

2.1.7 St. Louis (Missouri)

The population of the region is 5,141,000 (15th in the US). The major cities are St. Louis, population 2,420,000 (11th in the US) and Kansas City, population 1,518,000 (24th in the US). The gross state product is \$92.45 billion (US) and the labour force is 2,550,000. The state provides company headquarters for 25 Forbes 500 companies and 16 Fortune 500 companies.

The key industries in Missouri are manufacturing (transportation equipment), agriculture (cattle and soybean), minerals and fuel (lead, cement and stone), construction, and military related industries.

Ranked in order of value of exports in 1988 are the following sectors:

- transport equipment: \$1.1 billion
- chemicals/chemical related products: \$239 million
- industrial machinery: \$200 million
- computers: \$200 million
- electronics: \$190 million.

Since 1984, total spending on research and development by the State of Missouri has totalled over \$50 million.

In 1989 approximately \$1.1 million was funded by the federal government through the Small Business Innovation Research facilities. Another million in federal funds was passed to the centers for Advanced Technology.

In total, the federal government has spent more than \$5 billion in Missouri for research and development in the past year.

TECHNOLOGY TRENDS / STRENGTHS

Large firms in the Missouri area such as Monsanto and Ralston Purina have been strong in the fields of biotechnology, biochemistry and genetics.

Recently, Monsanto has joined together with Washington University, also very strong in research capabilities, for a collaborative research venture. Over a period of 8 years, ending in 1991, Monsanto will have given Washington University \$62 million for biomedical and biotechnological research.

The company also has built a \$150 million life sciences laboratory expanding the spectrum of their research. This complex will focus on biotechnology, genetics, and biochemical sciences.

Ralston Purina has strong research capabilities in the food science sector.

General Dynamics, headquartered in St. Louis, is working with NASA to develop the first privately built rocket launch facilities.

McDonnell Douglas, a leader in aerospace and largest employer in St. Louis with 44,000 employees, received \$2.9 billion in government research funding in 1989 (12% of total defence research). The company is the nation's largest defence contractor, with more than \$8 billion in annual contracts. They are negotiating with NASA to build the Delta rocket launcher at Kennedy Space Center.

Other than these private companies, many learning institutions in the region have strong research capabilities and often work alongside the private companies in joint ventures.

There are about 1500 other technologically based companies in the area, with specific strengths in agriculture, robotics, aerospace (composite and advanced materials), biotechnology (human therapeutics, plant agriculture, animal agriculture, pharmaceuticals and diagnostics), engineering and computer sciences.