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Clemson's automotive research campus has jump on other schools' efforts

By JAMES T. HAMMOND
jhammond@thestate.com

With a globally recognizable corporate sponsor, \$50 million on the table, and a sharp focus on automotive systems integration, Clemson University's Greenville campus has gone a long way in a short time toward becoming a leader in automotive research and jobs creation.

German automaker BMW devoted \$10 million in 2002 to match state grants for research professorships. Since then, Clemson and its new 400-acre campus have created a buzz in the engineering research field, helping Clemson attract top-tier researchers and global prominence.

BMW donated another \$40 million from state tax credits it could have spent on its factory to Clemson's research campus, where private researchers mix with academic researchers and graduate students.

The \$50 million will build the Carroll A. Campbell Graduate Engineering Center, the primary academic building on the Greenville campus and the BMW Information Technology Research Center, to be owned by Clemson and used by BMW.

Clemson board chairman Bill Hendrix believes the International Center for Automotive Research, or ICAR, is a prime example of what can happen when the state's three research universities and political and academic leaders set collective research and job-creation goals, then work together to make them happen.

Hendrix practically glows with pride as he describes the 380 jobs already created at CU-ICAR and plans for the stylish, modern campus rising along Interstate 85.

"Every automotive company in the world is a potential partner here," Hendrix said.

Annual salaries at the campus average \$85,000. By year's end, Hendrix said, Clemson expects CU-ICAR to employ 445 people.

BMW's money helped sharpen the school's vision.

Vague strategies such as building a wind tunnel for racers were scrapped in favor of the BMW 84,000-square-foot research center.

Other industry leaders followed BMW.

The Timken Co., a worldwide innovator of automotive bearings that posts \$5 billion a year in sales, built the Timken Technology Center across from BMW's building. Already, its scientists and technicians have turned out more than 100 prototypes.

In April 2004, Clemson hired Bob Geolas away from the N.C. State University research campus to become the first director of CU-ICAR. The N.C. State Centennial Campus has been a model in the region for using academia to boost economic development. But Geolas said Clemson is moving at a much faster pace than was the case in North Carolina.

"We've accomplished more in three years here than the Centennial Campus accomplished in a decade," Geolas said.

IBM, Michelin and Microsoft, for example, already have joined as industry sponsors. And the new campus will see its first graduate engineering program students this fall.

Geolas said he already is planning a second phase of development that could focus on computing technology and might include retail and residential elements. He would not say who the corporate partners might be in the next wave of development.

So far, the state board of Centers for Economic Excellence has approved \$20 million for four research chairs for professors. Clemson has raised about 90 percent of the dollar-for-dollar match the state requires.

To date, CU-ICAR has a total of \$213 million in public and private investments, including:

- \$25 million in land
- \$25 million for roads, sewer and other infrastructure
- \$96 million for buildings.

Geolas said a wind tunnel might still be in CU-ICAR's future, depending on the auto industry's needs.