



**MANUFACTURING SOLUTIONS CENTER &
TEXTILE TECHNOLOGY CENTER:
REPORT ON REVENUES & EXPENDITURES**

**REPORTED TO THE
JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE,
THE FISCAL RESEARCH DIVISION AND
THE OFFICE OF STATE BUDGET AND MANAGEMENT**

JANUARY 15, 2015

As directed by Section 10.3 of S.L. 2014-1000, the State Board of Community Colleges hereby submits its report to the Joint Legislative Education Oversight Committee, the Fiscal Research Division, and the Office of State Budget and Management. A summary of the revenues and expenditures is included for the Textile Technology Center at Gaston College and the Manufacturing Solutions Center at Catawba Valley Community College during 2012-2013 and 2013-2014 fiscal years in addition to an overview of the programs and services provided by these two centers.

Textile Technology Center – Gaston College

Background:

The NC Vocational Textile School was founded in 1943 to provide textile training classes to the rapidly growing textile industry. In 1972, it became part of the NC Community College System and was renamed the NC Center for Applied Textile Technology. The Center issued associate degrees from 1973 to 1998. The issuance of degrees ceased in 1998 due to the rapid decline of the textile industry in North Carolina. The Center's focus shifted to providing technical assistance to the textile industry. The Center was transferred to Gaston College in 2005 and was renamed the Textile Technology Center. It has experienced tremendous growth in services to North Carolina textile firms since 2005.

The purpose of the Center is to develop a world-class workforce for the textile industry in North Carolina; support the textile industry by identifying problems confronting the industry and assisting the industry in solving them; garner support from the textile industry for the work of the Center; and serve as a statewide center of excellence that serves all components of the textile industry.

Programmatic Activity:

The Center assists textile firms with new product innovation, quality control, problem analysis, worker training, and consulting services. Many of these services are not available anywhere else in North Carolina. With the downsizing of the textile industry, many manufacturers abolished their research/development and quality control departments. The Center performs these functions for them. Since 2005, the Center has served 195 different North Carolina manufacturers in 50 North Carolina counties. For 2014, 15 North Carolina textile firms have projected \$605 million in investments in new plants and equipment and have projected to hire 1,100 workers. In the 2014-2015 state budget, the Center was granted an additional \$150,000 allotment for textile industry training.

Description of Revenues and Expenditures:

Appendix A provides a summary of the Textile Technology Center's revenues and expenditures for FY 2012-13 and FY 2013-14. The Center obtains revenues from state funding and from fees for services. Budget year 2012-13 was the first year that the Kimbrell Campus was designated a Multi-Campus Center, with the state categorical allocation strictly for the Textile Center. The \$353,954 categorical allocation was not adequate for Center operations in 2012-13, so the college allotted some additional state funds to support Center operations. This transfer was approved by the System Office.

Processing/testing fee rates can be found on the Textile Center website: www.gaston.edu/textile-technology-center . Each processing or testing area link (i.e. sample production, product testing, problem solving) will include its individual fee schedule.

The breakdown of fee revenue for the past two years follows:

Fee Structure	2012-2013	2013-2014
Textile Processing/Testing	\$1,127,857	\$1,251,109
Assessments	\$520	\$2,015
Facility Usage	\$8,477	\$9,259
Training	\$23,975	\$14,615
Transcripts/Miscellaneous	\$6,765	\$996
Waste	\$6,919	\$4,788
Total Fee Revenue	\$1,174,513	\$1,282,782

State funds support one director, four full-time technicians, and a portion of the salaries of two administrative assistants. State funds are also used for operating costs and for the acquisition of capital equipment. Proprietary funds support nine full-time technicians and eight part-time technicians. Proprietary funds are also used for operating costs, maintenance, utilities, and capital equipment. The lower personnel costs for 2013-2014 represent the loss of two part-time technicians who were not immediately replaced.

Outcomes:

For the past two years, the Center has provided training and services as shown below:

	2012-2013	2013-2014
Number of trainees	750	1,199
Number of companies served	297	211
Number of counties served	30	30
Number of projects	1,058	1,042

The Center has grown tremendously since 2005, by adding new capabilities and additional personnel. Much of the equipment has been donated by customers who wanted the Center to expand their capabilities in processing samples or performing tests. The Center has received grants to develop new programs, assisted other companies with grants, assisted companies in solving processing and product problems, and in developing new products and obtaining patents. The customers have appreciated the timely service and the fact that the Center is a “one-stop shop” facility, providing complete testing services for the textile industry.

Manufacturing Solutions Center – Catawba Valley CC

Background:

The Manufacturing Solutions Center's (MSC) mission is to create and maintain jobs in North Carolina through training, testing, market development, entrepreneur help, product sourcing, managing a manufacturing business incubator, prototyping and applied research.

The Manufacturing Solutions Center was started in 1990 originally as the Hosiery Technology Center of North Carolina to train hosiery technicians and operators on new electronic equipment at the request of North Carolina hosiery manufacturers. Over the years industry requested many other services of the center and it grew to the current product offerings. The original Hosiery Technology Center began helping other industries with what they had learned from hosiery. The name was officially changed four years ago to reflect the outreach to other industries although hosiery is certainly a core strength.

Programmatic Activity:

- Testing – The MSC has a testing lab that was started at the request of industry. The testing lab is a self-supporting entity that has a customer list of 1,051 companies. The testing helps companies create better product and to insure quality. MSC staff regularly help the companies make product improvements based on the testing performed.
- Creating New Businesses – The MSC is actively engaged in helping entrepreneurs get started. This includes everything from business planning, prototyping and sourcing the products with North Carolina manufacturers.
- Training – The MSC focuses primarily on all areas of hosiery manufacturing along with CAD training for furniture, testing and customized training as needed. This includes new employee screening and training along with training existing workers.
- Sourcing – We actively source North Carolina manufacturers to people who call MSC daily looking for product from all over the world.
- Outreach to Schools, Universities and Manufacturers- In order to be successful to help current businesses obtain new workers, a new major initiative was started. Critical outreach to schools, universities and manufacturers was begun in order to change the image of manufacturing from the old, low tech industry to the new reality of manufacturing that is highly automated and in need of highly qualified employees with excellent pay.
- Applied R&D and Prototyping – MSC helps get new products developed from an idea for existing manufacturers and brands along with entrepreneurs. We work with everyone from a large multinational brand such as NIKE to an entrepreneur with a new idea.
- Market Development – MSC will help develop marketing materials along with partnering with public agencies and private companies to help companies export, market jointly at trade shows along with government and military procurement.
- Innovation Fund of North Carolina – This is a new program that was started to promote entrepreneur growth in North Carolina that involves pre-seed investing in sustainable high growth businesses. The goal is job creation for North Carolina with education for both entrepreneurs and students.

Description of Revenues and Expenditures:

Appendix A provides a summary of MSC's revenues and expenditures for FY 2012-13 and FY 2013-14. The State General Fund appropriation is used to support salaries and benefits for six of the 21 total full time employees and several part-time employees of MSC. The other salaries, benefits, travel, equipment, taxes, utilities, etc. are paid for by fee revenue earned from services provided. For the two year period, the program has had a budget of approximately \$2.0 million with an average cost to the taxpayers of \$625,000 and an average of \$1.27 million in fee revenues. The center earns fee revenues through testing, prototyping and R&D fees along with an average of \$94,000 that comes from the NC State Industrial Extension Service (NCIES) Manufacturing Extension Partnership. MSC has been a partner with NCIES since 1994. Even without the NCIES money, MSC earns 62.6% of the MSC total budget.

MSC fees are based on the calculated cost of labor and materials for the services provided. Two links have been provided below to the MSC website that reflect fees for services that are often performed. If customers want a service that is not provided in the attached request form, MSC will cost the requested service based on a rate to cover labor and materials. The R&D and prototyping rate is \$50/hour.

<http://www.manufacturingsolutionscenter.org/MSCTestPackageRequestForm.pdf>

<http://www.manufacturingsolutionscenter.org/furniture-testing-price.pdf>

Outcomes:

MSC has performed testing for over 1,050 clients representing 47 states and 32 foreign countries. It is an ISO-17025 certified lab that started testing hosiery at the request of industry. It is now testing everything from paper towels to kayak paddles. Appendix B provides summary of MSC activity for the past two fiscal year.

The US Department of Commerce recognized MSC as one of the top economic job creation programs in last year's Americas Competitiveness Forum held in Panama City, Panama. MSC and Conover City representatives presented to this forum that was attended by 32 countries in the Western Hemisphere. Over 20 countries toured MSC in March, 2014 along with top officials from the US Department of Commerce.

The MSC incubator has had two start-up companies graduate creating seven total jobs. Currently there is one startup. MSC was featured in Entrepreneur Magazine in June 2014 for helping entrepreneurs get started. The Carolina Textile District (CTD) that the MSC helped start has become a model for getting manufacturers and entrepreneurs together. MSC has had to present facts about the CTD to the US Department of Commerce, US Economic Development Administration, the Appalachian Regional Commission and US Department of Agriculture at both MSC and in Washington, DC.

The Innovation Fund of NC had 3 funding cycles that averaged 70 applications per cycles. Over 900 mentoring hours were delivered with 19 internships created. 17 new jobs were created by awardees with an average salary of \$52,800.

Appendix A: Revenue and Expenditure Detail

Manufacturing Solutions Center

	2012-13	2013-14
<u>EXPENSE:</u>		
Personnel	1,478,693	1,649,458
Other Operating Costs	181,556	342,563
Equipment	243,130	179,753
Total Expense	\$1,903,379	\$2,171,774
<u>REVENUE:</u>		
State General Fund Appropriation	546,922	699,582
Fee Revenues	1,254,639	1,295,508
Other (NCSU Industrial Extension Service)	67,887	135,375
Total Revenue	\$1,869,448	\$2,130,465

Textile Technology Center

	2012-13	2013-14
<u>EXPENSE:</u>		
Personnel	1,066,364	1,037,485
Other Operating Costs	551,835	567,095
Equipment	123,559	138,411
Total Expense	\$1,741,758	\$1,742,991
<u>REVENUE:</u>		
State General Fund Appropriation	353,954	505,315
Fee Revenues	1,174,513	1,282,782
Other (state funds transferred from college)	212,094	0
Total Revenue	\$1,740,561	\$1,788,097

Appendix B: Manufacturing Solutions Center Performance Snapshot

The following chart is a snapshot of MSC performance in the last two years:

OUTREACH ACTIVITY	2012-2013	2013-2014
Elem/Middle School Students/Teachers/Principals	890	1,159
Community College/HS Interns	4	7
Community College Students	195	178
Foreign Country Visitors	0	65
Manufacturing Meetings	331	191
Government Meetings	115	215
Total	1,535	1,815
CLASSES		
	2012-2013	2013-2014
Hosiery 101	101	124
Hosiery Technician	21	45
Hosiery Operator	0	0
Total	122	169
OTHER MSC Services Non Textile		
	2012-2013	2013-2014
Engineering Projects	0	136
Other Entrepreneur Projects	0	9
Total	0	145
ENTREPRENEUR OUTREACH		
CAROLINA TEXTILE DISTRICT – Cut and Sew Projects for NC Companies	2012-2013	2013-2014
Active/Complete/On Hold	7	37
Referred Out/ to Manufacturer	14	157
Did Not Start / Inactive	45	152
Total Surveys	66	346
Hosiery Entrepreneur Projects		
	2012-2013	2013-2014
Active/Hold/Complete	0	9
Referred Out/ to Manufacturer	0	57
Did Not Start/Unknown	0	54
Total	0	120
Impact from NIST 3rd Party Survey from Quarter 1 2011 - Quarter 1 2014		
Economic Impacts	Jobs Created	Jobs Retained
\$25.3 Million	206	248