Industry Engagement Report, May 2013

Mississippi State’s Office of Research and Economic Development 2012 University-Industry collaboration report provides a summary of the university’s engagement with companies at local, regional, state, and international levels. The university employs its Economic Development Assistance Network (EDAN) tool and other outreach initiatives to facilitate collaborations with industries. Some corporations and small businesses contract with university units for R&D and technical assistance. However, a vast majority of research centers and institutes compete for external grants and contracts at state and federal levels to expand our knowledge base and to help industries increase their competitiveness in the global marketplace.

Competition for external funding to support industry outreach at state and federal levels is fierce and the amount of funding is decreasing. As a result, state level initiatives, such as HB 825, Strengthening Mississippi Academic Research Through Business Act (i.e., Smart Business), are being implemented to create incentives for companies to contract with universities for research and development assistance.

The remainder of this report provides a snapshot of self-reported university engagement with industry between July 2011 and June 2012.

Methodology and Data Collection

To identify and assess university-industry collaborations, the MSU Office of Research and Economic Development distributes a five-item questionnaire to directors of centers and institutes during the fall. They are asked to report on projects completed during the previous fiscal year. The survey items are the following: 1) List the name of the company that received assistance; 2) List the location of the business (i.e., city and county); 3) If available, indicate the number of employees impacted; 4) Indicate the economic impact of the services provided in U.S. dollars, if available; and 5) Rate the outcome of the project on a scale as follows: 1=poor, 2=average, 3=good, and 4=excellent.

During FY 2012, there were 40 centers and institutes. A total of seven units responded and provided data, yielding a 17.5% response rate. Centers and institutes that supplied data for this report are the Cobb Institute of Archaeology, High Voltage Laboratory, Institute for Genomics, Biocomputing and Biotechnology, Center for Advanced Vehicular Systems, MSU Energy Institute, Office of Entrepreneurship and Technology Transfer, and Social Science...
Research Center. A complete listing of Mississippi State University centers and institutes can be found at http://www.research.msstate.edu/ci/

**Results**

According to data gleaned from the FY12 University-Industry collaboration survey, 151 companies were assisted. (See Appendix A). The companies ranged in size from student-led start-ups to international corporations. A total of 184 projects were completed for those companies in FY12.

**National and Global Impact**

Mississippi State University’s research and development capabilities are recognized throughout the United States and the world. In FY12, MSU centers and institutes collaborated with industries in nineteen other states. (see Appendix B.) In addition, projects were completed in both China and Canada.

**Counties and Employees Impacted**

In FY12, MSU Centers and Institutes completed projects across the state. (See Appendix C.) The highest number of projects completed by county included the following: Madison (18); Lowndes (9); and Hinds (8).

The results of the analysis show that almost 11,000 employees were impacted by MSU’s industry outreach programs in FY12. This is a very conservative estimate, given that several of the units failed to respond to this survey item. The highest number of employees impacted by county was as follows: Madison (4,201); Lowndes (802); and Tippah County (615). (See Appendix D).

**Estimated Impact of Projects**

Unit directors were also asked to report the impact of the completed projects. As in previous years, data regarding the dollar value of projects completed for industry were incomplete. It should also be noted that impacts of projects may take months or even years to yield desired outcomes, thus requiring the collection of data over time. In addition, only one of the units is evaluated by an external third party. The Center for Advanced Vehicular Systems Extension’s (CAVS-E) impact has been valued at over $1 billion annually by a U.S. Department
of Commerce sponsored external evaluator. Accurately estimating the economic impact of university-industry R&D and technical assistance programs continues to be a focus of organizations and agencies at state and national levels.

**Ratings of Completed Projects**

Finally, directors of centers and institutes were asked to rate the outcomes of the completed projects on a scale ranging from poor to excellent. The results of the analysis show that 173 of the 184 projects completed in Mississippi received the following ratings: Excellent (104/60%); Good (50/29%); fair (3/2%); poor (1/1%); and missing (15/8%).

**Focus of University-Industry Engagement**

The results of the analysis provide insight regarding the wide array of projects completed. Unit Directors were asked to use keywords to describe the research area or focus of technical assistance provided in FY12. The list of focus areas included but was not limited to the following: mobility, renewable energy, plant layout, advanced manufacturing, new product development and testing, cultural site assessment, six sigma, health and safety consultation, modeling and simulations, business plan development, market assessment for new or improved products, and license agreements related to university intellectual property.

**Conclusions**

The results of the 2012 university-industry engagement survey were consistent with outcomes reported in previous years. MSU centers and institutes were engaged with industries throughout the state. Projects were completed for companies in nearly half of Mississippi counties. It is also important to note that the companies assisted ranged in size from student start-ups to multi-national corporations. Moreover, the results of an overwhelming majority of the projects completed received a rating of excellent or good.

For additional information regarding the results of the Mississippi State University FY 2012 University-Industry Engagement Report, please contact:

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### Appendix A: Companies Assisted

1. Ellis Construction  
2. Engineering Services, Inc.  
3. Pritchard Engineering  
4. JACKSCO Properties, LLC  
5. Scott Engineering  
6. Weaver and Associates, Inc  
7. Environmental Auditors  
8. Mississippi Gravel Sales, Inc.  
9. Venture Oil and Gas, Inc  
10. Community Development Partners, LLC  
11. Panamerican Consultants, Inc.  
12. Hendrix Wire and Cable, Inc.  
13. ABB Kuhlman Electric  
14. Southern States  
15. Aluma-Form, Inc.  
16. AZZ/Calvert Company  
17. FieldMetrics, Inc.  
18. Maysteel, Trinetics  
19. Turner Electric  
20. AZZ/CGIT SYSTEMS, Inc.  
21. Merial Limited  
22. Whitehouse Live Traps, LLC  
23. Advanced Technologies  
24. ATT  
25. Aurora Flight Science  
26. EquineLite Mat  
27. GreenTech Autoparts  
28. Kengro Corporation  
29. Mercury Bikes  
30. Milwaukee Electric Tools  
31. Mueller Industries  
32. PACCAR  
33. Plymouth Tubing  
34. Rush Medical Group  
35. Severstal (North America)  
36. Severstal, LLC.  
37. Sinha Tech  
38. Viking, LLC  
39. Viking Range, Co.  
40. Advanced Urethane Technologies, Inc.  
41. Ashley Furniture Industries, Inc.  
42. Calvert Company, Inc.  
43. Baqe Systems  
44. Baxter Health Care  
45. Borgwarner Emissions Systems

46. Calsonic-Kansei  
47. Columbus Brick Company, Inc  
48. Cox MHP, Inc.  
49. Eaton Aerospace  
50. ESCO Corporation  
51. Faurecia  
52. Faurecia-CANTON  
53. FMC Technologies  
54. GreenTech Automotive  
55. HOL-MAC Corporation  
56. Howard Industries  
57. Instituform Technologies  
58. Inter-Pac, Inc.  
59. Kuhlman Electric Corporation  
60. La-Z Boy  
61. MartinRea Fabco, Inc.  
63. Milwaukee Electric- Jackson  
64. Milwaukee Electric Tool Corporation  
65. M-TEK Mississippi, Inc.  
66. Mueller Copper Tube  
67. Multicraft International LTD Partnership  
68. Navistar Defense  
69. Nissan North America- Canton  
70. Omnova Solutions  
71. Orman’s Welding and Fabrication  
72. Plymouth Tube Company  
73. Quality Welding & Fabrication, Inc.  
74. Raytheon Space and Airborne Systems  
75. Siemens Power Transmission  
76. SINHATECH  
77. Southern Motion Furniture  
78. Stion Corporation  
79. T&L Specialty Chemicals  
80. The Laaron Company, LLC  
81. Thyssen Krupp Elevator  
82. United States Marine, Inc.  
83. USG Interiors  
84. BASF  
85. Ceramatec, Inc.  
86. Compact Membrane Systems  
87. Convergent Science, Inc.  
88. Cool Smart Planet  
89. Cooper Tire, Inc.  
90. DuPont  
91. Fleischmann’s Yeast  
92. FlexSteel, Inc.
93. Franklin Furniture
94. General Atomics
95. Hankins, Inc.
96. Harrelson & Associates
97. Holiday Inn & Suites
98. HY-TEK Bio
99. International Paper
100. Kior, Inc.
101. Lazy Magnolia
102. Livelong Co.
103. Lurgi
104. MDEQ
105. Mississippi Phosphates
106. New Forest Industries
107. NFI
108. North American Coal
109. PACCAR Engine Company
110. Parker Towing, Inc.
111. Piedmont BioProducts, LLC
112. Repreve Renewables, Inc.
113. Savery, LLC
114. Shuangliang Eco-Energy
115. Sinagy Cleantech
116. Sun Gro Horticulture
117. Syngenta
118. Wellman, Inc.
119. JBS United
120. Bioenergy, LLC.
121. 2 Zero Emissions
122. Butler Snow Advisory Services, LLC
123. Choctaw Coal & Energy, LLC
124. Cortez Research, LLC
125. Delta Green Fuels, LLC
126. FiberTech Energy, LLC
127. JCOM Consulting, Inc.
128. Jimmy Sanders, Inc.
129. Tronox, LLC
130. Visual Analytic Solutions, LLC
131. Transportation Management
132. The Laaron Company
133. Enovations
134. Tech-Sterminators
135. Five22, The (whatshappen.in)
136. SociallyIn, LLC
137. Night and Day Vending, LLC
138. College Shift
139. SHAWKE Therapy Products
140. Profile Tap
141. Sanctuary Power Plus, LLC
142. Gotcha Universe
143. University Passion
144. Burlap Apparel
145. Nimbus Mobile
146. KD Clothing
147. Carr’s Outfitters
148. North Mississippi Medical Center
149. EQ Health Solutions
150. Environmental Auditors, Inc. (LA)
151. AZZ Electrical and Industrial Products
Appendix B: Number of Industry Collaborations by State

Total U.S. Collaborations = 184
Appendix C: Employees Impacted by County (Mississippi)
Appendix D: Projects Completed by County (Mississippi)