for agricultural research with estimated expenditures of $800,000 in 1973-74. Research projects in surveying and mapping, geological sciences and mining and mineral processing are funded through various grants programs of the Department of Energy, Mines and Resources. The Department of Indian Affairs and Northern Development provides grants to universities and non-profit institutions ($310,000 in 1973-74) to promote northern oriented research and for northern scientific expeditions. Industry, Trade and Commerce is assisting in the establishment and maintenance of industrial research institutes at universities. Institutes supported by the program are located at Nova Scotia Technical College, École Polytechnique, and the universities of McGill, Montreal, Waterloo, Windsor and McMaster. This support totalled $717,000 by 1973-74.

The variety of grants provided by the Department of the Environment reflects the diverse interests of this large Department, including research in meteorology, forestry, marine and aquatic problems, geography, pollution, water quality, wildlife and fisheries. Grants awarded by Environment approached $2 million by 1973-74. R&D contracts were $1.5 million for the same year.

The Ministry of Transport supports a program of development grants for transportation research. This program, now administered by the Transportation Development Agency, was previously maintained by the Canadian Transport Commission. Expenditures of $110,000 to promote the development of teaching and research centres in transportation were disbursed in 1973-74.

The International Development Research Centre provides grant support to Canadian universities for research and development in areas relevant to the needs of developing countries. Grants for natural science research in 1973-74 were $150,000.

9.3 Federal activities in the human sciences

Increasingly the human sciences are being recognized as an essential tool of government for dealing with the economic, social and cultural needs of society.

The term human sciences encompasses the disciplines generally referred to as the "social sciences and humanities". The human sciences include all disciplines involving the study of human actions and conditions and the social, economic and institutional mechanisms affecting them. This includes the sciences of anthropology, economics, human geography, law and sociology, political science and the social aspects of architecture, design, psychology and linguistics. In addition, the applied social science fields, such as public and business administration, commerce, communications, criminology, demography, agricultural economics, industrial relations, social work and urban and regional studies, are included. In those fields which pertain to both the natural and human sciences (e.g. archaeology, geography, psychology and linguistics), projects are classified by the dominant motivation and the objectives of the work. Multi- and inter-disciplinary projects involving both natural and human sciences are divided whenever possible and, when not, are classified in the dominant scientific area.

Research, in the context of the human sciences, is explanatory and innovative work undertaken on a systematic basis toward the acquisition of new knowledge about man, his actions and his institutions and the application of this knowledge in new ways. It is characterized by objectivity, controlled observation and measurement, and logical analysis. To be classified as research, projects must generally involve a substantial element of novelty, uncertainty and innovation, have a well-defined project design and result in a written report of results and procedures.

The related activities defined for the human sciences include general data collection, scientific information, education support and operations studies.

General data collection is the routine gathering, processing, collating and analysis of information on social and human phenomena. The information may be collected through routine surveys, regular and special investigations, or special compilations of existing records. Data collection which is part of a research project is considered to be research. Projects to develop new collection methods are also defined as research. Studies of data collection procedures and programs carried out to assess efficiency, costs or benefits, are considered operations studies. Examples of general data collection would include the quinquennial censuses, surveys of employment and production and the routine analysis of foreign economic statistics.

Scientific information activities involve the storage, classification and dissemination of information and knowledge resulting from scientific activities in the human sciences. This in-