

2.1.11 Minneapolis (Minnesota, Iowa, North Dakota, South Dakota, Montana and Nebraska)

The region produces some 4.3 percent of total United States gross domestic product (GDP). Two thirds of goods and services produced in the region are from the states of Minnesota (42.3 percent) and Iowa (24.5 percent).

The region represents 4.5 percent of the American population. Major concentrations of population are in Minneapolis-St. Paul, Des Moines, Iowa, Omaha and Nebraska.

Minnesota and Iowa dominate the manufacturing sector producing over 80 percent of the region's output. Agriculture is a major sector in all states with the region generating 17 percent of U.S. production. Mining is an important contributor to the economies of Montana and North Dakota.

Located in the region are twenty-four Fortune 500 firms. The Minneapolis-St. Paul area is considered a leading high-tech center in the United States. Minnesota employment in high-tech firms numbers about 180,000 with approximately 40,000 producing office and computing machines, the largest high-tech industry segment.

Key industrial/high-tech sectors include (1) office and computing machines; (2) medical devices; (3) scientific/testing instruments; (4) telecommunications equipment; (5) computer peripherals; and (6) electronic components. Minnesota manufactures/sells nearly US\$5.2 billion of computers and electric/electrical equipment.

TECHNOLOGY TRENDS

A nation-wide computer industry slowdown has affected the state of Minnesota due to its production of mainframe, or large-scale computers, by firms such as Control Data, Honeywell and Unisys. It is estimated that mainframe sales have increased only 8.8 percent over the past two years versus 17.5 percent for the American computer industry.

Offsetting the slowdown in mainframe computers are the success stories of Cray Research (Minneapolis) in super computers and IBM (Rochester) in mini-computers and personal computers. Other sectors experiencing high growth trends are medical devices software development and biotechnologies.

TECHNOLOGY STRENGTHS

While R&D is funded in university laboratories by federal, state and private sectors, the overwhelming thrust in technological research is performed by individual private companies. Specific firms are identified below by key areas of technological strength:

<i>Key Technology</i>	<i>Specific Firm (major products)</i>
Computers	<ul style="list-style-type: none"> • Cray Research (large-scale scientific computers) • Control Data Corp. (main frame computers) • Unisys (mainframe computers) • IBM (mini-computers and PC's)
Medical Devices	<ul style="list-style-type: none"> • Medtronics (pace makers, heart valves) • 3M (health and safety products) • Starkey Laboratories (hearing aids) • St. Jude Medical (heart valves)