job-related skills of any of the claimant's full-time employees, to train any of the claimant's full-time employees on the job-related use of new technologies, or to provide job-related training to any full-time employee whose employment with the claimant represents the employee's first full-time job.

In determining whether to designate an area as an enterprise zone, Commerce is required to consider all of the following:

a. Indicators of the area's economic need, including data regarding household income, average wages, the condition of property, housing values, population decline, job losses, infrastructure and energy support, the rate of business development, and the existing resources available to the area.

b. The effect of designation on other initiatives and programs to promote economic and community development in the area, including job retention, job creation, job training, and creating high-paying jobs.

c. A business that retains jobs in an enterprise zone as eligible for enterprise zones tax credits, but only if the business makes a significant capital investment in property located in the zone, and at least one of the following applies: (1) the business is an original equipment manufacturer with a significant supply chain in Wisconsin, as determined by Commerce; or (2) more than 500 full-time employees are employed by the business in the enterprise zone. The term "original equipment manufacturer with a significant supply chain in the state" will be defined by Commerce, by administrative rule.

Commerce is required to specify whether an enterprise zone is located in a tier I or tier II county or municipality, and promulgate rules defining "tier I county or municipality" and "tier II county or municipality." The Department can consider all of the following information when establishing the definitions: (a) unemployment rate; (b) percentage of families with incomes below the poverty line; (c) median family income; (d) median per capita income; and (e) other significant or irregular indicators of economic distress, such as a natural disaster or mass layoff.

## **Business Development in Wisconsin Tax Incentives Program**

2. The business development in Wisconsin tax incentives program was created by 2009 Wisconsin Act 2. Under the program, a person that is certified and authorized to claim tax benefits can claim the economic development tax credit under the state individual income, corporate income and franchise, or insurance premiums taxes. The credit can be claimed for tax years beginning after December 31, 2008, and the amount of the tax credit is determined by Commerce using criteria established by the business development in Wisconsin tax credits program. Unused tax credit amounts could be carried forward up to fifteen years to offset future tax income and franchise tax liabilities. Commerce can authorize a person to claim tax benefits only after the person submits a report that documents, to the satisfaction of the Department, that the person has complied with the terms of the contract and the requirements of any applicable rules promulgated by the Department.

A person that conducts or proposes to conduct any of the following activities is eligible to be certified to claim tax benefits:

a. *Job Creation Project.* A project that creates and maintains, for a period of time established by the Commerce by administrative rule, full-time jobs in addition to any existing full-time jobs provided by the person.

b. *Capital Investment Project.* A project that involves a significant investment of capital, as defined by the Department by rule, by the person in new equipment, machinery, real property, or depreciable personal property.

c. *Employee Training Project.* A project that involves significant investments in the training or reeducation of employees, as defined by Commerce by rule, by the person for the purpose of improving the productivity or competitiveness of the business of the person.

d. *Project Related to Persons with Corporate Headquarters in Wisconsin.* A project that will result in the location or retention of a person's corporate headquarters in Wisconsin, or that will result in the retention of employees holding full-time jobs in Wisconsin, if the person's corporate headquarters are located in Wisconsin.

Commerce can authorize a person that is certified for tax benefits to claim additional tax benefits if, after conducting an investigation, the Department determines any of the following:

a. The person conducts at least one eligible activity in an area designated by Commerce as economically distressed. In designating an area as economically distressed, the Department is required to follow a methodology established by rule.

b. The person conducts at least one eligible activity that benefits, creates, retains, or significantly upgrades full-time jobs or, that trains, or that reeducates, members of a targeted group.

The total amount of tax benefits that can be provided under the Business Development in

Wisconsin Tax Incentives program is limited to \$65.29 million. Commerce can submit to the Joint Committee on Finance a request in writing a request to exceed the total amount of unallocated tax benefits, including with the request a justification for seeking an increase. The Committee, following its review, can approve or disapprove an increase in the total tax benefits available to be allocated.

Commerce is required to establish, by administrative rule, all of the following:

a. A schedule of hourly wage ranges to be paid, and health insurance benefits to be provided, to an employee by a person certified for tax benefits and the corresponding per employee tax benefit for which a person that was certified may be eligible.

b. A definition of "significant investment of capital" for purposes of a capital investment project, together with a corresponding schedule of tax benefits for which a person who is certified for tax benefits and who conducts a capital investment project could be eligible. The Department is required to include in the definition a schedule of investments that will take into consideration the size or nature of the business.

c. A definition of "significant investments in the training or reeducation of employees" for purposes of an employee training project, together with a corresponding schedule of tax benefits for which a person who is certified for tax benefits and who conducted an employee training project may be eligible.

d. A schedule of tax benefits for which a person is eligible, who is certified for tax benefits, and who conducts a project that will result in the location or retention of a person's corporate headquarters in Wisconsin.

e. The methodology for designating an area as economically distressed. The methodology must require the Department to consider the most current data available for the area and for the state on the following indicators: (1) unemployment rate; (2) percentage of families with incomes below the poverty line established under federal law; (3) median family income; (4) median per capita income; (5) average annual wage; (6) real property values; and (7) other significant or irregular indicators of economic distress, such as a natural disaster.

f. A schedule of additional tax benefits for which a person is eligible who is certified for tax benefits and who conducts an eligible activity in economically distressed areas and/or that benefits members of targeted groups.

g. Reporting requirements, minimum benchmarks, and outcomes expected of a person certified for tax benefits before that person may receive tax benefits.

h. Policies, criteria, and methodology for allocating a portion of the tax benefits available to rural areas.

i. Policies, criteria, and methodology for allocating a portion of the tax benefits

available to small businesses.

j. Policies and criteria for certifying a person who is eligible for tax benefits greater than or equal to \$3,000,000.

k. Procedures for implementing the business development in Wisconsin tax incentives program.

### **Proposed Jobs Tax Credit**

3. Assembly Bill 75 includes provisions that would create a refundable jobs tax credit under the state individual income and corporate income and franchise tax.

In order to claim the credit, a person would have to be certified by the Department of Commerce. Commerce could certify a person, for up to 10 years, if: (a) the person was operating or intended to operate a business in this state; and (b) the person applied and entered into a contract with Commerce.

A person that was certified could claim the jobs tax credit if, in each year for which the person claimed the tax credit, the person increased net employment in the person's business and one of the following applied:

a. In a tier I county or municipality, an eligible employee, for whom the person claimed a tax credit, earned at least \$20,000 but not more than \$100,000 in wages, in the year for which the credit was claimed.

b. In a tier II county or municipality, an eligible employee, for whom the person claimed a tax credit, earned at least \$30,000 but not more than \$100,000 in wages, in the year for which the credit was claimed.

c. In a tier I or tier II county or municipality, the person improved the job-related skills of any eligible employee, trained any eligible employee on the use of job-related new technologies, or provided job-related training to any eligible employee whose employment with the person represented the employee's first full-time job.

The jobs tax credit would equal up to 10% of the wages paid to an eligible employee and/or the amount of costs incurred to undertake training activities in a tax year, as determined by Commerce. Specifically, Commerce could award jobs credits of up to 10% of wages of at least \$20,000 but not more than \$100,000 in a tier I county or municipality, and of at least \$30,000 but not more than \$100,000 in a tier II county or municipality, paid by the person to each eligible employee. Commerce could also award tax credits in an amount determined by rule for costs incurred by the person to undertake training activities. The credit would be refundable. As a result, if the allowable amount of the credit claimed exceeded the tax otherwise due, a check would be issued for the difference. The credit would be paid from a newly-created annual GPR appropriation for refund payments. The maximum amount of tax credits that Commerce

could allocate in a calendar year would be \$10 million.

Partnerships, limited liability companies (LLCs), and tax-option corporations could not claim the credit, but the eligibility for, and the amount of, the credit would be based on their payment of amounts eligible for the credit. A partnership, LLC, or tax-option corporation would be required to compute the amount of credit that each of its partners, members, or shareholders could claim and provide that information to each of them. Partners, members of LLCs, and shareholders of tax-option corporations could claim the credit in proportion to their ownership interests.

A claimant would be required to include a copy of the Commerce certification for tax credits along with the claimant's tax return submitted to DOR. Current law provisions related to change of ownership and timely filing of claims would apply to the jobs tax credit. DOR would have full power to take administrative action, conduct any procedure, and to proceed as authorized under the state income and franchise tax laws.

Commerce would be required to notify DOR when it certified a person to receive tax benefits, and within 30 days of revoking a certification. Commerce would also determine the maximum amount of the tax credits that a certified business could claim and notify DOR of this amount. A claimant could be required to repay any tax credits claimed for a year in which the claimant failed to maintain employment at a level required under the contract with Commerce. Commerce would annually verify the information submitted by the person claiming tax credits.

Commerce would be required to promulgate rules for the implementation and operation of the jobs tax credit, including rules relating to the following:

a. The definitions of a tier I county or municipality and a tier II county or municipality. The Department could consider all of the following information when establishing the definitions: (1) unemployment rate; (2) percentage of families with incomes below the poverty line established under federal law; (3) median family income; (4) median per capita income; and (5) other significant or irregular indicators of economic distress, such as a natural disaster or mass layoff.

b. A schedule of additional tax benefits for which a person who is certified for tax credits, and who incurred costs related to job training may be eligible.

c. Conditions for the revocation of a certification.

d. Conditions for the repayment of tax credits.

Commerce would be authorized to promulgate emergency rules that would remain in effect until July 1, 2010, or the date on which permanent rules took effect, whichever was sooner. The Department would not be required to provide evidence that promulgating these rules as an emergency rules was necessary for the preservation of the public peace, health, safety, or welfare and would not be required to provide a finding of emergency. If the Secretary of

Administration required Commerce to prepare an economic impact report for the rules required under the provisions of the bill, the Department could submit the proposed rules to the Legislature for review before Commerce completed the economic impact report and before the Department received a copy DOA approval of the report.

"Business" would mean any organization or enterprise operated for profit, including a proprietorship, partnership, firm, business trust, joint venture, syndicate, corporation, LLC, or association, but would not include a store or shop in which retail sales was the principal business. "Eligible employee" would be defined as a person employed in a full-time job by a person certified by Commerce

"Full-time job" would be defined as a regular, nonseasonal full-time position in which an individual, as a condition of employment, was required to work at least 2,080 hours per year, including paid leave and holidays, and for which the individual received pay that was equal to at least 150% of the federal minimum wage and benefits that were not required by federal or state law. "Full-time job" would not include initial training before an employment position begins.

### **Discussion Points**

4. The benefit of participating in an employment tax credit program is the value of the tax savings to the firm. This is determined by the number of eligible jobs, the tax credit limits, and the discount rate (for determining present value) associated with future credits. Because the credit would be refundable, current and future tax liability would be less of a factor in determining the value of the credit, than if the credit was not refundable. The number of creditable jobs and wages, and the tax credit rate would determine the maximum potential credit that a firm could claim.

5. Firms incur costs for participating in a tax credit program (Faulk, 2002). Such costs may prevent businesses from participating in employment tax credit programs. For example, less than 5% of firms participated in the federal targeted jobs tax credit program (Bishop and Montgomery, 1993). The costs fall into the following categories:

a. *Search Costs.* Search costs associated with filing employment tax credits include finding information about the credit and other tax abatement programs.

b. *Compliance Costs.* Compliance costs consist of start-up costs and annual costs. Start-up costs include the costs of learning about the credit, training staff, and setting up new forms and systems to capture the information necessary to claim the tax credit. Annual costs are year-to-year costs associated with claiming the credit, such as obtaining necessary tax forms, and collecting information necessary to claim the credit. Personnel departments must coordinate activities with tax departments. Coordination costs could be substantial for multi-establishment firms.

c. *Information Costs.* Firms may be reluctant to report additional information to the state department of revenue. Fear of audits, or other consequences of revealing operating information, may be a deterrent to participating in the tax credit program. Claiming the tax credit



can make a business a more likely candidate for audit. One study (Rice, 1992) showed that publicly traded companies were more likely to over-report income to avoid audits.

d. *Public Identification.* Public scrutiny of firms that participate in tax abatement programs has increased, and such programs have been criticized in the popular press as corporate welfare. For example, the Milwaukee Journal Sentinel ran a two-part series that raised questions about the value of public subsidies provided to private businesses by the Department of Commerce (Schultze and Dresang, 2007). However, reducing tax liability by participating in tax credit programs could be viewed as good business practice.

e. *Hiring Costs.* New employees must be interviewed, selected, and trained, and the appropriate paperwork must be completed. The General Accounting (Accountability) Office (1991) reported that employers participating in the federal Targeted Job Tax Credit Program estimated that it cost between \$600 and \$1,000 to recruit and train a new employee in the late 1980s. One study (Barron and Bishop, 1985) found that hiring costs are positively related to firm size (measured by employment) and the number of establishments within the business. Differential hiring costs can make it more or less advantageous for firms in different industries and of different sizes to participate in employment tax credit programs. In some cases, hiring costs may be higher than the credit. Also, if labor turnover is high, a firm has to replace workers to maintain eligibility for the credit.

f. *Additional Federal Tax Liability.* State income taxes are deductible under the federal income tax. As a result, the effect of the tax credit is diminished. The magnitude of the effect depends upon the firm's federal income tax rate.

6. A firm's responsiveness to a reduction in wages, as a result of the tax credit, determines the effectiveness of an employment tax credit in affecting the firm's demand for labor. In economic terms, the measure of responsiveness is the wage elasticity of demand for labor. The wage elasticity of demand for labor measures the change in the demand for labor as a factor of production when there is a change in the market wage rate. The wage elasticity of demand depends upon the following factors:

a. *The Proportion of Labor Costs in the Total Costs of the Business.* When a business' or industry's labor expenses are a high proportion of total costs, demand for labor can be expected to be more elastic, or more responsive to wages, than a business or industry where fixed costs of capital are the primary business expense.

b. *The Ease and Cost of Factor Substitution.* Firms can substitute between labor and capital when the relative prices change. Capital can be substituted for labor if wages increase, although there are financial costs and time lags associated with such substitutions. Conversely, labor can be substituted for capital, if the cost of capital increases. The substitutability of factors depends upon the nature of the production process, the added human value labor provides (particularly in the service industries), and the flexibility of the labor market (the ease and cost of hiring and firing employees). The demand for labor tends to be more elastic when labor and

capital are easily substitutable, while when labor is considered a necessity in the production process, the demand for labor will be inelastic.

c. *The Price Elasticity of Demand for the Final Output Produced by a Business.* The ability of a firm to pass on higher (or lower) wages in the prices of the firm's products or services to consumers contributes to the elasticity of demand for labor. If a firm is operating in a highly competitive market, where final demand for the product is price elastic (demand is highly responsive to price), the firm may have little pricing power to pass on higher wage costs to consumers through a higher price. In this case, the demand for labor may be more elastic, and responsive to wages.

d. *The Time Period.* In the short run, at least one factor is considered to be fixed, so that the demand for labor will be more inelastic, compared to the long run, when a business has a much greater ability to vary the factor mix between capital and labor.

7. Analysis of the economic impact of employment tax credits frequently focuses on studies of the effectiveness of the federal New Jobs Tax Credit (NJTC) that was effective in 1977 and 1978. The credit equaled 50% of the increase in each employer's wage base under the Federal Unemployment Tax Act (FUTA) above 102% of that wage base in the previous year. The FUTA wage base was \$4,200, so that the maximum tax credit per employee was \$2,100. Perloff and Wachter (1979) used Census data to compare the rates of employment growth in 1976 and 1977 of firms that knew about the credit, and those that did not. Controlling for various factors, they found that employment in firms that knew about the credit grew 3% faster than employment in firms that were unaware of the credit. This implies an economy-wide increase in employment of 700,000 jobs in 1977.

Times series analysis of employment in construction, retail trade, wholesale trade, and trucking, and its relationship to business knowledge of the NJTC, found that employment growth had accelerated during the 15-month period following the passage of NJTC legislation (Bishop and Haveman, 1979). Bishop argues that economic theory predicts that the NJTC should stimulate employment, decrease hours worked, and reduce product prices in the subsidized industries. In a 1981 study, Bishop found that the NJTC was responsible for 150,000 to 670,000 of the more than one million increase in employment that occurred between mid-1977 and mid-1978 in the construction and retailing businesses. The analysis also indicated that, by June, 1978, the NJTC had produced approximately a one percentage point reduction in the margin between retail and wholesale prices of commodities that saved consumers between \$1.9 and \$3.6 billion over the year. In an updated estimate, Bartik (2008) estimated that a revised NJTC might increase aggregate U.S. employment by about 1.3 million jobs, due to the incentive effects on subsidized employers.

8. Emil Sunley, who was Deputy Assistant Secretary for tax Analysis in 1977, wrote in a 1980 Brookings Institution volume that the impact of the NJTC on jobs was "slight." Many persons making hiring decisions did not understand the firm's tax status. In addition, there was a time lag between the employment decision and determination of eligibility for the credit. Sunley

notes that, because the capital stock is fixed in the short run, demand for output must increase in order for employment to increase significantly. An incremental tax cut tied to employment will not, by itself, generate that increase in demand.

In their initial research, Wachter and Perloff warned that the results "should be viewed with caution." Potential problems included a sample that was not random, and the fact that growing companies would have the greatest incentive to learn about, and use the credit. As a result hiring plans may have caused firms to learn about the credit, rather than credit causing firms to increase hiring.

Bartik, (2001) indicates that, any such wage subsidy program, to some extent provides subsidies for employment expansions that would occur anyway. Empirical results suggest that about two out of three jobs subsidized by the original NJTC would have been created without the credit. However, Bartik notes that this does result in additional net national employment, and it seems unlikely that the social benefits exceed the budgetary cost. Also, many of the jobs would continue beyond the subsidy period. The author indicates, that there is evidence that such wage subsidies can make a significant difference if designed properly.

9. Twenty-two states currently have broad, statewide job creation tax credits (JCTCs), and about another dozen have narrow JCTCs targeted to specific industries or geographic zones. The basic structures are similar. All JCTCs subsidize net job creation. Only new jobs that expand a business' total employment payroll typically qualify. With many JCTCs, a company can only claim the credit if the number and/or wages of the new jobs are above specified thresholds, and meet certain requirements, such as providing health insurance. States also offer multiple credit rates that increase with the number or wages of new jobs.

JCTCs are generally credits against the state corporate income tax and use one of three basic structures. In most states, the credit per new job is a percentage of that job's annual wages or total compensation. In a number of states, the credit per new job is a percentage of the state's income tax withholding associated with that job. In a few states, the credit per new job is a fixed dollar amount. Not many states offer refundable credits, but many allow credits to be carried forward to offset future tax liabilities. State JCTCs differ in whether the new job tax credit is available in the year in which the job was created, or in future years, provided the job is maintained. Wilson and Notzon (2009) developed estimates of the relative JCTCs provided by each state. Their calculations indicated that the average state credit per new job was \$5,820. The largest credits were those that could be taken in multiple years. For credits that only be claimed in one year the average credit was \$2,331.

10. There have been a few studies of the effectiveness of state jobs tax credits. Using data on business establishments applying for Ohio's Job Creation Tax Credit, Gabe and Kraybill (1999) found that the credit had a positive impact on job creation in Ohio between 1993 and 1995. Between 63% and 68% of new jobs (2,764 to 3,976) occurred in firms that received the credit. Using firm level data from corporate income tax returns in an empirical model that estimated the impact of Georgia's job tax credit on employment, Faulk (2002) found that firms created jobs in

response to the tax credit. Firms claiming the credit created 23.5% to 27.6% more jobs (1,870 to 2,196 more jobs) than eligible firms not taking the credit between 1993 and 1995. However, 72.4% to 76.5% of the employment change in participating firms would have occurred in the absence of the credit. Since the total tax expenditure on the tax credit program was slightly greater than \$5 million, approximately \$3.6 million to \$3.8 million in tax credits were provided for jobs that would have been created without the credit.

11. Research on the impact of training programs indicates that employee training increases both wages and productivity. However, some of the studies rely on subjective measures. Using data from the 1982 Employment Opportunity Pilot Project, Bishop (1994) found that employer-based training increased productivity by almost 16%. Based on a statistical analysis of wage and productivity growth, Barron, Black, and Loewenstein (1989) determined that worker training was the primary factor that increased productivity growth. In different studies, Holzer et. al. (1993), Bartel (1994), and Barrett and O'Connell (2001) found that training had a positive effect on productivity. Lynch (1992) studied the outcomes of training on youth and found that all types of training were associated with higher wages. Becker writes that the limited data available indicates that on-the-job training is an important source of the increase in earnings for workers. In an evaluation of the Massachusetts Workforce Training Fund (WTF), Hollenbeck (2008) found a 16.6% return on investment, and a 1.7% increase in employment as a result of program grants for employee training. The National Center on the Educational Quality of the Workforce (NCEQW 1995) surveyed approximately 3,000 businesses with 20 or more employees about employment, training, and hiring practices. The survey found that a 10% increase in the average education of all workers was associated with an 8.6% increase in output for all industries. According to information developed by the U.S. Department of Labor (DOL), Employment and Training Administration, employers have indicated that worker training increases profitability, improves the quality of goods and services produced, ensures on-time production and delivery of goods and services, increases worker morale and reduces turnover, and improves the level of customer service provided.

12. A fundamental issue in evaluating an economic development program is determining what would happen in the absence of the program. There is the potential that the cost to the state of subsidizing training that would otherwise be provided by the employer will more than offset any benefits from providing the grants to firms that need them. Barnow, Chasanov, and Pande (1990) identified cases where government training incentives operated as windfalls for the businesses and resulted in a substitution of public spending for private investment. In a review of state-subsidized, employer-centered training programs in California, Massachusetts, North and South Carolina, Batt and Osterman (1993) found that each of the states examined had funded programs that appeared to represent substantial subsidies of activities that would have occurred without public funding. The authors suggested that strategies for limiting subsidies would be to target small and at-risk firms and to target specific types of workers and skills.

13. Although there are potentially large returns to employer-provided training there may be underinvestment from the state's perspective. A firm's decision to invest in training, particularly general training, may be influenced by the characteristics of the workers. Employees who are perceived to have higher turnover rates are less likely to receive employer provided training. In

addition, training itself may contribute to turnover. If the new skills are of value to other firms, employers risk having their trained employee hired away. As a result, investments in non-transferable specific training are more attractive to individual firms, unless employers can find a way to capture their investment in general training. Firms that fear workers may leave if they acquire certain skills, may invest in a sub-optimal (social) level of training.

In addition, smaller firms may have higher training costs per employee than larger firms, because they cannot spread the fixed costs of training over a larger group of employees. The loss in production from having one additional worker in off-site training is probably higher for a smaller firm than a larger one. Smaller firms are also less likely to have developed extensive internal labor markets that allow those firms to better retain or promote employees within the firm. Both of these circumstances can make small firms hesitant to invest in worker training.

These issues would not necessarily result in under-investment in training if capital markets were perfect so that workers could borrow to finance more general training, if the state subsidized training, or workers accepted lower wages during training spells. However, capital markets are not perfect, and workers differ from employers in their attitudes towards risk and time horizons. As a result, there may be a suboptimal level of general training provided.

### **Design Issues**

14. As noted, Bartik (2001) indicates that employment tax credits can be effective in increasing employment if properly designed. Bishop (2008) argues that: (a) the credit must be a significant share of labor costs; (b) the credit should not favor low-wage high-turnover firms; (c) there should not be a per firm absolute dollar cap on the amount of tax credits a business could receive; and (d) the credit should not be targeted to individuals with specific characteristics. In addition, the credit should not be based on a yearly updated threshold based on the prior year's employment. Under the proposed jobs tax credit, there is a statewide cap on the total amount of credits that can be claimed, but there is not a direct limit on individual firm tax credit claims. In administering the program, and through administrative rules, Commerce can ensure that credits are not certified primarily to low-wage high-turnover firms. A 10% credit of wages between \$20,000 and \$100,000 could provide up to \$10,000 per employee, which compares favorably with the estimated average credit of approximately \$5,800 in other states. Moreover, the credit would be refundable, and provides tax benefits to all firms, including those with no tax liability. Since the fraction of firms with no tax liability rises during economic downturns, the credit can be a countercyclical policy tool. Finally, the credit would be based on the previous year's employment. Since a reduction in employment in one year lowers the threshold level of employment in the next, firms may have an incentive to adopt a two-period employment strategy in which they alternatively increase and decrease their employment, collecting a credit every other year. However, a claimant could be required to repay any tax credits claimed for a year in which the claimant failed to maintain employment at a level required under the contract with Commerce.

15. As noted, the jobs tax credit will not take effect until tax years beginning after December 31, 2011. As a result, the credit will be generally based on a firm's change in employment

in 2012. In addition, the credits are designed to increase employment in distressed areas (tier 1 and tier 2 municipalities and counties). Studies have found that the effectiveness of targeted employment subsidies are heavily dependent on the macroeconomic and labor market conditions into which they are introduced. A general conclusion can be drawn that during the upswing and downswing phases of the business cycle, targeted employment subsidies are likely to be effective in increasing employment and reducing inflationary pressures (Budett-Hool, 1982; Johnson 1982). The May, 2009, economic forecast by IHS Global Insight, Inc. estimates that annualized real GDP growth over the remainder of 2009 will be 0.2% in the third quarter and 0.7% in the fourth quarter. Real GDP growth is estimated at 1.5% in 2010 and 3.4% in 2011. Global Insight expects employment to continue to decline through the remainder of 2009 and the first quarter of 2010. It is anticipated that the peak level of employment seen in late 2007 will not be reached until the beginning of 2013. Given the current economic forecast, the proposed job tax credit will not be able to be claimed until employment has generally rebounded from the current economic downturn. To provide an effective countercyclical stimulus and a more efficient incentive for hiring, the effective date of the credit could be moved to tax years beginning after December 31, 2009. The total cap of credit claims could be reduced to \$2 million for tax year 2010 and 2011 to minimize the fiscal impact.

**ALTERNATIVES**

1. Adopt the Governor's recommendation to create a refundable jobs tax credit under the individual income and corporate income and franchise taxes, for tax years beginning after December 31, 2011.
  
2. Modify the Governor's recommendation to create a refundable jobs tax credit under the individual income and corporate income and franchise taxes, for tax years beginning after December 31, 2009. Limit the total amount of tax credits that could be claimed to \$2 million in 2010 and 2011.

<b>ALT 2</b>	<b>Change to Bill</b>
	Revenue
GPR	- \$3,000,000

3. Delete the Governor's recommendation.

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