



STATE OF WASHINGTON
DEPARTMENT OF COMMERCE

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January 5, 2023

Ms. Sarah Bannister, Secretary of the Senate
312 Legislative Bldg.
PO Box 40482
Olympia, WA 98504-0482

Mr. Bernard Dean, Chief Clerk of the House of Representatives
338B Legislative Bldg.
PO Box 40600
Olympia, WA 98504-0600

Re: SHB1170 Report on Research and Development Incentives in Other States

Dear Ms. Bannister and Mr. Dean,

The Department of Commerce (Commerce) submits this letter and research to satisfy the reporting requirements in Section 6 of Substitute House Bill 1170 ([Chapter 64, Laws of 2021](#)).

SHB 1170 states:

“Within existing resources, the department must report ...the progress made in developing, recruiting, and retaining research and development employers and workforce; and a description of how the state's policy toolkit for developing strength in research and development as a sector compares to competitor states.”

Points of Interest in State Research and Development Tax Credits in the United States

The following summary of research and development (R&D) tax incentives in every state in the United States is intended as a first step in providing a national context. This analysis sets the stage for further research on successful R&D in specific states, especially as it relates to tax incentives available at the federal and state level.

Some items are worth mentioning should the Legislature consider creating or renewing its previous R&D tax incentive:

- A federal R&D tax credit based on qualified expenditures is available to every state.
- State R&D tax credits are determined by each state and not all states have adopted one. Washington is one of 12 states without a R&D tax incentive.
- Each state's R&D tax credit differs slightly. All of their qualified expenditures are based on the definitions by the IRS associated with the federal R&D tax credit.
- Many states allow tax credits to be carried over to subsequent tax years.
- Some states cap overall funding dedicated to the tax credit, and limit the amount claimed.
- Some states focus their R&D tax credits on specific types of R&D, such as technology, life sciences or energy efficiency.
- States can also attempt to incentivize *expansion* in R&D spending by focusing their credits on the growth in spending.
- Of interest is the difficulty finding information on R&D tax credits from most states. In fact, there are several businesses thriving in their efforts to assist interested businesses to find states with R&D tax credits most favorable to their respective enterprises, since these credits are so difficult to find and decipher. Importantly, there are several states with exceptionally clear and accessible R&D online tax credit information provided by the state (usually their departments of commerce or revenue). Transparency in available tax credits seems a laudable goal to democratize the availability of tax credits to eligible large and small businesses.

What the Research Says about R&D Tax Credits in the United States

“Though initially aimed at fostering innovation by established enterprises, state R&D tax credits also increase the rate of entrepreneurship, and importantly, the formation of high growth potential startups needed to achieve economic development objectives. However, the R&D tax credit does not offer a ‘quick fix’ for states seeking to catalyze regional economic growth through entrepreneurship. Importantly, increases in the formation of high potential growth firms only materialize over time in response to R&D credits. Thus, it may take a decade or more for state R&D tax credits to have an impact on the economy through entrepreneurship. More generally, tax incentives might be more effectively leveraged as one part of a broader complement of initiatives aimed at encouraging the formation and scaling of growth-oriented firms. Overall, our findings counsel in favor of ‘patient’ and targeted policy-- offering longstanding tax incentives tailored towards the revenue trajectories of high-potential growth startups and encouraging investment in initiatives, including public-private partnerships, that support this important category of newly-founded firms.”¹

For those interested in reading state evaluations of R&D tax credits, please see the National Conference for State Legislatures: [State Tax Incentive Evaluations Database](#).

Another significant finding is a major shift in R&D expenditures in the U.S. since 1982. In 1982, R&D spending was roughly equal between the government (\$37.8 billion) and private sector

¹ Catherine Fazio, J. G. (2019). The Impact Of State-Level R&D Tax Credits On The Quantity And Quality Of Entrepreneurship. National Bureau of Economic Research Working Paper Series, 4-5.

(\$40.7 billion). By 2020, the private sector was investing \$517.4 billion, nearly four times that of the public sector (\$142.8 billion).²

“At one level, there is nothing wrong with businesses having primacy over government in R&D spending. America has a vibrant private sector that enables business leaders to scan the landscape, decide where there are investment opportunities, and position their firms for future value. It is a virtue of market capitalism that such decisions are privately-made and decentralized across a range of chief executives.

“But at another level, there are problems with the bulk of R&D coming from the business community. First, vital national interests may get overlooked to the detriment of the overall country. Second, [profitable consumer products](#) likely will get advantaged over unprofitable societal innovations, even if the latter are important for public health and national security. Third, innovations that need to get financed in order to promote longterm public goods may receive short shrift over items that promise a quick payoff. Corporate leaders are under enormous pressure to meet quarterly revenue projections and that can skew their R&D allocation decisions.”³

Please contact me by phone at (206) 256-6140 or email at Carolyn.Busch@commerce.wa.gov if you have any questions regarding this report or need additional information.

Sincerely,

Carolyn Busch
Workforce Innovation Sector Lead
Office of the Economic Development and Competitiveness
Department of Commerce

² West, D. M. (2022). R&D for the Public Good: Ways to Strengthen Societal Innovation in the United States. Brookings.

³ Ibid.

2022 R&D tax incentives in the 50 states

State	R&D incentive	Description
Alabama	None	
Alaska	None	
Arizona	State income tax credit Arizona Incentives - Research and Development Tax Credit Program for Business	The Research and Development (R&D) incentive provides an Arizona income tax credit for increased research and development activities conducted in this state, including research conducted at a state university and funded by the company. The goal is to encourage Arizona businesses to continue investing in research and development activities.
Arkansas	State income tax credit Arkansas Research & Development Income Tax Credit Incentive	The Research & Development Tax Credit Program allows credits against a taxpayer's Arkansas state income tax for making certain qualified research expenditures as well as certain donations or sales below cost of new machinery and equipment to a qualified research program. Income tax credits are intended to provide incentives for university-based research, in-house research of several kinds, and research and development in start-up, technology-based enterprises.
California	State income tax credit California state income tax credit	This credit is based on the federal research credit, with modifications. Businesses may qualify for this credit if they engaged in qualified research activities in California.

State	R&D incentive	Description
Colorado	Enterprise Zone Research & Development State Tax Credit Colorado Enterprise Zone Research and Development Tax Credit	The credit helps businesses invest in research and development. Businesses can earn a state income tax credit for 3% of the increase in annual research and development expenses compared to what the business spent the prior two years. The Colorado Legislature created the Enterprise Zone (EZ) Program to encourage development in economically distressed areas of the state. The 16 designated enterprise zones have high unemployment rates, low per capita income, or slow population growth
Connecticut	Research and Experimental (Incremental) Expenditures Tax Credit Connecticut Research and Experimental Incremental Expenditures Tax Credit	A tax credit may be applied against the tax imposed under Chapter 208 (Corporation Business Tax) for the incremental increase in research and experimental expenditures conducted in Connecticut.
Delaware	Research and Development Tax Credits Delaware Tax Incentives & Financing	Delaware companies can receive a tax credit for all eligible spending on research and development activities conducted in the state. The Delaware credit is 50% of the amount eligible for the federal credit.
Florida	Research and Development Tax Credit Program	Florida provides a corporate income tax credit for eligible businesses for certain qualified research expenses. The Florida Corporate Income Tax Credit is contingent, in part, on the eligible business having received the federal research and development tax credit. Taxpayers will be able to apply to the Florida Department of Revenue (DOR) for an allocation of the Florida Research and Development Credit beginning on March 20, 2022.

State	R&D incentive	Description
Georgia	Research and Development Tax Credit Georgia Research and Development Tax Credit	R&D tax credits are available to any company that increases its qualified research spending. New companies, existing companies embarking on R&D for the first time, established companies expanding their R&D budget - all are eligible for R&D tax credits. The tax credit earned is a portion of the increase in R&D spending. The credit can be used to offset up to 50% of net Georgia income tax liability, after all other credits have been applied.
Hawaii	Hawaii Research Credit Hawaii Film Tax Credit and Hawaii Research Credit	The Tax Credit for Research Activities (R&D Tax Credit) is a refundable income tax credit for a qualified high technology business equal to the credit for research activities provided by section 41 of the Internal Revenue Code and as modified by HRS 235-110.91. The maximum credit available per year is \$5 million. Certifications will be provided on a first-come, first-served basis until the cap is reached. The tax credit will be repealed from statute on December 31, 2024.
Idaho	Sales tax exemption for research and development activities Idaho State Legislature - Section 63-3622RR	Sales tax exemption for the lease, rental, purchase, sale at retail, storage, use or other consumption in this state of tangible personal property which is primarily used in research and development activities.
Illinois	Research and development income tax credit Illinois General Assembly - Illinois Compiled Statutes	The income tax credit is 6.5% of the qualifying expenditures for increased research activities. Qualifying expenditures are equal to the federal credit for increasing research activities which would be allowable under Section 41 of the Internal Revenue Code.

State	R&D incentive	Description
Indiana	Research expense credits R&D sales tax exemption Indiana Overview	There are two tax incentives targeted at encouraging investments in research and development. Taxpayers may receive a credit against their Indiana state income tax liability calculated as a percentage of qualified research expenses. In addition, taxpayers may be refunded sales tax paid on purchases of qualified research and development equipment. The Indiana Department of Revenue oversees these incentive programs.
Iowa	Research activities credit Iowa Research Activities Credit (RAC)	Using average annual gross receipts for the four preceding years to the taxable year for which the credit is being determined; the base amount cannot be less than 50% of the qualified research expenses for the credit year. Allowed for Federal Research Credit for qualified research expenses under Internal Revenue Code section 41 for the same taxable year. The credit is only for manufacturing, life sciences, software engineering, and aviation/aerospace.
Kansas	Research and development income tax credit Kansas Department of Revenue Tax Policy - Research and Development Credit	The Kansas research and development credit allows a taxpayer who makes expenditures in research and development activities in Kansas to claim an income tax credit. Expenditures made for research and development purposes must be allowable under the provisions of the federal internal revenue code of 1986. The credit is 6.5% of the difference between the actual qualified research and development expenses for the year and the average of the actual expenditures made during the year and the two previous tax years. The credit allowed in any one tax year is limited to 25% of the credit plus any carry forward. Any remaining unused credit may be carried forward in 25% increments until the total amount of credit is used.

State	R&D incentive	Description
Kentucky	Qualified Research Facility Income Tax Credit Kentucky Qualified Research Facility Tax Credit	A nonrefundable credit equal to 5% of the qualified costs of construction of research facilities that may be applied against individual, corporate, or limited liability entity income taxes. Qualified research as defined in Section 41 of the Internal Revenue Code.
Louisiana	Research and Development Income Tax Credit Louisiana Research and Development Tax Credit	Encourages existing businesses with operating facilities in Louisiana to establish or continue research and development activities within the state. Provides up to a 30% tax credit on qualified research expenditures incurred in Louisiana — with no cap and no minimum requirement.
Maine	Research Expense Income Tax Credit Maine Title 36, §5219-K: Research expense tax credit	Is limited to 5% of the excess qualified research expenses that exceed the previous three-year average and 7.5% of basic research payments. The credit is also limited to 100% of the first \$25,000 in tax liability plus 75% of the liability over \$25,000.
Maryland	Research and Development Income Tax Credit Maryland Business Tax Credits Research and Development	The tax credit is equal to 10% of eligible R&D expenses (as defined by the IRS) incurred during the taxable year in excess of the Maryland Base Amount. If the total credits applied for exceed the statutory caps, the business's R&D tax credit is prorated. The total statutory cap is \$12 million with a small business set-aside of \$3.5 million. A single applicant may not receive a tax credit exceeding \$250,000.
Massachusetts	Research Credit Massachusetts Research Credit	May be available to business corporations subject to the corporate excise that incurred “Massachusetts qualified research expenses” in Massachusetts. The credit closely parallels the federal research credit. May not reduce a taxpayer’s liability below \$456. The credit amount is limited to: 1) The first \$25,000 of corporate excise due, plus 2) 75% of any excise due in excess of \$25,000.

State	R&D incentive	Description
Michigan	Research and Development Expenses Michigan New, Retained, and Expanded Credits	A new credit for 1.9% of Michigan research and development expenses. Along with two other tax credits (compensation and investment), the three credits are limited to 75% of a taxpayer's tax liability.
Minnesota	Research and Development Tax Credit Minnesota Research and Development (R&D) Tax Credit	Equal to 10% of qualifying expenses up to \$2 million, and 4% for expenses above that level. Qualifying expenses are the same as for the federal R&D credit. Contributions to qualified nonprofit organizations that make grants to early-stage technology businesses in Minnesota also may qualify.
Mississippi	None	
Missouri	Research and Development Tax Credits Missouri Revisor of Statutes - RSMo Section 620.1039	Income/franchise credit based on increased research and development spending. Exemption from state and local sales/use tax related to total research and development equipment expenditures. \$300,000 cap per taxpayer. Initial \$5 million of \$10 million for this program prioritized to women and minority taxpayers annually.
Montana	None	
Nebraska	Advantage Research and Development Credit Nebraska Advantage Research and Development Act FAQs	Research and experimental expenditures equal to 15% of the federal tax credit and 35% if made at a college or university in Nebraska. The tax credit may be a refund of sales/use taxes or income taxes paid. If eligible, businesses may claim the credit for no more than 20 years, unless claimed through a college/university when the limit is 4 years.
Nevada	None	

State	R&D incentive	Description
New Hampshire	Research and Development Income Tax Credit New Hampshire Research and Development Tax Credit (R&D) FAQ	With an annual program appropriation of \$7 million, the amount of the credit shall be the lesser of 10% of the business organization's qualified manufacturing research and development expenditures or \$50,000 in any given fiscal year (qualified expenditures based on IRS specifications).
New Jersey	Research and Development Business Tax Credit New Jersey What tax credit programs are available to New Jersey businesses?	Provides a credit for increased research activities based on qualified expenditures (based on IRS). This credit is calculated in the same manner as the federal tax credit for increasing research activities. It provides a credit of 10% of excess qualified research expenditures over a base amount, plus 10% of basic research payments.
New Mexico	Technology Jobs and Research and Development Tax Credit New Mexico Technology Jobs and Research and Development Tax Credit	A taxpayer conducting qualified research at a qualified facility and making qualified expenditures of no more than \$5 million is eligible to claim the basic technology jobs and research and development tax credit of 5% against the taxpayer's compensating tax, withholding tax or gross receipts tax, excluding local option gross receipts tax. The tax credit will double to 10% for expenditures in facilities located in rural New Mexico. Taxpayers may apply for an additional tax credit of 5% against the taxpayer's income tax or corporate income tax liability. The additional credit will double to 10% for taxpayers located in rural New Mexico. To qualify for the additional credit, the taxpayer must increase the annual payroll expense \$75,000 for every \$1 million in qualified expenditures claimed. The taxpayer may not claim an amount that exceeds the taxpayer's personal or corporate income for that reporting period. Businesses with 50 or fewer employees may receive additional incentives.

State	R&D incentive	Description
New York	Life Sciences Research and Development Tax Credit New York Life sciences research and development tax credit	For new businesses, the credit is equal to 15% of the qualified life sciences company's research and development expenditures for a company that employs 10 or more persons, or 20% of the qualified life sciences company's research and development expenditures for a company that employs fewer than 10 persons. The credit is allowed for up to three consecutive years and is limited to \$500,000 per year.
North Carolina	None	
North Dakota	Research Expense Income Tax Credit North Dakota Research Expense Income Tax Credit	This is an income tax credit for conducting research. The credit is equal to a percentage of the excess of qualified research expenses (QRE) over a base amount of 1) 25% for the first \$100,000 of excess QRE in a tax year and 2) 8% for excess QRE over \$100,000 in a year. A taxpayer may elect to use an alternative simplified method to calculate the credit, under which the credit is a percentage of QRE in excess of 50% of the average QRE for the preceding three tax years. The credit is 17.5% of the first \$100,000 of excess QRE plus 5.6% of the excess QRE over \$100,000. Taxpayers may choose either method.
Ohio	Research and Development Center Grant Program JobsOhio Research & Development (R&D) Center Grant Program	Creating at least five new jobs, an R&D Center Grant may provide funding for a portion of the costs related to a new center over five years. The R&D Center Grant Program will have an initial total funding authorization of \$100 million. To be eligible to receive an R&D Center Grant, a center must represent at least \$3 million in new cash investment by a corporation
Oklahoma	None	
Oregon	None	

State	R&D incentive	Description
Pennsylvania	Research and Development Income Tax Credit Pennsylvania DOR	Businesses and individuals eligible for the tax credit must have at least two years of qualified expenditures (as defined by the IRS). Pennsylvania caps its total R&D credit at \$55 million (\$11 million set aside for qualified small businesses). The credit rate in Pennsylvania is 10% (20% for qualified small businesses). Pennsylvania offers a modified Alternative Simplified Credit.
Rhode Island	Research and Development Expense Credit State of Rhode Island R&D Expense Credit	The credit is available to corporations for qualified research expenses (based on IRS definitions). The amount of the credit is equal to 10% of the cost of the research and development property. Eligible properties are tangible personal property and other tangible property, including buildings and structural components of buildings, that are acquired, constructed, reconstructed, or erected for certain research and development purposes. To be eligible for the credit, the property must be: 1) Depreciable or recovery property with respect to which a deduction is allowable; 2) Classified as having a useful life of three or more years acquired by purchase and used principally for purposes of research and development in the experimental or laboratory sense.
South Carolina	Research Expenses Credit South Carolina Department of Revenue Tax Credits	Qualified research and development expenses are defined by the IRS. The credit is 5% of the qualified research expenses made by the taxpayer during the tax year. The credit taken in any tax year may not exceed 50% of the taxpayer's tax liability remaining after all other credits are applied.
South Dakota	None	
Tennessee	None	

State	R&D incentive	Description
Texas	Sales Tax Exemption or Franchise Tax Credit for Qualified Research Texas Sales Tax Exemption or Franchise Tax Credit for Qualified Research	A person engaged in qualified research (as defined by IRS) can claim either: a) a sales and use tax exemption on the purchase, lease, rental, storage or use of depreciable tangible personal property directly used in qualified research, or b) a franchise tax credit based on qualified research expenses. A person cannot claim both the sales tax exemption and the franchise tax credit for the same period. The election to claim the sales tax exemption or take the franchise tax credit is not permanent and can be changed.
Utah	Credit for Research Activities in Utah Utah Income Taxes - Research Activities	This credit is: 1) 5% of your qualified expenses (defined by IRS) for increasing research activities in Utah above a base amount; 2) 5% of certain payments made to a qualified organization increasing basic research in Utah above a base amount; and 3) 7.5% of your qualified research expenses in Utah for the current taxable year.
Vermont	Research and Development Income Tax Credit Vermont Tax Credits for Business	Businesses/individuals eligible for the federal research and development tax credit may qualify for a state R&D credit. The credit can be taken in an amount equal to 27% of the federal tax credit allowed in the taxable year. This credit applies to personal income tax or business or corporate income tax. Names of recipients are published the year after taking the tax credit.

State	R&D incentive	Description
Virginia	Research and Development Expenses Tax Credit Virginia Research and Development Expenses Tax Credit Guidelines	The base credit for a taxpayer using the primary method is equal to: (i) 15% of the Virginia qualified research and development expenses paid or incurred by the taxpayer during the credit year (up to a \$45,000 credit), or (ii) 20% of the Virginia qualified research and development expenses paid or incurred by the taxpayer during the credit year if the Virginia qualified research was conducted in conjunction with a Virginia public or private college or university (up to a \$60,000 credit), to the extent such expenses exceed the taxpayer's Virginia base amount. Qualified expenses are defined by the IRS.
Washington	None	
West Virginia	Research and Development Sales Tax Exemption West Virginia's Business Development Incentives	Purchases of tangible personal property and services directly used in research and development are exempt from the consumer sales tax.

State	R&D incentive	Description
Wisconsin	Research Credits Wisconsin Research Credits	<p>There are 3 types of research tax credit: 1) Increasing research; 2) Related to internal combustion engines; and 3) Activities related to certain energy efficient products. The credit is equal to a percentage of the amount of qualified research expenses for the taxable year exceed 50% of the average qualified research expenses for the 3 taxable years immediately preceding the taxable year for which the claimant claims the credit. If the claimant had no qualified research expenses in any of the 3 taxable years immediately preceding the taxable year for which the claimant claims the credit, the claimant may claim an amount equal to a percentage of the qualified research expenses for the taxable year for which the credit is claimed with percentages varying by the tax credit focus. The percentage for research is 5.75 and 11.5 for combustion engines and energy efficient products. If the claimant did not have qualified research expenses in the preceding 3 years, the percentage is 2.875 for research and 5.75 for combustion engines and energy efficient products. Qualified expenses are defined by the IRS.</p>
Wyoming	None	