

Ohio consortium boosts bioscience training through grants

Like much of the Rust Belt, north central Ohio has been hit hard by the manufacturing sector's decline. In the last two years, however, regional education providers and local planners have used a bioscience initiative to help create high-wage opportunities for the workforce in a predominantly rural area.

Regional stakeholders seek to offset heavy job losses

In December 2008, General Motors cut a work shift at its metal stamping plant in Mansfield, Ohio—the latest in a series of blows for the region's labor force. At its peak, GM employed approximately 3,000 people at the Mansfield plant; now the number is closer to 1,200. To make matters worse, the GM layoffs have coincided with smaller-scale job loss at other manufacturing firms in the region, including many auto supplier companies.

While the auto industry's presence has slowly diminished in north central Ohio, a consortium of education providers, business leaders, and researchers are exploring ways to diversify the regional economy. One promising avenue is increasing training opportunities for those interested in bioscience careers. After securing a large earmark grant in early 2008 to get the process started, four education institutions, including **North Central State College**, recently were awarded a \$500,000 “Choose Ohio First” grant to fund scholarships for up-and-coming students.

Labor market projections, impact assessments key to grant success

While there are a number of established and budding bioscience firms in the region, finding a ready supply of skilled workers to meet the companies' demand has been a challenge. Ohio produced 5,000 graduates with bioscience-related degrees in 2006, but many left the state or pursued medical school. To help fill the shortage, stakeholders came together in 2006 to start the BioScience Consortium of Northeast Ohio. The diverse partnership seeks to begin students' training at the high school level and create a career pathway through the master's degree level.

The consortium's most recent grant focuses on meeting the demand in areas such as research, testing and medical laboratories (RTML), agricultural bioscience, and the pharmaceutical industry. Tom Prendergast, Director of Institutional Research at NC State College, used EMSI's labor market data and projections to show that the region's RTML and agricultural bioscience employment is expected to grow by 15% through 2013 with the median earning level at more than \$53,000 per year.

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--Tom Prendergast, Director
of Institutional Research, North
Central State College

Next, with EMSI's input-output tool, Prendergast quickly determined that the addition of **147 new jobs** in the testing laboratory sector will lead to **128 spin-off jobs** in the region and increase regional earnings by **\$11 million**. Showing the demand and impact was vital to earning the grant. “EMSI has played such an integral role in our region,” Prendergast says. “The earmark grant, which relied on EMSI data, funded essentially the creation of the pathway, the curriculum development, and the purchase of equipment. There was no biosciences program in north central Ohio two years ago. This group of volunteers and businesses and non-profits said this has potential to be a driver industry in our region.”

Bioscience companies look for highly-skilled labor

The consortium has a twofold goal in mind with the bioscience initiative: (1) it wants to ramp up workforce development in the area to fill the needs of the many area bioscience firms, and (2) it wants to enhance economic development opportunities in the region. By improving the skill sets of workers, there's a better chance that outside firms will be attracted to the area, according to Tom Kluding, the director of the North Central Ohio Tech Prep Consortium. Either way, the region's economy should prosper in the long run. “The thought behind really both of



these grant proposals that were fueled by EMSI data was to grow your own workforce,” Prendergast says. “And that benefits everybody.”

The most progress thus far has made by the Tech Prep’s bioscience program. Its inaugural class of students is set to complete training in the spring of 2009, and roughly 30 high school juniors and seniors are currently enrolled. According to Prendergast, it’s been a remarkable success to have so many interested students in a largely rural seven-county area that encompasses 27 high schools. “It’s really the only rural program of its type in the state, probably one of a few in the nation,” he says.

Most of the soon-to-be graduates are planning to further their education at NC State College or Ohio State University’s Agricultural Technical Institute (ATI) in nearby Wooster. Thanks to collaboration between an array of postsecondary institutions, there are college transfer agreements set up for students who finish the Tech Prep classes. NC State College launched a new bioscience program in the spring of 2009, while students can also move their credits to Ashland University, Lakeland Community College and ATI. In addition, AU is in the process of adding a master’s-level bioscience program. “So we’re literally going to have a career pathway from the high school level all the way through the master’s level, all regionally based,” Prendergast says.

These advances in the past three years have created lots of buzz at regional planning meetings and similar events, Prendergast says. With the presence of firms such as WIL Research Laboratories—the largest employer in Ashland County with 700 workers—planners and decision-makers are realizing there are high-wage opportunities in bioscience. “It’s really a breath of fresh air for a community that’s just reeling in other areas, especially related to manufacturing.”

References and further reading

Northeast Ohio Bioscience Partnership Choose Ohio First Narrative Proposal:

http://www.economicmodeling.com/resources/wp-content/uploads/cof-narrative-revised-020308_tmp-clean-2_.pdf

The BioScience Consortium of Northeast Ohio: <http://biosciencetechnoohio.org/>

North Central Ohio Tech Prep Consortium: <http://www.collegetechprep.net/>

About EMSI

Economic Modeling Specialists Inc. (EMSI) is a professional services firm that offers integrated regional data, web-based analysis tools, data-driven reports, and custom consulting services. EMSI has served thousands of workforce, education, economic development, and other policy professionals in the U.S., Canada, and the United Kingdom, and the company’s web-based **Strategic Advantage** research and analysis suite is used by over 2,500 professionals across the U.S. For more information, call (866) 999-3674 or visit www.economicmodeling.com.