## HIGH TECHNOLOGY R&D DEFERRAL/WAIVER (SALES AND USE TAX) AND CREDIT (B&O TAX)

Report Summary						
What the Preference Does	Public Policy Objectives	Estimated Beneficiary Savings	Auditor Recommendation			
Provides:  1) A deferral/waiver of state and local sales and use taxes on investment in facilities, and machinery and equipment by firms engaged in high technology R&D and pilot scale manufacturing; and  2) A B&O tax credit for qualified research and development spending.  Expires January 1, 2015.	The Legislature stated the public policy objectives of the high technology R&D tax preferences are to:  1) Create "quality" employment opportunities in this state; and  2) Encourage expenditures in research and development, supporting, and sustaining the high technology sector as it develops new technologies and products.	\$114 million in 2013-15 Biennium	Review and clarify: To determine if progress toward its high technology R&D objectives is sufficient and to consider identifying targets for investment and employment.			

## HIGH TECHNOLOGY R&D DEFERRAL/WAIVER (SALES AND USE TAX) AND CREDIT (B&O TAX)

#### **Current Law**

Current law provides two tax preferences to businesses that perform high technology research and development (R&D):

- A deferral and eventual waiver of state and local sales and use taxes on investment in facilities, and machinery and equipment by firms engaged in qualified high technology R&D and pilot scale manufacturing; and
- 2) A business and occupation (B&O) tax credit for businesses that meet a certain threshold of qualified research and development spending.

To qualify, research and development must be conducted in the fields of:

- Advanced computing;
- Advanced materials;
- Biotechnology;
- Electronic device technology; or
- Environmental technology.

Exhibit 24, below, shows high technology R&D that qualifies and does not qualify for these tax preferences.

Exhibit 24 - R&D that Qualifies and Does Not Qualify for Tax Incentives

Qualifying R&D	Non-Qualifying R&D	
Discovering and translating technological information into new or improved products,	Adaptation or duplication of existing products without improving by means of technology	
processes, techniques, formulas, inventions, or	Surveys and studies	
software, including exploring a new use for an	Social science and humanities research	
existing drug, device, or biological product if the new use requires separate licensing by the	Market research or testing and quality control	
federal Food and Drug Administration.	Sale promotion and service	
	Computer software developed for internal use	
	Research in such areas such as style, taste, and	
	seasonal design	

Source: JLARC analysis of tax law.

Both the B&O tax credit and the sales and use tax deferral/waiver became effective January 1, 1995 and expire on January 1, 2015.

#### Sales and Use Tax Deferral/Waiver

In order to qualify for the high technology R&D sales and use tax deferral/waiver, a business or nonprofit must invest in a new R&D facility or expand, renovate, or equip an existing facility.

Beneficiaries are required to submit an application to the Department of Revenue (DOR) prior to beginning construction of a facility or acquiring machinery and equipment. As long as the facility or machinery and equipment continues to qualify for the intended purpose, the deferred sales and use taxes do not need to be repaid. Beneficiaries must submit an annual survey by April 30 each year and continue the qualified use of the facility for eight years. Twelve and a half percent of the deferred tax is waived each year these criteria are met so at the end of eight years, the deferred taxes have been completely waived.

### **Business and Occupation (B&O) Tax Credit**

In order to qualify for the high technology R&D B&O tax credit, a business must spend more than 0.92 percent of its taxable income on qualified R&D in Washington. The credit is calculated by:

- 1) Determining the amount of qualified R&D expenditures. This amount is either 100 percent of expenditures on in-house R&D or 80 percent of compensation received to perform R&D for others.
- 2) Subtracting 0.92 percent of the taxpayer's taxable income from the qualified R&D spending.
- 3) Multiplying the remainder by 1.5 percent.

Exhibit 25, below, provides an example of how this B&O tax credit is calculated.

Exhibit 25 – Calculation of the B&O Tax Credit for High Tech R&D Spending Assume \$75,000 R&D Spending and \$100,000 Taxable Income

Taxpayer's R&D Spending	\$75,000
Taxpayer's Taxable Income (\$100,000) X 0.92%	\$920
= Remainder	\$74,080
( 1.5% (B&O Tax Credit Rate)	\$1,111

Source: JLARC analysis of tax law.

The credit for each taxpayer may not exceed \$2 million or the amount of tax liability for the calendar year, whichever is less. Qualified expenditures can include operating expenses such as wages, compensation of a proprietor or a partner, and benefits, supplies, and computer expenses, but may not include capital and overhead costs.

See Appendix 3 for the current statutes for the deferral/waiver, RCWs 82.63.010, and 82.63.030 and for the tax credit, RCW 82.04.4452.

### **Legal History**

In the years leading up to enactment of these tax preferences, legislative and executive branch studies recommended that the state address the startup costs of persons conducting high technology research and development. The Legislature responded with two forms of tax relief: one for capital investment and another for operating expenditures.

1994 The Legislature enacted the high technology R&D sales and use tax deferral, and required the deferral to be repaid over a five-year period beginning after the third year of operation. The deferral applied to capital investment in facilities and machinery and equipment.

In the same bill, the Legislature enacted the B&O tax credit for high technology R&D operating expenditures. Originally, the statute required R&D spending to exceed a threshold of 0.92 percent of taxable income in order to qualify. The credit was equal to the amount of qualified expenditures multiplied by 2.5 percent for for-profit businesses and 0.515 percent for nonprofit organizations.

The statute required DOR to evaluate the high technology incentives in 1997, 2000, and 2003. Both the credit and deferral became effective on January 1, 1995, and were set to expire on July 1, 2004.

- 1995 Legislation converted the 1994 sales and use tax deferral to an eventual waiver if the beneficiary used the facility for its qualifying use for eight years.
- 1997 The Legislature reduced the rate of the B&O tax credit from 2.5 percent to 1.5 percent for for-profit businesses and from 0.515 percent to 0.484 percent for nonprofit organizations.
- 2004 The Legislature changed the B&O tax credit rate (the rate to be multiplied by qualified R&D spending) to the taxpayer's average tax rate beginning in June 2004. In addition, the Legislature changed the method of determining the amount of spending qualifying for the B&O tax credit. Originally, the law required R&D spending to exceed a threshold of 0.92 percent of the beneficiary's taxable income and, if so, calculated the credit by multiplying the full amount of R&D spending by the credit rate. In 2004, the calculation of the credit was done by subtracting 0.92 percent of taxable income before multiplying by the tax rate. This change reduced the benefit of the credit because it reduced the amount of qualified spending to be multiplied by the credit rate.

Also in the 2004 bill, the Legislature expanded the deferral/waiver to state universities and extended the expiration date for both preferences to January 1, 2015.

A new provision required that beneficiaries of the tax preferences file annual surveys reporting on the number of positions created, wages and benefits by wage bands, and information related to product development. Stating that "accountability and effectiveness are important aspects of setting tax policy" and that information on the tax preference is needed in order to make decisions on the "best use of limited state resources," the Legislature required that DOR prepare annual descriptive statistics and analytical reports due in 2009 and 2013 based on information reported in the annual survey.

2005 The Legislature again changed the credit rate to the higher of the taxpayer's average tax rate or 0.75 percent effective in Calendar Year 2007, the higher of the taxpayer's average tax rate or 1 percent in Calendar Year 2008, and the higher of the taxpayer' average tax rate or 1.25 percent in Calendar Year 2009. The credit rate became 1.5 percent beginning in Calendar Year 2010. See Exhibit 26, below, for the credit rate history.

Exhibit 26 - Rate History of High Technology R&D B&O Tax Credit

<b>Year Enacted</b>	For-Profit Credit Rate	Nonprofit Credit Rate			
1995-1997	2.5%	0.515%			
1998-2003	1.5%	0.484%			
2004	Taxpayer's average rate	0.484%			
2005-2006	Taxpayer's average rate				
2007	Higher of average rate or 0.75%				
2008	Higher of average rate or 1.0%				
2009	Higher of average rate or 1.25%				
2010-2014	1.5%				

Source: JLARC analysis of tax law.

2009 The Legislature clarified that the tax deferral/waiver applied to multiple qualified buildings leased to the same person if the structures are located within a five mile radius and construction of the buildings is initiated within a 60-month period.

### **Public Policy Objectives**

## What are the public policy objectives that provide a justification for the tax preferences? Is there any documentation on the purpose or intent of the tax preferences?

The Legislature expressly stated the public policy objectives of the high technology R&D tax preferences are to:

- 1) Create "quality" employment opportunities in this state; and
- 2) Encourage expenditures in research and development, supporting, and sustaining the high technology sector as it develops new technologies and products.

The Legislature did not identify specific targets associated with the employment objectives. The Legislature did not specify how many jobs it required to meet objectives and what wage and benefit levels it considered to be "quality" employment. The amount of R&D spending required to meet objectives was also not specified.

### What evidence exists to show that the tax preferences have contributed to the achievement of any of these public policy objectives?

The information provided in DOR tax returns, surveys, and other records indicates that the two public policy objectives are being fulfilled to a certain extent. However, there are problems with DOR's collecting and reporting of information on the annual survey. Beneficiaries reported that

they have created jobs and have claimed the sales and use tax deferral/waiver and B&O tax credit for R&D spending. It is not clear from the survey how much tax incentive has been claimed and how many new jobs have been added. It is also not clear from the survey whether an increase in jobs and how much of an increase in R&D spending has occurred as a result of the tax preferences. (For further discussion, see the Supplement to this review following this report.)

To determine whether employment and R&D spending increased **as a result of** the tax preferences, JLARC contracted with economists who are experts in econometric modeling. JLARC obtained confidential tax return data from DOR and employment and wage data from the Employment Security Department (ESD) to overcome the problems we identified with the self-reported taxpayer survey data. However, the survey is the only source of information on the "quality" of jobs provided by beneficiaries.

This review will first present results of the econometric analysis on the increase in employment and R&D spending as a result of the B&O tax credit. The consultants did not include the sales and use tax deferral/waiver in the analysis because the low number of beneficiaries would have provided insufficient data to measure a statistical impact. Next, the review will provide information on the "quality" of jobs such as wages and benefits that is only available from the annual survey. The survey information relates to the quality of <u>all</u> jobs provided by the beneficiaries, not just the quality of the new jobs.

#### **B&O Tax Preference Estimated to Create an Average 454 New High Tech Jobs**

Our consulting economists were able to estimate the increase in employment that occurred **as a result of** the B&O tax credit for the study period 2004 to 2009. Their analyses indicate that employment growth of 454 new jobs (or between 0.5 and 0.6 percent) at the firms that claimed the B&O tax credit is attributable to the credit. The economists calculated a range of estimates with a low of 84 jobs and a high of 907 jobs, but preferred the estimate of 454 jobs. The economists caution that the 454 jobs should not be added for each year but are a "once-and-for-all permanent change in the number of jobs in the state." The full report is in Appendix 4.

In contrast, high technology businesses taking the B&O tax credit reported creating between 3,223 and 16,885 new jobs during this same time period. There are two caveats to remember when comparing these numbers: 1) as discussed in the Supplement to this tax preference review, JLARC identified problems with the job numbers reported in DOR's annual survey; and 2) in the survey, the businesses are directed to report the number of new jobs created regardless of the reason, while the economists estimated the number of new jobs that were **the result of** the B&O tax credit.

Our consulting economists suggested another measure the Legislature might find useful to gauge the impact of the B&O tax credit: a comparison of the **taxpayer savings per job** created by the B&O tax credit to the **new earnings per job** resulting from the tax credit. For the first part of this calculation, the amount of tax credit claimed over the study period averaged \$20.5 million per year or approximately \$45,000 per job.

The calculation to reach the amount of new earnings per job begins with estimating earnings associated with the tax preference. Estimated earnings associated with the new jobs averaged \$19.6 million per year over the study period or approximately \$43,000 per job.

However, as our consulting economists explain, only a portion of the earnings from these new jobs directly increase earnings for existing state residents. This is due to two factors:

- 1) A portion of all new jobs in the state will be reflected in a higher population over time rather than higher state employment rates as new workers move into the state to take some of the new jobs.
- 2) A portion of the earnings result from existing state residents moving up to better-paying jobs than would have occurred otherwise.

Therefore, estimated earnings must be adjusted downward in order to reflect only the <u>new</u> earnings per job. As our consulting economists explain, their previous research on these effects indicate about 40 percent of the earnings from the new jobs are likely to lead to higher earnings for the original state residents.

Taking 40 percent of the estimated average earnings of \$43,000 per new job yields a figure of \$17,200 in new earnings per job.

JLARC then used OFM's Washington Input-Output Model to identify the total direct, indirect, and induced change in total economy-wide earnings associated with each \$17,200 in increased earnings. The result is a final estimate of an increase of \$25,000 in new earnings in the state for each new job created by the high technology B&O tax credit. The Legislature can then compare this to the taxpayer savings of \$45,000 for each job created by the B&O tax credit.

### **Unclear What R&D Spending May Have Occurred Because of the Credit**

Beneficiaries of the high technology R&D incentives have invested an estimated \$2.9 billion in facilities and equipment and spent \$93.8 billion on R&D operating expenses over the lifetime of the tax preferences (from 1995 through 2010). It is not clear how much of this R&D spending may have occurred because of the tax credit.

Our consulting economists found that about 30 percent of the 672 firms included in the analysis have a reduced incentive to increase R&D spending. Firms with this reduced incentive are those that that cannot take the credit to the full extent because they have either reached the \$2 million cap for the amount of annual allowable credit (two firms) or are limited by the amount of their tax liability (an additional 198 firms).

### "Quality" of Employment

While, the previous analysis covered the effect of the B&O tax credit on new employment positions, the following analysis uses information from the DOR annual survey that includes all employees working for the beneficiaries, not just new employees.

Beneficiaries report that the percent of employees earning \$60,000 or more a year has fluctuated over the seven-year period since the survey information became available. The percentage of full-time employees and the percentage of employees enrolled in medical, dental, and retirement plans have declined over the same years. In 2010, 67 percent of all employees earned \$60,000 or more; 76 percent of beneficiaries' employees worked full time, 76 percent were enrolled in medical and dental plans; and 68 percent were enrolled in retirement plans. Exhibit 27, below, provides additional detail.

Exhibit 27 – Percent of Beneficiary Employees Earning \$60,000 or More Unchanged; Percent Enrolled in Medical, Dental, and Retirement Plans Declined

Year	% Earning \$60,000 or More	% Full Time	% Enrollees Medical & Dental	% Enrollees Retirement
2004	66%	92%	89%	77%
2005	72%	91%	90%	77%
2006	60%	78%	79%	70%
2007	60%	76%	78%	71%
2008	65%	76%	77%	69%
2009	66%	77%	78%	71%
2010	67%	76%	76%	68%

Source: JLARC analysis of Department of Revenue survey data.

The information is self-reported by the beneficiaries on the DOR's annual survey and is the only source of information on factors that relate to the "quality" of employment.

## For those preferences enacted for economic development purposes, what are the economic impacts of the tax preferences compared to the economic impact of government activities funded by the tax?

Legislation enacted in 2011 specifically directed JLARC to determine the economic impacts using the Washington Input-Output Model as constructed and maintained by the Office of Financial Management. However, JLARC learned in the course of our analysis that the current version of the Washington Input-Output Model does not include information on how the state and local government sectors relate to other sectors of the economy. Absent this information in the input-output model, JLARC cannot accurately compare private sector and government impacts. (For further discussion, see the Supplement to this review beginning on page 97.)

### To what extent will continuation of the tax preferences contribute to these public policy objectives?

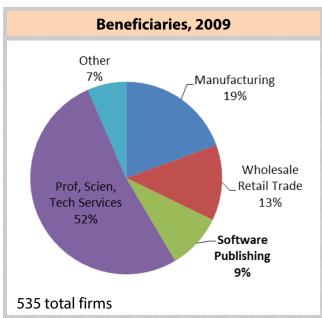
Continuation of the tax preference would continue to defer and eventually waive sales and use taxes for businesses and organizations investing in high technology R&D projects in Washington. Businesses that conduct high technology R&D would continue to receive a B&O tax credit for a portion of their operating expenses if their qualified R&D expenditures exceed 0.92 percent of their taxable income.

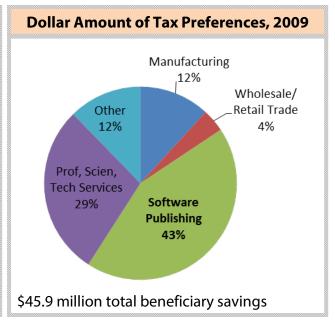
#### **Beneficiaries**

### Who are the entities whose state tax liabilities are directly affected by the tax preferences?

In 2009, a total of 507 businesses took the B&O tax credit and 25 businesses and nonprofits claimed the sales and use tax deferral/waiver for investments in 31 projects. Exhibit 28, below, shows that professional, scientific, and technical services are the primary beneficiaries in terms of the number of firms and software publishers are the primary beneficiaries in terms of the dollar amount of tax preferences claimed in 2009.

Exhibit 28 – Software Publishing Firms Make Up 9 Percent of all Beneficiaries and Claim 43 Percent of all Dollar Amount of Tax Preferences in 2009





Source: JLARC analysis of DOR taxpayer data.

### **Revenue and Economic Impacts**

### What are the past and future tax revenue and economic impacts of the tax preferences to the taxpayer and to the government if they are continued?

Beneficiaries of the high technology sales and use tax deferral/waiver and B&O tax credits saved an estimated \$77.6 million in Fiscal Year 2010. Savings are estimated to be \$114 million in the 2013-15 Biennium. See Exhibit 29, below.

Exhibit 29 – Estimated 2013-15 Beneficiary Savings from High Technology B&O Tax Credit and Sales and Use Tax Deferral/Waiver

Fiscal Year	Sales & Use Tax Deferral	B&O Tax Credit	Total Beneficiary Savings
2010	\$54,000,000	\$23,550,000	\$77,550,000
2011	\$28,700,000	\$28,700,000	\$57,400,000
2012	\$29,300,000	\$29,200,000	\$58,500,000
2013	\$30,000,000	\$30,000,000	\$60,000,000
2014	\$30,700,000	\$25,600,000	\$56,300,000
2015	\$31,500,000	\$26,200,000	\$57,700,000
2013-15 Biennium	\$62,200,000	\$54,200,000	\$114,000,000

Note: Beneficiary tax savings for Fiscal Year 2010 are based on actuals; the deferral amount for 2011 is a three year average because high technology investments are volatile. Fiscal Years 2011 through 2015 amounts are estimates. Source: JLARC analysis of DOR data and the February 2012 forecast of U.S. R&D spending.

# If the tax preferences were to be terminated, what would be the negative effects on the taxpayers who currently benefit from the tax preference and the extent to which the resulting higher taxes would have an effect on employment and the economy?

If the tax preferences were terminated, high technology R&D businesses and nonprofits located in high unemployment counties or community empowerment zones (areas within cities that are eligible for federal, state, and local assistance due to high unemployment and low household income) could qualify for deferral/waiver of sales and use taxes on facilities and machinery and equipment. However, most of the R&D activity is located outside these counties or empowerment zones.

Economic analysis indicates that the B&O tax credit is attributable to employment growth of 454 new jobs (or between 0.5 and 0.6 percent) at the firms that claimed the B&O tax credit. It can be assumed that in the absence of the credit this job growth would not occur.

### **Other States**

JLARC found that six states **do not** offer a tax credit for R&D operating expenses (Kentucky, Nevada, Oklahoma, South Dakota, Wyoming, and Texas). The remaining 44 states offer various forms of R&D tax credits, including 23 states that provide income tax credits based on the federal

credit for research and development spending. The federal credit requires that firms increase their R&D spending over previous years.

Thirty-two states provide sales and use tax exemptions for R&D machinery and equipment. Six states provide sales and use tax exemptions for R&D facilities.

#### **Auditor Recommendation:**

The Legislature identified the public policy objectives for this tax preference for high technology R&D: to encourage investment in high technology R&D and to create "quality" jobs. However, the Legislature did not identify specific targets for these objectives, or what is meant by "quality" jobs.

This JLARC review finds results of the two tax incentives are mixed. The B&O tax resulted in an estimated one-time employment growth of 454 jobs with an average cost per new job of \$45,000 and an estimated increase of new earnings per job of \$25,000.

In addition, while beneficiaries made R&D expenditures in Washington, it is not clear how much of this spending occurred as a result of the tax credit. Thirty percent of the beneficiaries received reduced benefit from the B&O tax credit because of limitations on the amount of credit that could be taken.

The Legislature should review and clarify this tax preference to determine if progress toward its high technology R&D objectives is sufficient and to consider identifying targets for investment and employment.

**Legislation Required:** Yes.

**Fiscal Impact:** Depends on legislative action.

### **Supplement to the Tax Preference Review:**

### Enhancements are Needed in the Annual Taxpayer Survey and OFM's Input-Output Model

In the course of conducting this tax preference review, JLARC staff encountered difficulties with two tools related to evaluating preferences: 1) the annual survey that DOR uses to collect and report beneficiary information, and 2) the current version of the Office of Financial Management's Washington Input-Output Model. This Supplement to the tax preference review contains two recommendations to improve these tools for evaluating other tax preferences.

### The Annual Taxpayer Survey

The Legislature stated in reference to the high technology preferences that "accountability and effectiveness are important aspects of setting tax policy," and that information on the tax preference is needed in order make decisions on the "best use of limited state resources." To allow for an ongoing evaluation of the preference, the Legislature put in place mechanisms for DOR to collect and report information on the tax preference.

Mechanisms for **collecting** information from beneficiaries are:

- The application for deferred sales and use taxes, which businesses must file before initiation
  of construction of facilities or purchase of machinery and equipment. The application
  provides estimates of employment and wages, project costs, and schedule for completion of
  the project. DOR has to approve the application, and approved applications may be
  disclosed.
- Beneficiaries of the B&O tax credit and the sales and use tax deferral must file an annual survey with DOR that provides information on the amount of tax deferral claimed in the previous year, and employment, wages, and benefits for the preceding year. DOR may request additional information to measure results of the tax preference. The amount of the tax preference claimed may be disclosed. Other survey information must be aggregated by three or more beneficiaries.

The Legislature established three different mechanisms for DOR to **report** on the performance of these tax preferences:

 DOR is to provide annual descriptive statistics to the Legislature every October. DOR uses information collected in the annual survey in its descriptive statistics. The descriptive statistics include information on the amount of tax preference claimed as well as information about jobs, wages, and benefits. Information is summarized to protect confidential employment and wage data.

- 2) The Legislature directed DOR to complete five **evaluations** of these preferences, in 1997, 2000, 2003, 2009, and in 2013 using information from the annual survey. The Legislature eliminated the 2013 DOR study requirement for the B&O tax credit and transferred responsibility to JLARC as part of the tax preference review process. However, DOR is still responsible for the study of the high technology sales and use tax deferral in 2013.
- 3) DOR is to provide information to the public on the amount of the tax credit and deferral claimed in the previous year for each beneficiary. If the amount on the survey is incorrect, DOR may disclose the correct amount using other sources.

DOR has completed annual descriptive statistics every year since 2004 when survey data became available. DOR submitted all of the evaluations by the prescribed due dates but did not submit the 2009 evaluation until April 2012. In addition, DOR provides information to the public by posting credit and deferral amounts specific to each type of tax preference on its website and in response to public requests. However, all three reporting mechanisms rely on survey information which overstates the amount of tax preference claimed.

### Annual Surveys Do Not Provide the Information Needed by the Legislature to Evaluate the Preference

JLARC found inconsistencies between the tax preference information needed to evaluate the preferences and the information that DOR is collecting in the annual survey and providing to the Legislature and the public. This section provides two examples of this problem, one about the reported tax deferral amounts and one about reporting on job performance.

**Reported sales and use tax deferral amounts** – DOR is instructing the beneficiaries of the high technology R&D sales and use tax deferral to report taxes deferred in a way that results in misleading reporting about the preference. To illustrate this problem, consider a business that builds a qualifying new facility, accumulating a \$100,000 sales tax bill that it can defer under this preference if it maintains the qualifying use and submits its required annual surveys. If it does so for eight years, the sales tax is waived.

The high technology R&D business is exempt from \$100,000 in sales tax one time, as it makes the necessary purchases to build its facility. DOR, however, is directing the business to report that one-time sales tax saving every year for eight years. Exhibit 30, on the following page, illustrates the reporting that results from this practice. This reporting leaves the impression that the state is foregoing \$100,000 in sales tax every year for this one project and that the amounts in each column could be added for an eight-year total.

Exhibit 30 – Example of How DOR's Reporting of the Annual R&D Sales Tax Deferral Would Not Match Actual Sales Tax Deferred

1 R&D Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Actual sales tax deferred	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
What DOR directs beneficiaries to report in the annual survey	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Deferral amount reported to the public by DOR	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Source: JLARC analysis of DOR annual survey instructions.

This JLARC review used actual sales and use tax amounts determined from audits of high technology R&D projects to overcome this problem.

**Reported performance in creating jobs** – The annual survey yields employment information that does not provide the Legislature with a clear picture of job performance among the beneficiaries of the high technology R&D tax preferences. To illustrate this problem, Exhibit 31, below, shows the employment information on the annual survey for a two-year period for the same 392 beneficiaries of the tax preferences that filed surveys in both years. These same beneficiaries reported **creating** 7,176 new positions between 2008 and 2009. They also reported **reducing** total employment by 4,699 employees. It is not clear what this means for overall employment performance for the taxpayer beneficiaries.

Exhibit 31 – Reporting on Annual Survey Gives No Clear Picture of Job Performance for Beneficiaries of the High Technology R&D Credit and Deferral

Year	Number of High Technology R&D Beneficiaries	Reported Washington Employees of the Beneficiaries	Reported New Employees of the Beneficiaries
2008	392	129,781	15,568
2009	392	125,082	7,176
Change in number of jobs between 2008 & 2009		(4,699)	

Source: JLARC Analysis of DOR Annual Surveys.

The economic analyses for this review used more reliable employment data from the Employment Security Department and statistical analysis to overcome this problem.

#### **Auditor Recommendation 1:**

The Department of Revenue should convene a work group to address how to improve the reliability and the accuracy of the information collected in the annual survey and reported to the Legislature and the public.

**Legislation Required:** No.

**Fiscal Impact:** JLARC assumes that this can be completed within existing

resources.

**Implementation Date:** In time for the 2013 annual survey.

### Improvements Are Needed in OFM's Input-Output Model

Legislation in 2011 (SB 5044) directed JLARC to provide information on the economic impact of a tax preference compared to the economic impact of government activities funded at the same level of expenditure as the tax preference.

The 2011 legislation specifically directed JLARC to determine these economic impacts using the Washington Input-Output Model as constructed and maintained by the Office of Financial Management. This review of the two high technology tax preferences offered JLARC its first opportunity to conduct this kind of assessment of the potential opportunity costs associated with taking the tax preference amounts out of public sector spending. However, JLARC learned in the course of our analysis that the current version of the Washington Input-Output Model is not constructed to evaluate how the state and local government sectors relate to other sectors of the economy.

Recommendation 2 below would provide the Legislature with information on the estimated cost to enhance the input-output model.

### **Auditor Recommendation 2:**

The Office of Financial Management should estimate the cost of including state government and local government as separate sectors within the Washington input-output model.

**Legislation Required:** No.

**Fiscal Impact:** JLARC assumes OFM can complete a cost estimate for this task

within existing resources. The results of the OFM analysis will provide an estimate of the fiscal impact to improve the model.

**Implementation Date:** In time for the Governor's 2013-15 budget submittal.