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OFFICE OF THE LEGISLATIVE AUDITOR
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Evaluation Report Summary / February 2017

Minnesota Research Tax Credit

We estimate that although **Minnesota's** research tax credit increased jobs and employee earnings in the state, the credit has not paid for itself.

Key Facts and Findings:

- Minnesota's research tax credit allows businesses to reduce their state tax liability if they conduct qualified research activities in the state. To qualify, research activities must meet several legal requirements.
- The 1981 Legislature established Minnesota's research tax credit and patterned it after a similar federal tax credit.
- Eligible businesses include "C" corporations, which use research tax credits to reduce their Minnesota corporate franchise tax. Also eligible are individual shareholders in "S" corporations and individual partners in partnerships, who use the credit to reduce their individual income tax.
- In 2014, businesses claimed $50 million in research tax credits, with C corporations claiming 67 percent of the total. On average, the largest 20 percent of C corporations (measured by national sales) received two-thirds of the tax credit claimed by all C corporation claimants in 2010 to 2014.
- Minnesota statutes do not specify a purpose for the research tax credit, even though national research indicates that it is important for states to set goals and objectives for tax incentives like the tax credit.
- In lieu of an explicit statutory purpose, likely purposes for the research tax credit are to: (1) create or retain jobs, (2) increase research activity, and (3) attract or retain businesses.
- Minnesota's research tax credit increased jobs and earnings statewide from 2008 to 2014, according to our estimates. However, the growth was relatively small, and the credit did not pay for itself, as its statewide net fiscal benefits offset only a small share of the amount of credit claimed.
- When legislators discuss changing the research tax credit, they receive estimates of impacts on the state's General Fund but receive no analysis of whether the proposal will increase the credit's effectiveness.
- Minnesota Department of Revenue data on the state's research tax credit are insufficient to allow evaluations of the credit's performance.
- The Department of Revenue provides limited guidance to help taxpayers understand documentation required to substantiate their claims for the state's research tax credit.

Key Recommendations:

- The Legislature should establish in statute explicit and measurable objectives for Minnesota's research tax credit.
- To the extent the Legislature considers changing Minnesota's research tax credit, it should require and review analyses of how well the proposed changes help achieve the credit's purpose.
- The Legislature should authorize and require the Minnesota Department of Revenue to collect and maintain data sufficient to allow periodic evaluations of the research tax credit.
- The Minnesota Department of Revenue should provide additional and more specific information to taxpayers about the documentation needed to substantiate claims for the research tax credit.

Room 140 Centennial Building, 658 Cedar Street, St. Paul, Minnesota 55155-1603 • Tel: 651-296-4708 • Fax: 651-296-4712
E-mail: legislative.auditor@state.mn.us • Website: www.auditor.leg.state.mn.us • Minnesota Relay: 1-800-627-3529 or 7-1-1

Businesses in 2014 claimed $50 million in Minnesota research tax credits.

Report Summary

The 1981 Minnesota Legislature established the research tax credit. Minnesota's credit allows businesses to reduce their taxes if they conduct qualified research activities in the state.

The Internal Revenue Code divides businesses into different types and, since 2010, Minnesota law has defined eligibility for the research tax credit by three of these types. One is S corporations (small, domestic businesses that meet requirements related to the number, type, and tax status of their shareholders). The second is C corporations (corporations that are not S corporations). The third is partnerships (that carry on business through entities such as syndicates, groups, and joint ventures).

C corporations use the research tax credit to lower *corporate* tax liability. By contrast, S corporations and partnerships pass research tax credits to shareholders and individual partners, respectively, to reduce their *individual* income taxes.

Most of the Minnesota research tax credits go to C corporations. From 2010 through 2014, C corporations claimed 81 percent of the credits. In 2014, the most recent year for which complete data are available, C corporations claimed $34 million in research tax credit, while shareholders in S corporations and individual partners in partnerships claimed $16 million.

The largest 20 percent of C corporations (as measured by national sales) received two-thirds of the tax credit received by all C corporations claiming the credit in the years between 2010 and 2014. Among C corporations, the manufacturing industry has claimed the largest share—65 percent—of the tax credit.

Federal and state law define qualified research. Qualified expenses for such research include researchers' wages, research supplies, and 65 percent of contract costs paid to others for doing research, among other items. Wages account for three-quarters of C corporations' qualified research expenses in the state.

Calculating Minnesota's research tax credit involves a complicated formula. The formula takes into account a company's (1) qualified research expenses in the current year, (2) Minnesota sales or receipts for the most recent four years, and (3) both qualified research expenses and sales or receipts from 1984-1988. (Companies without research expenses or sales in 1984-1988 follow a different formula specified in federal law.)

Qualified research expenses that exceed a calculated "base amount" are multiplied by the Minnesota credit's two rates: 10 percent on the first $2 million of qualified expenses and 2.5 percent on qualified expenses exceeding that. The resulting tax credit cannot exceed the company's tax liability, but if it does, the company can carry that share of the credit forward to reduce up to 15 future years' taxes.

Evaluating the research tax credit requires knowing the credit's purpose, but Minnesota law does not specify one.

National research recommends that states set goals and objectives for tax incentives such as tax credits, but Minnesota has not done this for its research tax credit. Although the tax credit's section in law is entitled "Credit for Increasing Research Activities," the state has not determined what the credit is supposed to accomplish nor what metrics the state should use to measure the credit's performance.

The Legislature should establish in statute explicit and measurable objectives for the tax credit. It should also direct a third party, such as the Department of Revenue or others, to develop the measures needed to determine how well the tax credit is meeting its objectives.

Minnesota's research tax credit could be reasonably said to have one or more of at least three objectives: create or retain jobs, increase research activity, and attract or retain businesses.

Academic research of specific states' research tax credits has found small increases in jobs due to the credits. In general, companies we surveyed indicated that the tax credit was moderately important in helping them hire new employees and retain jobs.[1]

Academic researchers tend to agree that research tax credits have at least some positive impact on private research spending. Additionally, 58 percent of our survey respondents indicated that the tax credit encouraged their decisions to conduct research or development in recent years. At the same time, Minnesota's formula for the tax credit allows many companies to claim the credit even when their qualified research expenses in the current year are lower than the prior year.

Minnesota's research tax credit allows many companies to receive a tax credit even if their research activity has not increased over the prior year.

Academic research results are mixed regarding the research tax credit's ability to attract business to the state. Some studies suggest that research tax credits largely retain or move research among existing research facilities instead of encouraging new research companies. Moreover, fewer than one in six of our survey respondents said that the tax credit was important for their company when considering whether to relocate business activities to Minnesota.

Minnesota's research tax credit increased jobs and expanded earnings statewide, according to our economic analysis.

Using an economic model developed by the Pew Charitable Trusts, we estimated employment and earnings attributable to Minnesota's research tax credit. Our estimates take into account changes in employment and earnings at companies directly receiving the tax credit. They also include (1) indirect effects that occur when suppliers to companies receiving the credit also grow and (2) induced effects from employees that have higher wages due to the tax credit and spend more in the local economy.

Statewide, we estimated the research tax credit created direct, indirect, and induced new job-years—defined as one job per one year—ranging from 790 in 2008 to 1,540 in 2014. Estimated earnings are direct, indirect, and induced employee wages and benefits attributable to the tax credit. They ranged from $43 million in 2008 to $129 million in 2014.

At the same time, jobs and earnings due to the research tax credit represent only a fraction of total jobs and earnings in the state. For instance, our analysis focused on the four industries that claim about 95 percent of Minnesota's research tax credit and accounted for an average of 21 percent of all employment in the state between 2008 and 2014. Compared with statewide employment in these industries, jobs attributable to the research tax credit represented just 0.2 percent or less during those seven years.

Although Minnesota's research tax credit produced statewide fiscal benefits, it has not paid for itself.

Jobs created due to the research tax credit result in both fiscal benefits and fiscal costs to the state. Benefits occur when new jobs generate income that expands state and local tax bases. Costs occur because new jobs increase statewide population that, in turn, spurs a need for additional public services. We estimated that net fiscal benefits of the tax credit totaled $7.2 million in 2014. However, the amount of research tax credit claimed was far higher at $32.3 million. The net fiscal benefits offset only 22 percent of the amount of the credit in 2014.

Looking at costs and benefits per job-year, however, shows that the tax credit was relatively cost-effective at creating jobs. We estimated that net employee earnings per job-year attributable to the tax credit averaged $72,000, while the state's net fiscal cost per job-year averaged $42,000.

When legislators discuss proposals to change Minnesota's research tax credit, they do not have analyses of how well the changes might improve the credit's effectiveness.

National research indicates that states should analyze both the costs and effectiveness of proposals to change tax incentives, such as research tax credits. When Minnesota legislators discuss changing the research tax

[1] We surveyed companies that claimed Minnesota's research tax credit in 2012, 2013, or 2014. Of 1,431 companies contacted, 493 responded (a 34.5 percent rate). Results are not generalizable to the population of tax credit claimants as a whole.

The Minnesota Department of Revenue should do more to inform taxpayers of the documentation needed to substantiate their claims for the research tax credit.

credit, the Department of Revenue estimates the fiscal impact to the state's General Fund. However, legislators do not receive estimates of how well the proposed change will increase the credit's effectiveness.

To the extent that the Legislature considers changing the research tax credit, it should require analyses of how well the proposed changes will help achieve the credit's purpose. Doing this presumes that the Legislature first explicitly specifies the purpose of the tax credit. The analyses would involve establishing baseline information on the credit's current effects. The state would then compare the baseline to the credit's effect after a change is implemented.

Minnesota Department of Revenue data on the research tax credit are insufficient to allow evaluation of the credit's performance.

A lack of sufficient data on the tax credit prevents the state from fully understanding the credit's effectiveness. The Department of Revenue is not legally required to evaluate the research tax credit, and it has not collected data needed to evaluate the full population of credit claimants. The department has not had business reasons to allocate resources toward collecting more data than it needs to administer and enforce the collection of taxes.

The Legislature should authorize and require the Department of Revenue to collect and maintain data sufficient to allow periodic evaluation of the current research tax credit. It should direct a third party to evaluate the credit. Future evaluations of the tax credit might require collecting additional information, such as data on jobs created, from tax credit claimants. Data-sharing agreements between state agencies would likely be necessary.

The Minnesota Department of Revenue provides limited guidance to help taxpayers understand the data required to substantiate claims for the research tax credit.

The department offers online information on the research tax credit, but the information lacks sufficient clarity and specificity. Department guidance to its auditors is more specific than its information for taxpayers. Most businesses we surveyed favored additional department assistance on documenting their credit claims.

The department should provide additional information to taxpayers on documentation needed for the tax credit. This could include providing online tutorials and sharing examples of acceptable documentation for substantiating the credit.

Summary of Agency Response

In a letter dated February 1, 2017, Department of Revenue Commissioner Cynthia Bauerly said the department agrees with the need to "focus on continuously improving our services in complex areas of law," such as the research tax credit. She identified activities, including adding website content, in which the department is already working to provide more information about the documentation needed to substantiate claims for the research tax credit. Commissioner Bauerly said she welcomes a conversation with the Legislature about its interest in articulating the objectives of the tax credit and expanding data available for evaluation purposes. She stated that evaluating effects of tax law changes can be costly, and such an evaluation would be helped by partnering with others, such as the Department of Employment and Economic Development. In addition, the commissioner explained that longer audit timelines occurred at a time of reduced audit staffing. She wrote that "investing in an appropriate level of staff" will help the department meet its goal for timely completion of audits.

The full evaluation report, *Minnesota Research Tax Credit*, is available at 651-296-4708 or:
www.auditor.leg.state.mn.us/ped/2017/researchcredit.htm