

Research & Development Overview



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What is R&D?



- **Research & Development:** Activities that a company conducts with the intent of making a discovery that leads to the development of new or improved products or procedures
- The federal and state government subsidize R&D activities: tax preferences, grants, budget items, spending through higher ed, etc.

R&D Spending in Virginia: The Big Picture



- Virginia contributes to R&D in many ways: tax preferences, grant programs, consortiums, general fund dollars to universities for research programs
- In Fiscal Years 2015 & 2016, at least **\$103 million** is attributable to research and development activities
 - ✦ This is a conservative estimate
 - ✦ Does not include economic development activities, facilities & equipment, nongeneral fund dollars

Examples of R&D Spending



- **The Commonwealth Research Commercialization Fund: \$3.8 M (FY15), \$3.8 M (FY 16)**
 - § 2.2-2233.1 of the Code of Virginia: Matching grant funds, commercialization program, eminent researcher recruitment
 - Proposed project must fit into a topic identified in the Commonwealth Research & Technology Strategic Roadmap (advanced manufacturing, aerospace, communications, cyber, energy, environment, IT, life sciences, modeling & simulation, nuclear physics, transportation)

Examples of R&D Spending



- **The Catalyst: Item 101 (J) of the Budget**
 - \$2.5 M (FY16)
 - Non-stock corporation research consortium initially comprised of UVa, VCU, VT, GMU, EVMS
 - Contract with private entities or other government sources to perform biosciences-related research

Examples of R&D Spending



- Direct allocation of general fund dollars to public institutions of higher education
 - ODU: \$2.1M (FY15), \$2.1M (FY16) to build research capacity in modeling and simulation
 - VCU: \$319,750 (FY15), \$319,750 (FY16) for Alzheimers and related diseases research award fund
 - UVa: \$1.6M (FY15), \$1.6M (FY16) to build research capacity in bioengineering and biosciences
 - VT: \$1.75M (FY15), \$3M (FY16) to support and enhance brain disorder research

Virginia Sales & Use Tax Exemption



- § 58.1-609.3(5) provides a sales and use tax exemption for tangible personal property used directly and exclusively in basic research, or research and development
 - Department of Taxation estimates that the exemption resulted in a reduction of revenue of \$5.9M for FY15.
 - Estimates in previous years have been as high as \$11.8M (FY97)

Virginia Research & Development Tax Credit



- § 58.1-439.12:06: Tax credit for certain expenses incurred by a taxpayer for research conducted in Virginia (adopted 2011)
- \$6M cap on total amount of credits be awarded in a given year
- Involves calculating of a “Virginia base amount” for a taxpayer; credit is equal to:
 - ✦ 15% of the first \$234,000 in qualified expenses that exceed the base amount; or
 - ✦ 20% of the first \$234,000 in qualified expenses that exceed the base amount if the research was conducted in conjunction with a public or private Virginia college or university
- Credit is refundable
- Credit is pro-rated if applications received for more than \$6M in credits
- Sunsets January 1, 2019

Virginia Research & Development Tax Credit



- Base amount: Formula tracks federal definition (although only taking into account research conducted in the Commonwealth)
 - A complex formula based upon the percentage which the aggregate research expenses for years 1984-1989 is of the aggregate gross receipts for the same years, multiplied by the average annual gross receipts of the taxpayer for the 4 taxable years preceding the year in which the credit is being determined.
- Department of Taxation reports that for taxable year 2014, 230 applications for \$6.19M in credits were approved
 - ✦ With proration, a taxpayer received 97% of requested credits

HB 1743 (2015) Fiscal Impact



- Instead of using complex “base amount” formula, uses federal alternative simplified credit model: look at average qualified research expenses over previous three years; credit is a percentage of expenses that exceed 50 percent of the average
- If amendments similar to those proposed in HB 1743 were adopted (using a simplified formula and no overall cap), Department of Tax estimates a \$23.7M fiscal impact
 - ✦ Assumes a 10% credit rate (7% reduced rate)
 - ✦ Assumes a minimum of \$5M in qualified research expenditures
 - ✦ Assumes credit continues to be refundable
- Adopting same assumptions, but with a non-refundable credit, Tax estimates a \$11.1 fiscal impact

R&D Credits in Other States



- Approximately 4/5 of the states have some sort of research & development tax credit
 - ✦ Most are derivative of the federal credit (but focusing on in-state expenditures)
 - Six states use the simplified model for at least some industries
 - Ex: Indiana appears to use the “traditional” method of calculation for its credit, but allows the aerospace industry to make an election to use the simplified method to calculate the credit
 - ✦ Virginia is one of five states that provides for a fully refundable credit
 - A few other states make the credit refundable for small businesses, or for businesses performing research in particular fields
 - Most states allow carry-forward if not refundable

North Carolina



- Credit expires in 2016 – part of larger tax reform package
- Credit ranging from 1.25%-20% of expenses, depending on size of company, total amount of R&D expenses, and whether expense was for research with NC university
- Other requirements apply:
 - ✦ Meet wage standard
 - ✦ Provide health insurance for employees
 - ✦ Maintain good environmental record
 - ✦ Maintain good OSHA record

West Virginia



- R&D Tax Credit was repealed by 2014 Session

Maryland



- Maryland “base” = business’ average R&D expenses over the last four years
- Credit has two tiers:
 - ✦ Basic credit: \$4.5M cap
 - 3% of expenses that don’t exceed the base
 - Prorated: \$27.9M in application = 0.48% credit (2012)
 - ✦ Growth credit: \$4.5M cap
 - 10% of expenses that exceed the base
 - Prorated: \$22.3M in application = 2.02% credit (2012)
- Credits can be carried forward for 7 years; refundable for small businesses

Pennsylvania



- Credit is available for an increase in R&D expenditures over a base year at a rate of 20% for small businesses, 10% for other businesses
- \$55M Cap (\$11M set aside for small businesses)
- Unique feature: Credits can be sold/assigned to other taxpayers, or carried over for 15 years
- In 2013, small business received 100% of requested credits
- In 2013, other business received 54% of requested credits (\$94.5M in requests for \$55M cap)

Texas



- A newer credit – established 2014
- Amount of credit is 5 - 6.25% of the difference between research expenses and the average amount of research expenses in the preceding three years (simplified model)
- Taxpayer must chose between the tax credit, and a sales tax exemption for property purchased and used in research & development – cannot use both preferences