



Economic and Fiscal Impacts of MBIA

Executive Summary

Revvng up Maryland's Commercialization Engine

The Sage Policy Group (Sage) was asked by the Maryland Business Incubation Association (MBIA) to evaluate the economic and fiscal impacts of incubators in Maryland. Sage undertook this study with support from MBIA along with added support from several of its member incubators: Sage Growth Partners, Emerging Technology Centers, BioHealth Innovation, and Montgomery County Business Innovation Network. The study was based upon two surveys, the first of current incubator tenant and associate companies, and the second of incubator operations. The response rate to the surveys was 75 percent. No survey was performed of incubator graduates because of complexity and time constraints; however, examples of incubator graduate success are cited.

Most Marylanders know that the Free State is home to an abundance of institutional and human capital assets. There may be no state in the country with as many high profile institutions as Maryland, which can boast the National Institutes of Health, the Food & Drug Administration, Johns Hopkins, the University of Maryland, the U.S. Naval Academy, the National Security Agency, Fort Detrick, the National Institute of Standards and Technology, Andrews Air Force Base, NASA Goddard Flight Center, the Port of Baltimore, BWI, the Naval Surface Warfare Center, the Patuxent River Naval Air Station, Aberdeen Proving Ground, Under Armour, T. Rowe Price, Legg Mason, Lockheed Martin, MedImmune, Marriott, McCormick Spice Co., W.R. Grace, Perdue and an array of other independent and public colleges and universities, regional headquarters, and operational centers.

Despite this, Maryland is not considered a national leader in technology commercialization. While developers in Silicon Valley and Boston struggle to keep up with demand for office and laboratory space, Maryland produces precious few technology giants. Incubators represent a way for Maryland to close the commercialization gap; to translate our prodigious R&D resources into global commerce and job creation.

To assess the collective economic impacts of Maryland's business incubators, the Sage study team utilized IMPLAN modeling software, which embodies multipliers specific to Maryland's economy. Impacts are measured in the form of jobs, associated income, augmented commercial sales, and State tax revenues. The economic and fiscal contributions generated by 23 incubator organizations (collectively managing 30 incubators, their tenants and associates are assessed and measured.

These incubators stretch across the state, supporting entrepreneurship in rural and urban communities alike. The incubators, which produce a pipeline of new businesses in typically high-wage, high-growth, technology-oriented sectors, represent a significant step toward improving the State's economic environment. By fostering business development in smaller communities, integrating higher education institutions into

economic development roles, and harnessing the State's wealth of mature companies, universities, and federal resources, incubators bolster Maryland's economy in a number of meaningful ways.

In total, the presence of incubators in Maryland is associated with support for approximately 4,100 jobs, \$310 million in compensation, \$635 million in augmented commercial activity, and \$27.5 million in additional State of Maryland taxes. If companies that did not participate in the survey are similar to those that reported their financial and operational data, the annual commercial impact of incubated firms is in the range of \$800 million. If one adds in incubator graduates, commercial impact surges even higher.

Our analysis indicates that incubators are both effective and efficient. Effectiveness pertains to an endeavor's capacity to positively alter outcomes, and Maryland's incubators generate desirable outcomes. Efficiency pertains to the ability of an endeavor to generate elevated returns for each amount of resource expended. Many of the incubators operating in Maryland today are young and small. Despite that, they are already impacting their local economies and addressing a key historic shortcoming of Maryland's economy – translating our massive R&D programs into viable commercial opportunities in order to advance science, cure disease, reduce unemployment and poverty, and enhance fiscal sustainability.

Principal Analytical Findings

- Tenant and Associate Operations
 - The incubators nurture roughly 550 tenant and associate companies at any given time;
 - Based on survey data, these 500+ companies directly support at least 1,780 FTE jobs. That figure rises to roughly 3,900 once multiplier effects are properly considered;
 - Those nearly 3,900 positions are associated with \$295 million in compensation each year;
 - That compensation produces nearly \$7 million in local income taxes and \$11 million in State income taxes per annum;
 - Annual business sales in Maryland are augmented by approximately \$615 million due to the operations of incubator tenants and associates despite the fact that some of these companies are pre-revenue; and,
 - Total State of Maryland tax revenues are bolstered by approximately \$26 million per year due to the presence of incubated companies.

- Incubator Operations
 - The 30 incubators associated with MBIA account for 119 direct jobs within the State and 195 jobs when one considers indirect and induced impacts.
 - Those jobs are associated with over \$14 million in employee compensation per annum.
 - Business sales are augmented by over \$20 million due to local incubator operations.
 - Operation of the 25 incubators generates roughly \$1.5 million in additional tax revenue for the State on an annual basis.

About MBIA

The Maryland Business Incubation Association (MBIA) is a nonprofit organization representing 30 incubators in Maryland. Spanning all regions of the state, our incubators are the key drivers of economic development for their localities. They represent the leading edge of entrepreneurship and technology innovation in areas such as biotechnology, software development, cyber security, health, education technology and energy/environment. MBIA serves its members by sharing best practices, providing shared services and educating stakeholders about the benefits of business incubation. See our website, www.incubatemaryland.org.

About Sage Policy Group, Inc.

Sage Policy Group, Inc. [SAGE], a Sub Chapter S Corporation, was established in 2004 by Anirban Basu. Sage is an eleven-person economic and policy consulting firm specializing in economic, fiscal and legislative analysis, program evaluation, and organizational and strategic development. The firm's clients include public agencies at every level of government, law firms, developers, money managers and an array of nonprofit organizations operating in a variety of segments. As experts in research methods, our corporate focus is to use sound, widely accepted analytical techniques that provide our clients and their stakeholders with valid and reliable knowledge and information to support critical organization and decision-making requirements.

About IMPLAN

IMPLAN is an economic impact assessment software system. The system was originally developed and is now maintained by the Minnesota IMPLAN Group (MIG). It combines a set of extensive databases concerning economic factors, multipliers and demographic statistics with a highly refined and detailed system of modeling software. IMPLAN allows the user to develop local-level input-output models that can estimate the economic impact of new firms moving into an area as well as the impacts of professional sports teams, recreation and tourism, and residential development. The model accomplishes this by identifying direct impacts by sector, then developing a set of indirect and induced impacts by sector through the use of industry-specific multipliers, local purchase coefficients, income-to-output ratios, and other factors and relationships.