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Presentation to the Tax Fairness Commission
January 7, 2014 Meeting
Tax Issues affecting Economic Competitiveness

Members of the Commission,

The Tax Fairness Commission deserves credit for considering tax issues affecting Massachusetts' economic competitiveness. Establishing fair tax policies for individual taxpayers is a laudable and worthwhile goal, but the commission is wise to acknowledge as well that issues of tax fairness affect Massachusetts businesses. Massachusetts businesses compete in a national marketplace where state tax policy plays a critical role in decision-making about where to locate and expand business operations. By establishing tax policies that foster competitive advantage, Massachusetts government leaders can help to attract and retain businesses that will enlarge Massachusetts' tax base, provide jobs, and generate economic growth.

This presentation is intended to give an overview of six topics: 1) a comparison of Massachusetts' R&D Tax Credit with those of other states and countries, with recommendations to make Massachusetts' R&D tax credit the most favorable in the U.S.; 2) an excerpt from Harvard Business School Professor Michael Porter's 2012 Survey on Competitiveness, with recommendations to state government leaders to work with business leaders to simplify the Massachusetts tax code; 3) a comparison of Massachusetts' Corporate Excise Tax with those of other states and a recommendation to reduce Massachusetts' corporate tax rate to the national average; 4) a review of Associated Industry of Massachusetts' proposal to reform our Unemployment Insurance Tax system, ranked as second most costly in the nation, with a recommendation for the Tax Fairness Commission to express support for needed reforms; 5) a recommendation to Massachusetts leaders to follow the state of New York's lead by adopting a lower small-business corporate tax bracket and a lower manufacturer bracket; and 6) a comparison of Massachusetts' Minimum Corporate Excise Tax with those of other states, with a recommendation to reduce or eliminate this unfair tax.

Pioneer Institute offers these recommendations in concert with the commission's broader mission of identifying unfair elements across the spectrum of the Massachusetts tax system, including many other subjects currently under consideration.

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Recommendation 1: make Massachusetts' R&D Tax Credit the most favorable in the nation by: 1) adopting a state version of the federal Alternative Incremental Research Credit (AIRC); 2) adopting a state version of the federal Alternative Simplified Credit (ASC); and 3) adopting a Super R&D Credit, as 12 nations and two U.S. states have done.

Addendum A presents an overview of Massachusetts research and development tax incentives.

Addendum B presents a summary of R&D Tax Credits of the 50 states and the District of Columbia from the Legislative Budget Board of Texas, as updated by Pioneer Institute.

Addendum C presents a graph showing 12 nations that offer Super R&D tax credits. A super credit consists of an extra tax saving that can be claimed by companies with levels of research activity and/or a numbers of new employees over a set base amount.

History of the Massachusetts R&D tax credit

In 1991, Intel Corp. chose to build its new research and development facilities in California instead of Mexico, citing California's R&D tax credit, passed in 1987, as a major influence on its choice of location [24]. Learning from Intel Corp.'s decision, states began to offer more and more attractive tax incentive schemes, hoping that these would convince R&D firms, as major sources of high-skilled jobs for the state's citizens, not to relocate. With the strong support of Lieutenant Governor Paul Cellucci and House Speaker Thomas Finneran, Gov. Weld passed an R&D tax credit in 1991 and an R&D investment tax credit in March 1993. When it was established, the Massachusetts R&D tax incentive was described by the Massachusetts High Technology Council (MHTC) as "the most attractive state R&D incentive in the country." Three years after its implementation, the MHTC found that 83% of CEOs rated Massachusetts' business climate as good or excellent, against just 50% in early 1991. The origins of the R&D tax credit can be traced directly back to the research of Harvard Business School Professor Michael Porter. Michael Porter was invited by Speaker Finneran to come to the State House and explain in detail his research and proposal for an R&D tax credit. His recommendations formed the basis of the resulting R&D tax credit. Massachusetts original R&D tax credit scheme had three components:

- a 10% Massachusetts R&D Tax Credit for all expenses that qualify for the Federal R&E tax incentive program.
- a 15% R&D Tax Credit for expenses made to university-based research.
- a Sales and Use tax exemption on merchandise for use in R&D

Massachusetts' 2010 Life Sciences tax incentives

Massachusetts adopted in 2010 a stand-alone credit specifically aimed at the development of the Life Sciences. This stand-alone credit is comprised of three components:

- the Life Sciences Investment Program of 10% on investments made to "Life Sciences" qualified firms

- the Life Sciences Tax Incentive Program which gives a refund for 90% of excess credit over the base

- the Life Sciences Refundable Job Credit which gives a refund for 90% of excess credit over the base amount

Since the Life Sciences R&D tax incentive program began, fifty companies have been awarded a total of $75 million, which created an estimated 1,800 jobs, according to and Corrente and Kebadjian. This program has improved Massachusetts' R&D tax credit scheme by being ranked first amongst R&D incentive programs in job creation and job quality in the Life Sciences sector and by being the only program in the United States to specifically target higher education institutions and the Life Sciences sector.

Here are three possible steps that Massachusetts government leaders could take to make Massachusetts' Research & Development Tax Credit the most favorable in the US. The following three suggestions identify features of the federal R&D credit that are not currently offered by Massachusetts and from features of the R&D credit offered by other states and countries that are not currently offered by Massachusetts.

- Adopt the Alternative Incremental Research Credit (AIRC). The AIRC is a credit allowed by the Internal Revenue Code that combines a three-tier credit rate ranging from 3% to 5% of the total amount of R&D expenditures above the base amount. Firms that have increased their R&D expenditures, but not their R&D intensity, are eligible for the AIRC. Massachusetts currently does not offer this credit.

- Adopt the Alternative Simplified Credit (ASC). The AIC is a credit allowed by the Internal Revenue Code that provides a 12% credit for R&D expenditures above 50% of the average qualified research expenditures over the three years before the credit year. The Alternative Simplified Credit was enacted in the Tax Relief and Healthcare Act of 2006. Massachusetts currently does not offer this credit.

- Adopt the Super R&D Credit. A super-credit consists is an extra tax saving that can be claimed by companies with levels of research activity and/or a numbers of new employees over a set base amount (Deloitte, 2012). Russia adopted the measure in 2009, and in 2013 the United Kingdom just expanded its super credit scheme in 2013. Within the United States, Maine and Wisconsin offer super credit schemes, for firms with qualifying research and development expenditures respectively 1.5 and 1.25 times over the base amount.

Recommendation 2: Work with state business leaders to simplify the Massachusetts Corporate Tax code.

Professor Michael Porter of the Harvard Business School surveyed HBS graduates in 2012 about the competitiveness of U.S. corporations. The closing question of his survey asked each respondent to make one specific suggestion to government officials to improve U.S. competitiveness. The leading response was to “simplify the tax code.” Amazingly, this suggestion appeared more than twice as often as the second most commonly cited suggestion: “Reduce the corporate tax.” The third most cited suggestion was to “reform the tax code.” The suggestions to simplify the tax code and reform the tax code totaled 42.5% of all responses, dwarfing by comparison any other single response. Professor Porters’ survey helps to put into perspective the enormous significance of this fixable problem.

TAX-RELATED SUGGESTIONS OF BUSINESS LEADERS SURVEYED BY PROFESSOR PORTER:

- Simplify the tax code 31.1%
- Reduce the corporate tax 14.6%
- Reform the tax code 11.4%
- Facilitate repatriation of profits 6.9%
- Reduce taxes in general 6.1%
- Establish flat tax 5.7%
- Give incentives for investment or R&D 5.5%
- Other tax-related suggestions 18.7%

The results of Professor Porter’s survey suggests that one of the most valuable and welcomed things that Massachusetts government leaders could do to improve competitiveness is to undertake a joint initiative with business and government leaders to identify and ameliorate problems resulting from the undue complexity of the tax code.

Recommendation 3: Set the Massachusetts Corporate Tax rate at or below the national average.

The second most common tax recommendation offered by business leaders in Professor Porter’s competitiveness survey is to reduce the corporate tax. Table D presents a breakdown of corporate tax rates by state. The average maximum corporate tax rate of 47 states and the District of Columbia is 6.99%. Massachusetts has a flat 8.0% corporate tax rate. Three states - Ohio, Texas, and Washington – are not included in the analysis because these states have adopted a corporate receipts tax with rates not strictly comparable to corporate income tax rates. By reducing the corporate tax rate in Massachusetts from 8% to 7%, state leaders could send a powerful message by leveling the competitive playing field for Massachusetts businesses. The Tax Foundation’s 2014 State Business Tax Climate Index gave Massachusetts a corporate tax rank 16th worst of the 50 states. (See Appendix E). One sure way to improve our corporate tax ranking is to lower the corporate tax to the national average.

Recommendation 4: Reform Massachusetts’ Unemployment Insurance tax system.

The Tax Foundation’s 2014 State Business Tax Climate Index ranked Massachusetts’ Unemployment Insurance Tax as 2nd worst in the nation. (See Appendix E.) Massachusetts business groups, including Associated Industries of Massachusetts, the National Federation of Independent Businesses, the Retail Association of Massachusetts, the Massachusetts High Technology Council, and the regional Chambers of Commerce have been pleading for years to fix a broken unemployment insurance system that saddles Massachusetts business leaders with the second-highest payroll taxes in the nation. Associated Industry of Massachusetts’ Unemployment Insurance reform proposal, now pending before the legislature, introduces more than $100 million in one-time and recurring cost savings into the system by the following reforms, including the following:

1. Adjusting the UI rate schedule to require negatively rated employers, those who habitually put employees into the UI system, to pay higher rates than more stable employers whose

employees rarely use the UI system; and to require that new employers contribution rate be set at the so-called zero positive rate, more accurately reflecting the employers actual trust fund balance and avoiding "sticker shock" when receiving the actual bill after the first year of operation.

2. Increasing the work requirement for eligibility to collect UI benefits from 30 times the weekly benefit amount to forty and requiring wages to be paid in at least two quarters, bringing Massachusetts into line with the majority of other states; (estimated annual savings: $30 million.)

3. Reducing the maximum duration of benefit weeks from 30 to 26 when the state's economy is performing well by adjusting the statutory trigger mechanism from 5.1 percent unemployment in each of the 10 local labor markets in the state to a straight 5.1 percent unemployment rate statewide over the preceding six months – producing savings in the UI Trust Fund of between $50 and $90 million per year. This provision would bring Massachusetts' benefits into line with all other states.

It would be most helpful to this reform effort for the Tax Fairness Commission to express support for the initiatives of Massachusetts business leaders seeking to address the unfair disadvantage created by inordinately burdensome unemployment taxes.

Recommendation 5: Follow New York's lead by adopting a lower small-business corporate tax bracket and a lower manufacturer bracket.

The state of New York allows small business taxpayers and manufacturers to pay lower rates of corporate taxation. New York's default corporate tax rate is 7.1%, but lower rates apply to small business taxpayers, as follows:

- Entire Net Income base (ENI) of $290,000 or less = 6.5% tax rate; and
- ENI base of more than $290,000 but not more than $390,000 = $18,850 plus 7.1% of the amount over $290,000 plus 4.35% of the amount over $350,000.
- Also, a lower rate of 6.5% applies to qualified New York manufacturers.

By adopting a lower tax rate for small businesses and manufacturers, Massachusetts would be giving its business owners a fairer chance to compete in the national marketplace.

Recommendation 6: Eliminate or reduce the Minimum Corporate Excise Tax for small businesses.

Massachusetts mandates that for-profit companies pay an annual minimum corporate excise tax of $456, whether or not the corporation earned any income. For small start-up businesses, temporarily inactive businesses, or businesses with very little income, this tax represents an unfair burden that should be reduced or eliminated.

According to the Federation of Tax Administrators, 37 states do not impose any minimum corporate excise tax. Of the 13 states that do impose one, Massachusetts, New Jersey, and Rhode Island establish rates far higher than the rest, as seen in the following data:

New Jersey $500
Rhode Island $500
Massachusetts $456
Vermont $250
Connecticut $250

Oregon $150
Utah $100
Arizona $50
Montana $50
New York $25
North Dakota $50
Idaho $20
Note: California $800 if incorporated prior to Jan 1 2000, $0 if incorporated after Jan 1 2000.

Conclusion:

Pioneer Institute offers the six above-described suggestions for consideration by the Tax Fairness Commission as items to be included in its forthcoming proposal of tax reform proposal. These ideas focus on making Massachusetts more economically viable and competitive by making its corporate tax structure fairer to Massachusetts businesses competing in a national and international marketplace. Pioneer Institute is committed to working as well on the myriad other subjects currently under consideration by the commission.

APPENDIX A.

Overview of Research and Development Tax Incentives. Memorandum from Legislative Budget Board. Boston, MA. Retrieved on 11/6/2013 at:
http://www.lbb.state.tx.us/Other_Pubs/Overview%20of%20Research%20and%20Development%20Tax%20Incentives.pdf

The specifics of the Massachusetts R&D program: summary

Tax expenditure	Description of tax	Tax Expenditure (in millions)		
		FYI 2011	FYI 2012	FYI 2013
Expensing of Research and Development Expenditures in One Year Income Tax for Economic competitiveness, targeted policy priorities	Individuals or investors in a trade or business may take an immediate deduction for research and development expenditures. For a more detailed description of this tax expenditure, see corporate excise item 2.308. Origin: IRC § 174	$1.2	$1.2	$1.2
Investment Tax Credit Corp&Bus Tax for Economic competitiveness, targeted policy priorities / R&D	Manufacturing corporations and corporations engaged primarily in research and development, agriculture or commercial fishing are allowed a credit of 3% of the cost of depreciable real and tangible property. Such property must have a useful life of four years or more. The property must be used and located in Massachusetts on the last day of the taxable year. A corporation cannot take the credit on property which it leases to another. A corporation can take	$57.2	$57.9	$56.5

companies and Manufacturing	the credit on property which it leases from another (for property leased and placed in service on or after July 1, 1994). Generally, eligible corporate lessees making qualifying leasehold improvements may claim the credit. A corporation may carry over to the next succeeding 3 years any unused portion of its Investment Tax Credit (ITC). Origin: M.G.L. c. 63, § 31A (i), (j)			
Expensing of Research and Development Expenditures in One Year Corp&BusTax for Economic competitiveness, targeted policy priorities / R&D companies	Taxpayers may elect to treat research or experimental expenditures incurred in connection with a trade or business as immediately deductible expenses. Under generally accepted accounting principles, at least some of these costs would otherwise be treated as capital expenditures and depreciated or amortized over a period of years. Their immediate deduction results in a deferral of tax or an interest-free loan. Involves Corporations which made basic research payments and/or incurred qualified research expenses conducted in Massachusetts Origin: IRC, § 174	$47.6	$47.3	$61.1
Life Sciences Tax Incentive Program Corp&Bus Tax for Economic Competitiveness/Life Sciences/Job Creation	On June 16, 2008, "An Act Providing for the Investment in and Expansion of the Life Sciences Industry in the Commonwealth" was passed. The Act establishes the Life Sciences Investment Program as well as the Life Sciences Tax Incentive Program. It provides for a $1B dollar investment in the life sciences sector, including $25 million each year for 10 years for the Massachusetts Life Sciences Investment Fund (subject to required authorizations by the Massachusetts Life Sciences Center and to approval by the Secretary of Administration and Finance). These incentives are effective from January 1, 2009 through December 31, 2018. Since the tax expenditures in this item will be subject to approval and their composition will differ from year-to-year, it is not known what proportion will be in the form of corporate tax credits as opposed to other tax expenditures. However, the Department of Revenue believes that the largest portion of the tax expenditure will be in the form of corporate tax credits, and therefore has placed it in this section of the tax expenditure budget. Since July 1, 2010, the Life Sciences Refundable Jobs Credit has been added to this program. The credit is applicable to insurance companies as well. Origin: M.G.L. c. 63, § 31M; 38CC; 38W; 38U Includes the Life Sciences Investment Tax Credit, the Life Sciences User Fee Credit and the Life Sciences Research Credit	$20.0	$20.0	$25.0
Research Credit Corp&Bus Tax for Economic	A credit is allowed for corporations which made basic research payments and/or incurred qualified research expenses conducted in Massachusetts during the taxable year. A corporation taking the research credit is limited in the	$ 116.3	$ 113.5	$110.9

competitiveness, targeted policy priorities / R&D companies	amount that can be taken against the excise in any year. The credit cannot reduce the tax to less than $456. The amount of credit is equal to: 100% of the first $25,000 of excise; and 75% of any amount of excise remaining after the first $25,000. The deduction allowed to a corporation for any research expenses generating a Massachusetts Research Credit must be reduced by the amount of the credit generated. This amount is added back to income on Schedule E, line 13. Any corporation which is a member of a combined group may share excess research credits with other members of the combined group. Corporations which are members of a controlled group or which are under common control with any trade or business (whether or not incorporated) are treated as a single taxpayer for purposes of determining the allowable Research Credit. The credit may be carried-forward for up to 15 years with certain restrictions. Origin: M.G.L. c. 63, § 38M			
Exemption for Materials, Tools, Fuels and Machinery Used in Research and Development Sales Tax for Economic competitiveness, Structural (Avoid Tax Pyramiding)	Materials, tools, fuels and machinery, including spare parts, used in research and development by certified manufacturing or research and development corporations are exempt from sales tax. Origin: M.G.L. c. 64H, § 6(r) and (s)	$ 76.2	$ 80.2	$ 86.3

APPENDIX B.

The Legislative Budget Board of Texas (LBB), on January 2013, published a report which presented the main features as well as the costs and benefits of the federal and state R&D tax incentives. Attached is a summary table taken from this report which compares the tax incentive programs offered by each state. Changes made to state-level R&D tax incentive programs after the LBB published this report were added in italics by Pioneer Institute.

State	Business Tax Incentive	Sales Tax Incentive	Notes
Alabama	None.	None.	No specific R&D credit. A business that falls in certain research related NAICS industries is eligible for a capital investment tax credit of up to 5% of initial capital costs for qualifying projects and is eligible for an abatement of all state and local non-educational portion of the

			construction related sales tax associated with equipping and constructing a qualified project.
Alaska	Alaska adopts the federal credit by reference. Taxpayers are eligible to claim 18% of the amount of federal credit attributable to Alaska. Credits may be carried forward for 15 years.	Alaska does not levy a sales tax.	In early 2012, the Alaska House passed a bill implementing a R&D credit similar to the federal credit, but the bill failed to advance in the Senate.
Arizona	Beginning in 2011, a business may claim the Credit for Increased Research Activities equal to 24% of the first $2.5 million of qualifying expenses (follows the federal definition) plus 15% of the qualifying expenses in excess of $2.5 million. The credit is capped at $2.5 million and unused credits may be carried forward for 15 years. Previously the credit was non-refundable, however beginning in 2011 a small business (< 150 employees) may apply for a partial refund of up to 75% of the unused credit. Beginning in 2011 a business may claim an additional credit of 10% of basic research payments to an Arizona state university.	Machinery or equipment used in R&D is exempt from the Transaction Privilege Tax	In 2018, the percentage credit amounts will revert to 20% and 11% for amounts below and in excess of $2.5 million, respectively.
Arkansas	A business may claim a credit of 20% of its excess qualified research expenditures (same as the federal credit). The credit is nonrefundable, non-capped, and unused credits may be carried forward for 9 years. Arkansas has a larger business tax R&D credit for 3 types of research: A business that (1) contracts with a state	None	Arkansas businesses must apply to the Economic Development Commission to receive a R&D tax credit. The business must re-apply every 5 years to continue to claim the credit.

	university in performing research, (2) is in one of 6 sectors deemed a "targeted business" (generally start-up tech companies), or (3) a business performing research in an "area of strategic value" to the state may claim a credit of 33% instead of the normal 20% offered to all businesses.		
California	The state has a credit for both the personal and corporate income tax for qualified research expenditures above a computed base amount. The credit is 15% and is non-refundable, but unused credits may be carried forward to future years. In addition, corporations may claim a credit of 24% of payments to qualified organizations for basic research.	None. *Update: In 2013, California enacted a sales and use tax exemption for manufacturing and research development limited to the first $200 million of purchases made during the calendar year. Not applicable to local sales and use taxes.*	California generally follows the federal definition of "qualified research expenditure" with some modifications, such as the definition of a "qualified organization" and the definition of gross receipts.
Colorado	Non-refundable income tax credit equal to 3% of expenditures on research and experimental activity above the average of those expenditures in the prior two years. The research and expenditure definition is based on the federal definition, but is not as strict. 25% of the earned credit may be claimed in the year it is earned and in each of the 3 following years.	None. *Update: In 2013, Colorado enacted a 2.9% refund on sales and use taxes for firms in the biotechnology, clean technology and/or medical devices industries.*	Research activity must be performed in an enterprise zone. The credit must be pre-certified by the zone administrator prior to the research expenditures being made. Prior to 2010, taxpayers were eligible for a refund of sales and use tax paid for property used in R&D if state revenue collections exceeded a certain level (TABOR), however this provision was repealed in 2010.
Connecticut	Includes 3 different business tax credits. (1) 20% of the	50% exemption for machinery and	If a company claims credit (3) and either (1) or (2), they must the

	research and experimentation expenditures (those that may be deducted under Section 174 of the Internal Revenue Code) that exceed the prior year. Credit is non-refundable but may be carried forward 15 years. (2) 25% of the amount spent on grants to Connecticut institutions of higher education for performing R&D activities. (3) A credit may be taken for the total R&D expenses made in a year, with the definition of expenditures including those deductible under Section 174 of the Internal Revenue Code and those defined under Section 41 of the Internal Revenue Code. The amount of the credit increases ratably with the amount of expenses made, starting at 1% for less than $50 million of expenses and increasing up to 6% for expenses exceeding $200 million. Qualified small businesses are eligible for the 6% credit regardless of total expenditures. No more than 1/3 of the amount of credit earned may be claimed in a year and the amount of credit claimed may not exceed 50% of tax liability, but unused credits may be carried forward to future years.	equipment used in R&D in furtherance of manufacturing tangible personal property.	amount of allowable expenditures claimed for credit (3), by the amount of excess expenditures they claimed for either (1) or (2).
Delaware	Taxpayers are eligible to claim a credit equal to either (1) 10% of their qualified R&D expenditures over a base amount, or (2) 50% of the amount of their federal R&D tax credit apportioned to	Delaware does not levy a sales tax.	Taxpayers must apply to the Director of the Department of Revenue to claim the credit. The tax credit currently sunsets on December 31, 2013.

	Delaware. Qualified research follows the definition in Section 41 of the Internal Revenue Code. Credits claimed in a year may not exceed 50% of a taxpayer's tax liability and unused credits may be carried forward for 15 years. The total amount of credits claimed by all taxpayers may not exceed $5 million in any fiscal year.		*Update: Delaware, in 2103, made its business tax incentive permanent.*
Florida	Credit equals 10% of qualified research expenses over the average of qualified research expenses made in the preceding 4 years. The definition of qualified research expenses follows the federal definition in Section 41 of the Internal Revenue Code. Credits may not exceed 50% of tax liability in a year, and unused credits may be carried forward for 5 years. Total credits taken by all taxpayers may not exceed $9 million in any one year.	Tangible personal property for use directly and solely in R&D is exempt for the state sales tax. Machinery and equipment used predominately for R&D are exempt from the state sales tax.	The credit was enacted in 2011 and will be first available for tax year 2012, making it the newest state R&D tax credit.
Georgia	If a taxpayer claims a federal R&D tax credit, they are eligible for a state credit of 10 percent of qualifying research expenses above a base amount. Qualifying research expenses follow the federal definition in Chapter 41 of the Internal Revenue Code, except that all wages paid and services and supplies purchased must be made in Georgia. The base amount is the current year Georgia gross receipts multiplied by the average ratio of state research expenses to state gross	None.	New business enterprises in their first 5 years can use unused credits against state payroll withholding. *Update: On May 3, 2012, Georgia signed into law the "Income tax credits" bill, which extended the "credits against payroll withholding" feature of the incentive to all qualified companies with an emphasis on the alternative energy, biomedical, biotechnology and telecommunications industries.*

	receipts for the prior 3 years, or 0.3, whichever is less. Credits may not exceed 50% of tax liability in a year, and unused credits may be carried forward for 10 years.		
Hawaii	None. *Update: On July 9, 2013, Hawaii introduced a 20% credit on qualified research expenses through the bill "Relating to economic development". The bill also included a High Technology Business Investment Tax Credit, which offered an 80% income tax credit to investors in high technology businesses of Hawaii. The investment credit is capped at $2 million per qualified business year.* *The new business and investment tax incentives are scheduled to sunset in 2019.*	None.	Hawaii previously provided a 20% refundable credit for qualified research activities, which expired on December 31, 2010.
Idaho	Non-refundable credit of 5% of qualified research expenses for research conducted in Idaho over the base amount and 5% of basic research payments. Qualified research expenses, base amount, and basic research payment definitions follow section 41 of the Internal Revenue Code. Credits may be carried forward for 14 years.	Tangible personal property primarily used in R&D activities is exempt from the state sales tax.	
Illinois	Non-refundable credit of 6.5% of qualifying research expenditures above the average of the previous three	None.	Illinois recently extended the sunset date of its research tax credit from 2011 until 2016. In the past, Illinois provided an exemption

	years qualifying research expenditures. Qualifying research expenditures follow the definition in Section 41 of the Internal Revenue Code. Unused credits may be carried forward for 5 years.		from the sales tax for tangible personal property used in R&D from July 1, 2007 to June 30, 2008.
Indiana	Research expense credit is equal to 15% of the first $1 million of qualified research expenses over a base amount and 10% of excess qualified research expenses above $1 million. Qualified research expense follows the definition in section 41 of the Internal Revenue Code; however, the base amount is a modification of the federal definition by including only Indiana qualified research expenses and gross receipts in the calculation of the taxpayers fixed base percentage and average annual gross receipts. The credit is non-refundable and may be carried forward for 10 years.	Beginning June 30, 2007 tangible personal property used for R&D equipment is exempt from the sales tax.	Indiana allows taxpayers engaged in aerospace manufacturing to use the alternative computation allowed under the federal credit definition.
Iowa	Research Activities Credit equal to 6.5% of qualified research expenditures in the state above a base amount. Qualified expenditures and base amount definitions follow section 41 of the Internal Revenue Code. The credit is refundable. Certain taxpayers can apply to the Economic Development Authority to receive a Supplemental RAC that can be as high as 10% depending on the size of the business.	The sale of computers, machinery, and equipment directly and primarily used in R&D of new products or processes of processing is exempt from the state sales tax.	Taxpayers can elect to calculate the credit using the Alternative Simplified Credit calculation, similar to the federal version of the ASC. No prior approval for the credit is required unless the taxpayer wishes to claim the supplemental credit.

Kansas	Credit for qualified R&D expenditures equal to 6.5% of expenditures over the average of the current year and prior 2 years expenditures. Qualified expenditures definition follows the federal definition in section 41 of the Internal Revenue, with some exceptions. Credit is non-refundable and 25% of the total amount of credit may be used in a single year. Unused credits may be carried forward until all of the credit is used.	None.	*Update: Beginning 2013, the credit will only be available to C corporations (corporations subject to Kansas corporate income tax)*
Kentucky	Non-refundable income tax credit equal to 5% of the qualified costs of constructing, remodeling, or equipping, or expanding facilities conducting qualified research. Unused credits may be carried forward for 10 years. The definition of qualified research follows section 41 on the Internal Revenue Code.	Companies can apply for a refund of sales tax on R&D equipment for certain economic development projects with a minimum $500 thousand investment.	Total sales tax refunds for all projects may not exceed $5 million in a single year.
Louisiana	Refundable tax credit based on the number of employees of the taxpayers. Qualified research expenses follow the federal definition in section 41 of the Internal Revenue Code. The base amount equals 70% of the annual average of qualified research expenses made in the preceding 3 years. If a company employees: (1) over 100 employees the credit is 8% of the qualified research expenses in the state in excess of the base amount, (2) between 50 and 99 employees the credit is 20% of the qualified research expenses in	None.	The credit is scheduled to sunset in 2019. All taxpayers must apply to the Department of Economic Development to receive the credit.

	the state in excess of the base amount, or (3) less than 50 employees the credit is 40% of the qualified research expenses in the state.		
Maine	Non-refundable Research expense credit equals to 5% of qualified research expenses in the state over a base amount plus 7.5% of basic research payments in the state. Qualified research expenses and basic research payments follow the definition in section 41 of the Internal Revenue Code. Base amount is the average of qualified research expenditures for the prior 3 years. If tax liability exceeds $25,000, the credit cannot reduce tax liability below 75% of the amount of tax liability above 25,000, and unused credits may be carried forward for 15 years. Taxpayers can also receive a “super credit” equal to the qualified research expenditures in excess of 1.5 times the base amount. Super credits are limited to 50% of the taxpayer’s tax liability and may be carried forward for 5 years.	Sale of machinery and equipment for use in a statutorily defined list of R&D purposes is exempt from the state sales tax.	Individual entities of a combined group can give unused credits to other entities within the group.
Maryland	Taxpayers are eligible a non-refundable credit equal to 3% of total qualified research and expenditure expenses in the state that are less than the base amount plus 10% of qualified research and expenditure expenses in the	The sale of tangible personal property for use in statutorily defined R&D activities is exempt from the state sales tax.	Taxpayers must file an application with the Department of Business and Economic Development to receive the credit. The total credit amount awarded to all taxpayers cannot exceed $6 million in a given year. The credits are scheduled to

	state in excess of a base amount. Qualified research and expenditure expenses and the base amount follow the federal definition in section 41 of the Internal Revenue Code, adjusted for expenses in Maryland. Unused credits may be carried forward for seven years.		sunset in 2020. *Update: Starting December 15, 2013, some small business will be able to receive a refund instead of the credit. Maryland also increased the total amount awarded to taxpayers from $6 million to $ 8 million. The Maryland biotechnology investment tax credit was extended to companies that have been active for more than 10 years.*
Massachusetts	Business corporations are eligible for a credit of 10% of qualified research expenses over a base amount, and 15% of basic research payments made to research organizations in the state. Qualified research expenses, base amount, and basic research payments all follow the federal definition in Section 41 of the Internal Revenue Code, except only apply to instate expenses. The credit may not reduce a taxpayer's liability below $456 and a taxpayer cannot earn a credit greater than the first $25,000 of tax liability and 75% of any liability over $25,000. Unused credits may be carried forward for an unlimited amount of time.	Sales of materials, tools, fuels, and machinery used directly and exclusively by a R&D corporation are exempt from the state sales tax.	Beginning in 2009, a company certified as a "life science company" is eligible for a refund of 90% of any unused research and expense credits in a given year. Life science companies include areas such as biomedical engineering, medical devices, pharmaceuticals, and stem cell research.
Michigan	None.	Tangible personal property used for industrial processing is exempt from the state sales tax. The	Michigan previously allowed a 1.9% R&D credit under the Michigan Business Tax.

		statutory definition of industrial processing includes research and experimental activities.	The MBT was replaced in 2012 with a 6% corporate income tax that does not include a R&D credit.
Minnesota	A refundable credit equal to 10% of first $2 million of qualified research expenses over the base amount plus 2.5% of the qualified research expenses in excess of $2 million over the base amount. Qualified research expenses and base amount follow the definition if Section 41 of the Internal Revenue Code, with adjustments made to include only expenses made in the state.	Machinery and equipment used for R&D is exempt from the sales tax.	Minnesota made its credit refundable in 2010 and added more entities to the list that was eligible to receive the credit.
Mississippi	Business or corporation may claim a tax credit of $1,000 for each full time employee requiring R&D skills for a 5 year period. There is no limit on the number of employees, but the total amount of credit may not exceed 50% of tax liability. Unused credits may be carried forward for 5 years.	None.	Taxpayers must apply to the Department of Revenue to be eligible for the Research and Development Skills Tax Credit.
Missouri	None.	Tangible personal property and utilities purchased for use or consumption directly or exclusively in the R&D of agricultural, biotechnology, plant genomics products, or prescription pharmaceuticals consumed by humans	Missouri previously had a 6.5% incremental credit that expired on January 1, 2005.

		or animals are exempt from the state sales tax.	
Montana	A R&D company is not subject to corporate income taxes for the first 5 years of activity in the state.	Montana does not levy a sales tax.	Montana previously had a 5% incremental, non-refundable tax credit that expired on December 31, 2010.
Nebraska	Two credits are available. (1) A refundable credit equal to 15% of the incremental qualified expenditures federal credit as defined by Section 41 of the Internal Revenue Code and (2) A refundable credit equal to 35% of the basic research payment federal credit as defined by Section 41 of the Internal Revenue Code made to a college or university in Nebraska. Only qualified research expenses made in Nebraska qualify for the credit. The amount of credit may also be used to claim a refund of sales and use tax paid by the taxpayer	None.	Beginning in 2009, all taxpayers claiming the credit must use the E-verify system to verify the work eligibility status of all employees hired in the year the credit is claimed.
Nevada	Nevada does not levy a business tax.	None.	
New Hampshire	Non-refundable credit equal to 10% of the qualified manufacturing R&D expenses. Total credit for a single taxpayer may not exceed $50,000 and unused credits may be carried forward for 5 years. Qualified manufacturing R&D expenses and the base amount definitions follow Section 41 of the Internal Revenue Code, except that	New Hampshire does not levy a sales tax.	Taxpayers must apply to the Commissioner of Revenue Administration to be eligible to claim the credit. Total amount of credits awarded to all taxpayers may not exceed $1 million in any one year. The credit was scheduled to expire on July 1, 2013, however the sunset date was recently extended until 2015.

	statutory adjustments are made to include only the manufacturing industry.		*Update: In August 2013, New Hampshire made its business tax credit permanent and increased the total amount of credits available to all taxpayers from $1 million to $2 million.*
New Jersey	Non-refundable credit equal to 10% of the qualified research expenses in the state over the base amount and 10% of the basic research payments made in the state. Qualified research expenses, base amount, and basic research payment definitions follow Section 41 of the Internal Revenue Code. Unused credits may be carried forward for 7 years.	Sales of tangible personal property, except energy, and digital property purchased for use or consumption directly and exclusively in R&D in the experimental or laboratory sense are exempt from the state sales tax.	Prior to 2012, the amount of credit claimed in a year could not exceed 50% of tax liability. Beginning in 2012, the amount of credit can reduce tax liability by greater than 50%, as long as tax liability does not fall below the statutory minimum amount of tax due in the state.
New Mexico	A credit for a qualified R&D small businesses equal to sum of all gross receipts taxes or 50% of withholding taxes paid on behalf of employees during a reporting period. To be a small business a business must employ less than 25 employees and have total revenue of no more than $5 million.	None.	The tax credit expired on June 30, 2009 and was inactive for 2 years. The credit was reenacted on July 1, 2011 and will sunset on June 30, 2015.
New York	Taxpayers must apply to Empire State Development to participate in the Excelsior Jobs Program. If approved, taxpayers may claim a credit for R&D expenses made in New York equal to 50% of their federal research and experimentation credit claimed under Section 41 of the Internal Revenue Code. The credit is capped at 3% of total research and expenditure expenses made in New York.	Fuel oil, gas, electricity, refrigeration, and steam; and gas, electric, refrigeration, and steam service used directly and exclusively in R&D is exempt from the state sales tax. Tangible personal property used or consumed directly in R&D is exempt from the sales	The state previously had a 9% credit for qualified research expenses made by qualified emerging technology companies that met certain conditions. The credit expired on December 31, 2011.

	Unused credits may be carried forward for 10 years.	tax.	
North Carolina	Credit for qualified North Carolina research expenses of (1) 1.25% of expenses less than $50 million, (2) 2.25% of expenses between $50 million and $200 million, and (3) 3.25% of expenses above $200 million. Taxpayers may claim a credit of 20% for any North Carolina University research expense. Beginning in 2011, research performed in an Eco-Industrial Park is eligible for a credit of 35% of eligible expenses. Amount of credit may not exceed 50% of tax liability and unused credits may be carried forward for 15 years.	A R&D company in the physical, engineering, and life sciences is eligible to purchase tangible personal property used for R&D at a reduced sales tax rate of 1%. The statutory sales tax rate is 4.75%	The tax credit is scheduled to sunset on December 31, 2014. *Update: On July 17, 2013, the business tax incentive was extended through 2015*
North Dakota	A non-refundable credit equal to 25% of the first $100,000 of qualified research expenses over the base amount and 8% of all qualified research expenses more than $100,000 in excess of the base amount. Qualified research expenses and base amount definitions follow Section 41 of the Internal Revenue Code, with adjustments to only include expenses in North Dakota. Unused credits may be carried back for 3 years or carried forward for 15 years.	None.	Prior to 2010, the credit percentage was larger for expenses over $100,000, but the total credit was capped at $2 million
Ohio	A non-refundable credit equal to 7% of the qualified research expenses in excess of the average qualified research expenses made in the prior 3 years. Qualified research	Capitalized tangible personal property used primarily to perform R&D is exempt from the sales tax.	

	expense follows the definition under Section 41 of the Internal Revenue Code. Unused credits may be carried forward for 7 years. In addition, taxpayers who have borrowed money through the state's R&D loan fund are eligible for a credit equal to the qualified R&D loan payments made during the previous year. This credit may not exceed $150,000 in single tax year.		
Oklahoma	Taxpayers may claim a non-refundable credit of $500 per employee for each new employee added in a year engaged in R&D, capped at 50 employees per year. Unused credits in a year may carry forward for 4 years.	Taxpayers in a R&D NAICS industry are eligible for a sales tax refund on the purchase of computers, data processing equipment, related peripherals, telegraph or telecommunications services, and equipment.	The jobs credit expired July 1, 2010, but was renewed on July 1, 2012.
Oregon	Taxpayers can elect to take one of two credits (but not both): A non-refundable credit of 5% of qualified research expenses and basic research payments over a base amount, or a non-refundable credit of qualified research expenses that exceed 10% of Oregon sales. If the second credit is used, the amount of credit is capped at $10,000 times the percentage amount that qualifying research expenses exceed 10% of Oregon sales. Both credits are capped at $1	Oregon does not levy a sales tax.	Oregon recently extended the sunset date of the credit from 2012 to 2018 and reduced the maximum credit per taxpayer from $2 million to $1 million.

	million per taxpayer. Qualified research expenses, basic research payments, and base amount follow the definitions in Section 41 of the Internal Revenue Code, with adjustments made to apply only to Oregon expenses. Unused credits may be carried forward for 5 years.		
Pennsylvania	Non-refundable credit equal to 10% (20% for a “small” business, whose total business assets are less than $5 million) of qualified research expenses over the product of the fixed-base percentage and the average annualized gross receipts of the taxpayer for the previous 4 years. Qualified research expenses follow the definition in Section 41 of the Internal Revenue Code. Unused credits may be carried forward for 15 years or sold to another taxpayer. If sold, the credit cannot exceed 75% of the purchaser’s tax liability.	Tangible personal property and services used directly in research having as its objective the production of a new or improved product or utility service or method of producing a product or utility service is exempt from the state sales tax.	Taxpayers must submit an application to the Department of Revenue to receive the credit. The amount of credit to all taxpayers is capped at $55 million in a year. The credit is currently set to sunset in 2016.
Rhode Island	A non-refundable credit equal to 22.5% for the first $111,111 of qualified research expenses over the base period, and 16.9 percent for the qualified research expenses in excess of $111,111 over the base period. Qualified research expenses and base period follow the same definition as Section 41 of the Internal Revenue Code. The credit may not reduce tax liability by more than 50% and unused credits may be carried forward for 7 years. Taxpayers are also	Scientific equipment, computers, software, and related items used for R&D purposed are exempt from the sales tax.	

	eligible for a credit equal to 10% of the cost of tangible personal property, including buildings and components of buildings that are used principally for purposes of R&D.		
South Carolina	A credit equal to 5% of qualified research expenses made in South Carolina. Qualified research expense follows the definition in Section 41 of the Internal Revenue Code. A credit may not reduce a taxpayer's liability by more than 50% in a year and unused credits may be carried forward for 10 years.	Machines used in R&D are exempt from the sales tax.	Taxpayers operating a R&D facility may qualify for a jobs credit depending on the county they are located in.
South Dakota	South Dakota does not levy a business tax.	None.	
Tennessee	None.	None.	R&D enterprises can qualify for a jobs credit based on the number of jobs created and the size of their capital investment.
Texas	None. *Update: On June 14, 2013, Texas reinstated the "Texas Franchise Tax Credit" for qualified research activities, which will be effective beginning in 2014. The credit is equal to 5% of excess research expenses over 50% of the prior3 year average, which is about equivalent to the federal method of calculating the credit). The credit is increased to 25% if taxpayers contract a*	None. *Update: Taxpayers may elect sales tax exemption instead of the credit.*	Texas previously had an incremental nonrefundable credit that was repealed, effective January 1, 2008.

	public institution of higher education. The credit may be carried forward 20 years. The credit is limited to 50% of a taxpayer's Texas Franchise Tax liability.		
Utah	Non-refundable credit equal to 5% of a taxpayer's qualified research expenses that exceed the base amount and a nonrefundable credit equal to 7.5% of basic research payments to a qualified organization. Qualified research expenses, base amount, and basic research payments all follow the definition from Section 41 of the Internal Revenue Code, with an adjustment made to apply to expenses and payments in Utah. The unused portion of the 5% credit may be carried forward for 14 years, but the 7.5% credit may not be carried forward	Construction materials used in the construction of a new or expanding life science R&D facility and machinery and equipment that are used in performing qualified research are exempt from the state sales tax.	Utah's qualified research expenses credit expired in 2011, but was renewed in 2012. The sales tax exemption was enacted in 2012.
Vermont	None.	Tangible personal property used directly or exclusively in R&D is exempt from the state sales tax.	Beginning in 2011, Vermont has a credit equal to 30% of the federal credit for qualified research expenses performed in Vermont. Since the credit is tied to federal version, it also expired in 2012, but will be reinstated if and when the federal credit is reinstated.
Virginia	A credit equal to 15% of the first $167,000 of qualified research expenses in excess of the base amount or 20% of the first $175,000 of qualified research expenses in excess of the base amount if the research is conducted in conjunction with a Virginia	Tangible personal property used directly and exclusively in basic research or R&D in the experimental or laboratory sense is exempt from the state sales tax.	A previous version of the credit expired at the end of 2010. The current version was implemented in 2011 and will sunset at the end of 2015. There is a statewide cap of total credits awarded of $5 million.

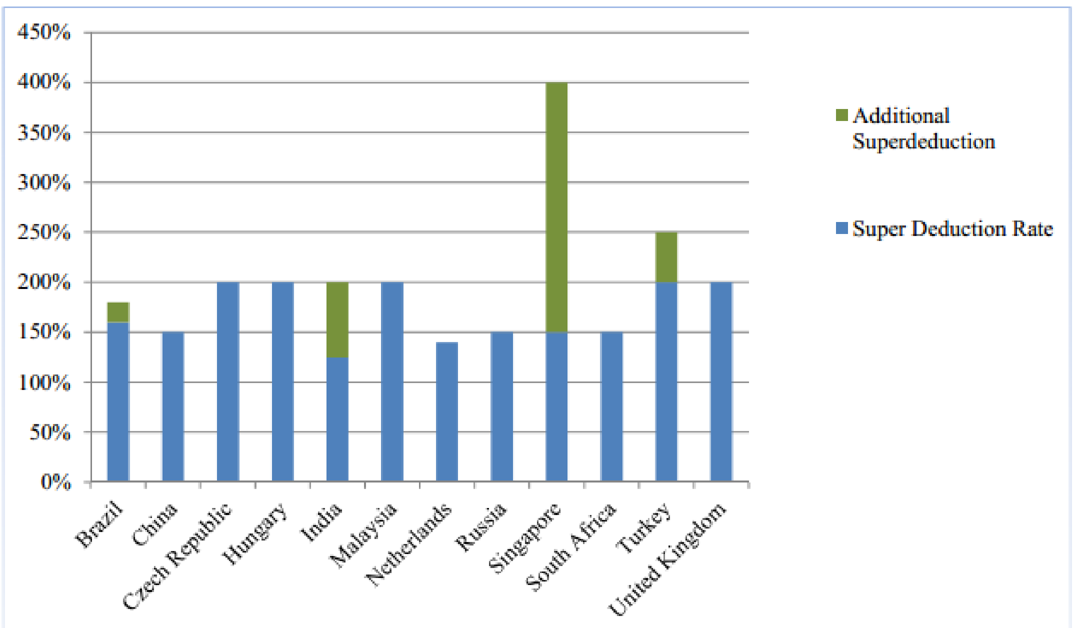
	college or university. Qualified research expenses and base amount follow the definition in Section 41 of the Internal Revenue Code, with an adjustment made to apply only to expenses incurred in the state. Tax credits in excess of a taxpayer's liability are refundable.		
Washington	A credit against the state Business and Operations (gross receipts) tax is given if taxpayers qualified R&D spending exceeds 0.92 percent of their taxable income during the year. The credit is equal to 1.5% of the difference of these two amounts. The credit is capped at $2 million per taxpayer, is nonrefundable, and may not be carried forward to future years. Washington has its own definition of qualified R&D expenditures and must be performed in one of 5 specific fields.	Sales to a public research institution of machinery and equipment used primarily in a R&D operations are exempt from the state sales tax.	Its credit is scheduled to expire on January 1, 2015. Taxpayers claiming the credit must complete an annual survey with information on the jobs created by the research and the output of the research, such as new products, patents, or trademarks.
West Virginia	A credit equal to the greater of 3% of annual qualified R&D expenditures or 10% of annual qualified R&D expenditures over the base amount. West Virginia has statutory definitions of qualified research and expenditures and base amount that are broader in scope than the federal definition. The credit is refundable for businesses with revenues less than $20 million and payroll less than $2.5 million. For other businesses, unused credits may be carried	Sales of tangible personal property and services directly used or consumed in the activity of R&D are exempt from the state sales tax.	Taxpayers must apply to the tax commissioner to be eligible to receive the credit.

	forward for 10 years. Credits are capped at $2 million per year.		
Wisconsin	A non-refundable credit equal to 5% of the qualified research expenses over the base amount and 5% of the amount paid to construct and equip new facilities or expand existing facilities for qualified research. Qualified research expenses and base amount follow the definition in Section 41 of the Internal Revenue Code with an adjustment made to apply only to expenses in Wisconsin. Unused credits may be carried forward for 15 years. The amount of credit increases to 10% if the research is related to designing internal combustion engines or the design and manufacturing of energy efficient lighting systems, building automation and control systems, or automotive batteries for use in hybrid-electric vehicles. In addition, taxpayers are eligible for a “super” credit equal to 100% of the qualified research expenses over 1.25 times the average of qualified research expenses made in the prior 3 years. The super credit is non-refundable and may be carried forward for 5 years.	Machinery and equipment, including attachments, parts, and accessories, and tangible personal property that are sold to entities engaged primarily in manufacturing or biotechnology in this state and are used exclusively and directly in qualified research.	The super R&D credit was recently enacted in tax year 2011. The sales tax exemption was enacted beginning in 2012. *Update: Wisconsin extended its business tax incentive to individuals, S-companies, partnerships and some limited liability corporations.*
Wyoming	Wyoming does not levy a business tax.	None.	

APPENDIX C.

The "super R&D credit" or "super deduction" has become increasingly popular internationally, with twelve countries offering such incentives as of 2012. Following is a summary of countries offering super deductions. (Deloitte Global R&D Survey, 2012).
http://www.investinamericasfuture.org/PDFs/Global_RD_Survey_September_2012_FINAL.pdf

Jurisdictions Offering Super Deductions:



Note: For the United Kingdom, the super deduction is currently 200% for SMEs and 130% for non-SMEs.

The United Kingdom is a country of particular interest in this list. Indeed, the UK is the country to attract the most R&D investment from the US. Deloitte found that US-affiliated investments on UK-based R&D amounted to $4 billion in 2003.

The R&D industry is fast growing in China. Today it can claim the largest number of science graduate students. Recently, the country has also drawn major global firms such as Dow Chemical, Philips, Nestle, Bosch and Shell to establish their R&D centers. http://chinaipsummit.com/2012/press_1123/30.html

The US' generosity in subsidies offered to encourage R&D activities has steadily declined so that the US currently ranks 27th in the world, while it was 23rd in 2007. This might indicate that the United States' R&D is not currently as competitive as it could be and that the country is not creating as many jobs as it could with an improved tax credit (Stewart, L. A., Warda, J. & Atkinson, R. D., 2012). http://www2.itif.org/2012-were-27-b-index-tax.pdf

Battelle and R&D magazine found that China is projected to pass the United States in 2022 in R&D expenditure.

Within the United States, Maine and Wisconsin offer super credit schemes, for firms with qualifying research and development expenditures respectively 1.5 and 1.25 times over the base amount. No study has specifically examined the effectiveness of these credits.

APPENDIX D.

The following is a summary of state corporate income tax rates for 2013 promulgated by the Federation of Tax Administrators. http://www.taxadmin.org/fta/rate/corp_inc.pdf

RANGE OF STATE CORPORATE INCOME TAX RATES

(For tax year 2013 -- as of January 1, 2013)

STATE	TAX RATE (percent)	TAX BRACKETS LOWEST		TAX BRACKETS HIGHEST	NUMBER OF BRACKETS	TAX RATE (a) (percent) FINANCIAL INST.	FEDERAL INCOME TAX DEDUCTIBLE
ALABAMA	6.5		----Flat Rate----		1	6.5	Yes
ALASKA	1.0 - 9.4	9,999		90,000	10	1.0 - 9.4	
ARIZONA	6.968 (b)		----Flat Rate----		1	6.968 (b)	
ARKANSAS	1.0 - 6.5	3,000		100,001	6	1.0 - 6.5	
CALIFORNIA	8.84 (c)		----Flat Rate----		1	10.84 (c)	
COLORADO	4.63		----Flat Rate----		1	4.63	
CONNECTICUT	7.5 (d)		----Flat Rate----		1	7.5 (d)	
DELAWARE	8.7		----Flat Rate----		1	8.7-1.7 (e)	
FLORIDA	5.5 (f)		----Flat Rate----		1	5.5 (f)	
GEORGIA	6.0		----Flat Rate----		1	6.0	
HAWAII	4.4 - 6.4 (g)	25,000		100,001	3	7.92 (g)	
IDAHO	7.4 (h)		----Flat Rate----		1	7.4 (h)	
ILLINOIS	9.5 (i)		----Flat Rate----		1	9.5 (i)	
INDIANA	8.0 (j)		----Flat Rate----		1	8.5	
IOWA	6.0 - 12.0	25,000		250,001	4	5.0	Yes (k)
KANSAS	4.0 (l)		----Flat Rate----		1	2.25 (l)	
KENTUCKY	4.0 - 6.0	50,000		100,001	3	--- (a)	
LOUISIANA	4.0 - 8.0	25,000		200,001	5	4.0 - 8.0	Yes
MAINE	3.5 - 8.93	25,000		250,000	4	1.0 (m)	
MARYLAND	8.25		----Flat Rate----		1	8.25	
MASSACHUSETTS	8.0 (n)		----Flat Rate----		1	9.0 (n)	
MICHIGAN	6.0		----Flat Rate----		1	--- (a)	
MINNESOTA	9.8 (o)		----Flat Rate----		1	9.8 (o)	
MISSISSIPPI	3.0 - 5.0	5,000		10,001	3	3.0 - 5.0	
MISSOURI	6.25		----Flat Rate----		1	7.0	Yes (k)

MONTANA	6.75 (p)		----Flat Rate----		1	6.75 (p)	
NEBRASKA	5.58 - 7.81		100,000		2	--- (a)	
NEVADA	--		No corporate income tax				
NEW HAMPSHIRE	8.5 (q)		----Flat Rate----		1	8.5 (q)	
NEW JERSEY	9.0 (r)		----Flat Rate----		1	9.0 (r)	
NEW MEXICO	4.8 - 7.6	500,000		1 million	3	4.8 - 7.6	
NEW YORK	7.1 (s)		----Flat Rate----		1	7.1 (s)	
NORTH CAROLINA	6.9		----Flat Rate----		1	6.9 (t)	
NORTH DAKOTA	1.68 - 5.15	25,000		50,001	3	7 (b)	Yes
OHIO	(u)					--- (u)	
OKLAHOMA	6.0		----Flat Rate----		1	6.0	
OREGON	6.6 - 7.6 (v)		10 million		2	6.6 - 7.6 (v)	
PENNSYLVANIA	9.99		----Flat Rate----		1	--- (a)	
RHODE ISLAND	9.0 (b)		----Flat Rate----		1	9.0 (b)	
SOUTH CAROLINA	5.0		----Flat Rate----		1	4.5 (w)	
SOUTH DAKOTA	--		No corporate income tax			6.0-0.25% (b)	
TENNESSEE	6.5		----Flat Rate----		1	6.5	
TEXAS	(x)					(x)	
UTAH	5.0 (b)		----Flat Rate----			5.0 (b)	
VERMONT	6.0 - 8.5 (b)	10,000		25,000	3	--- (a)	
VIRGINIA	6.0		----Flat Rate----		1	6.0	
WASHINGTON	--		No corporate income tax				
WEST VIRGINIA	7.0 (y)		----Flat Rate----		1	7.0 (y)	
WISCONSIN	7.9		----Flat Rate----		1	7.9	
WYOMING	--		No corporate income tax				
DIST. OF COLUMBIA	9.975 (b)		----Flat Rate----		1	9.975 (b)	

APPENDIX E.

The Tax Foundation, "***2014 State Business Tax Climate Index.*** http://taxfoundation.org/article/2014-state-business-tax-climate-index

Table 1: *2014 State Business Tax Climate Index* Ranks and Component Ranks

State	Overall Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemployment Insurance Tax Rank	Property Tax Rank
Alabama	21	19	22	37	15	10
Alaska	4	28	1	5	29	25
Arizona	22	26	18	49	1	6
Arkansas	35	39	26	42	11	19
California	48	31	50	41	16	14
Colorado	19	21	15	44	28	22
Connecticut	42	35	33	32	23	49

State	Overall Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemployment Insurance Tax Rank	Property Tax Rank
Delaware	13	50	28	2	2	13
Florida	5	13	1	18	6	16
Georgia	32	8	41	12	24	31
Hawaii	30	4	35	16	38	12
Idaho	18	18	23	23	47	3
Illinois	31	47	11	33	43	44
Indiana	10	24	10	11	13	5
Iowa	40	49	32	24	36	38
Kansas	20	37	17	31	12	29
Kentucky	27	27	29	10	48	17
Louisiana	33	17	25	50	4	24
Maine	29	45	21	9	33	40
Maryland	41	15	46	8	40	41
Massachusetts	25	34	13	17	49	47
Michigan	14	9	14	7	44	28
Minnesota	47	44	47	35	41	33
Mississippi	17	11	20	28	5	32
Missouri	16	7	27	26	9	7
Montana	7	16	19	3	21	8
Nebraska	34	36	30	29	8	39
Nevada	3	1	1	40	42	9
New Hampshire	8	48	9	1	46	42
New Jersey	49	41	48	46	32	50
New Mexico	38	40	34	45	17	1
New York	50	25	49	38	45	45
North Carolina	44	29	42	47	7	30
North Dakota	28	22	38	21	19	2
Ohio	39	23	44	30	10	20
Oklahoma	36	12	39	39	3	11
Oregon	12	32	31	4	34	15
Pennsylvania	24	46	16	19	39	43
Rhode Island	46	43	36	27	50	46
South Carolina	37	10	40	22	30	21
South Dakota	2	1	1	34	37	18
Tennessee	15	14	8	43	27	37
Texas	11	38	7	36	14	35

State	Overall Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemployment Insurance Tax Rank	Property Tax Rank
Utah	9	5	12	20	18	4
Vermont	45	42	45	13	22	48
Virginia	26	6	37	6	35	26
Washington	6	30	1	48	20	23
West Virginia	23	20	24	25	26	27
Wisconsin	43	33	43	15	25	36
Wyoming	1	1	1	14	31	34
Dist. of Columbia	*44*	*35*	*34*	*41*	*26*	*44*

Note: A rank of 1 is more favorable for business than a rank of 50. Rankings do not average to total. States without a tax rank equally as 1. D.C. score and rank do not affect other states. Report shows tax systems as of July 1, 2013 (the beginning of Fiscal Year 2014).
Source: Tax Foundation.

APPENDIX F.

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