

## EXECUTIVE SUMMARY

This report is the third and final in a series of analyses of two tax incentives enacted in 1994, the high tech B&O tax credit and the high tech sales tax deferral. RCW 82.04.4452 provides a credit against state B&O tax for qualified expenditures in R&D. Chapter 82.63 RCW allows a deferral/exemption from retail sales and use tax for qualified investment in R&D facilities and machinery. Both incentives are restricted to firms in one of five designated "high technology" industries: advanced computing, advanced materials, biotechnology, electronic device technology, and environmental technology.

The Legislature, in adopting these programs, expressed the finding that the high technology sector is characterized by high-wage, high-skilled jobs and that these firms are vital to the state's economy. Further, it is acknowledged that such industries rely upon substantial R&D to develop new products, but that firms typically do not experience profitability during the product development phase of their operations. These tax incentives are intended to help offset the impact of state taxes for firms prior to actual manufacturing of new products.

Under present state law both incentives are scheduled to expire during 2004. The sales tax deferral/exemption terminates on July 1, 2004, while the B&O tax credit expires on December 31, 2004.

The analyses contained in this report focus principally on results directly related to the tax incentives and the high tech sector as a whole. A second part of the report (forthcoming) analyzes whether the tax incentives have caused an increase in jobs in the high tech industry. To the extent that a tax incentive is successful and is able to create new jobs, the income of those employees rises and their personal expenditures, in turn, stimulate secondary rounds of economic activity. Measuring these secondary impacts is beyond the scope of this study.

The statutes require an assessment of and report on these programs in the years 1997, 2000, and 2003. The Legislature directed the Department to measure the effects of each program on the following features of the state's economy:

- (1) job creation,
- (2) the number of jobs created for Washington residents,
- (3) company growth,
- (4) diversification of the state's economy,
- (5) growth in R&D investment,
- (6) introduction of new products,
- (7) movement of firms or the consolidation of firms into the state, and
- (8) other factors selected by the Department.

## **(1) JOB CREATION**

Evidence of job creation in the high tech industry is mixed. Although R&D spending has increased in Washington relative to the nation, the state's share of high tech jobs has remained about the same over the last decade. Meanwhile, the state is losing manufacturing jobs along with the rest of the nation. Rural county high tech employment has declined somewhat for the three years for which county breakdowns are available, 1997, 1998, and 1999.

## **(2) THE NUMBER OF JOBS CREATED FOR WASHINGTON RESIDENTS**

Firms taking the B&O tax credit report that 59 percent of their new employees are Washington residents.

## **(3) COMPANY GROWTH**

Over the eight-year period of the incentives program, 1,311 firms have taken the B&O tax credit and 393 projects have been approved for the sales tax deferral. Participating high tech firms have grown 58 percent in total over seven years as measured by employment, increasing from 90,000 in 1995 to 142,000 in 2002.

## **(4) DIVERSIFICATION OF THE STATE'S ECONOMY**

There is mixed evidence of diversification of the state's economy caused by the high tech incentives. One possible indicator of product diversification is growth in high tech patents. Patents for firms in Washington's high tech sectors have increased 180 percent since enactment of these incentives, rising from 370 in 1995 to 1,069 in 2001.

There is no clear evidence of growth in geographical diversity in the high tech sector. Rural county high tech employment has declined somewhat for the three years for which county breakdowns are available, 1997, 1998, and 1999.

## **(5) GROWTH IN R&D INVESTMENT**

There is strong evidence of growth in R&D investment. R&D spending excluding capital investment has increased from \$1.5 billion in 1995 to \$6.8 billion in 2002 for firms taking B&O tax credits. Capital investment has increased from \$266.7 million to \$712.5 million from 1995 to 2002 for firms taking sales and use tax deferrals. All together, R&D investment in the state has tripled.

## **(6) INTRODUCTION OF NEW PRODUCTS**

Growth in patents is used in the study as a measure of growth in the introduction of new products, although the relationship between the two is not perfect. Patents for firms in Washington's high tech sectors have increased 180 percent in the seven years after enactment of the incentives. This result is confirmed by a survey of B&O tax credit recipients in which 76 percent report that their R&D spending culminated in a new product.

## **(7) MOVEMENT OF FIRMS OR THE CONSOLIDATION OF FIRMS INTO THE STATE**

Firms taking both incentives have responded variously to questions relating to movement and consolidation of their firms into the state.

- Thirty-nine percent of firms taking the B&O tax credit and 27 percent of the firms taking the sales and use tax deferral/exemption report that they are new businesses in Washington. However, very few of them report relocating to Washington because of the incentives.
- Ten percent of the firms taking the credit say they have built new facilities in the past five years.
- Forty-four percent of the firms taking the credit have expanded because of creating a new product or service.

Analysis comparing total tax burden of Washington and six competitor states shows that the sales and use tax deferral improves Washington's relative tax rankings. To the extent that taxation is a factor in firm location decisions, this result suggests that the deferral could encourage firms to remain in or move to Washington State. The B&O tax credit, however, has no impact on tax rankings.

## **(8) OTHER FINDINGS**

Washington's incentive programs have high participation among high tech R&D firms. Over 75 percent of R&D expenditures in Washington (excluding capital investment) qualify for the B&O tax credit. Other information on participation:

- \$204.0 million in B&O tax credit has been taken by 1,311 firms in an eight-year period through 2002.
- \$323.9 million in sales tax deferrals have been approved for 393 projects in an eight-year period through 2002.
- Three of the five technologies--advanced computing, electronic device technology, and biotechnology--account for 89 percent of the B&O tax credits and nearly 100 percent of the sales and use tax deferrals.
- The average annual wage in Washington's high tech sector has increased from \$65,000 in 1995 to \$130,000 in 2001. Excluding computer software (SIC 737), average wages have

increased from \$46,000 to \$66,000 during the same time, an increase of 50 percent. Non-agricultural wages have grown 33 percent.

- Washington's high tech credit and deferral programs provide more tax relief on average than incentives of our six major competitors except California. Oregon and Nevada provide little or no relief, in most cases because of routinely low tax burdens on high tech firms.
- Washington's B&O tax credit provides more relief because it is calculated on the total amount of R&D spending. Most competitor states piggyback on the federal credit which is measured by an increment investment over an initial base.
- Washington firms may also make greater use of Washington's credit program because it is easier to use than the federal-based credit.