



Federal Geomatics Bulletin

the official publication of the Inter-Agency Committee on Geomatics



Government
of Canada

Gouvernement
du Canada

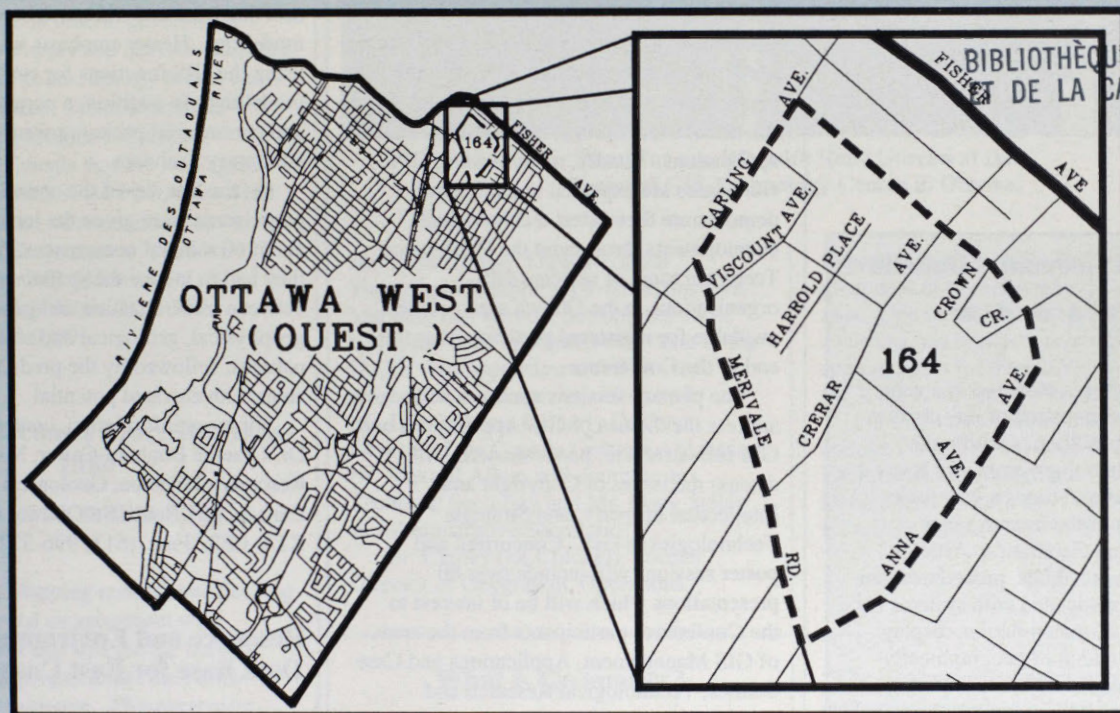
Vol. 3, No. 2 Winter 1992

SURVEYS AND MAPPING
LIBRARY

GIS Applications in the Federal Electoral System



MAR 19 1992



Sample of a Polling Division from a Digital Electoral Boundaries Map – Ottawa, Ontario

The principle of representation by population is at the root of the Canadian electoral system. Consequently, after each decennial census, the federal electoral map is redrawn to reflect demographic shifts in the Canadian population. First, the number of seats in the House of Commons is calculated according to a formula set out in the Constitution Act. Once Elections

Canada has determined the number of seats to which each province is entitled, the process of dividing the country into new ridings begins. The rules for undertaking this enormous task come from the Electoral Boundaries Readjustment Act (EBRA) which, to ensure political neutrality, assigns the responsibility to independent commissions, one for each province and the Northwest Territories (the Yukon constitutes a single electoral district).

The EBRA specifies that both Statistics Canada and Energy, Mines and Resources Canada (EMR) make available their

services for redistribution. Statistics Canada traditionally supplies detailed population counts, current municipal boundaries and other reference materials; for the first time, it is also responsible for all urban riding maps. These large-scale maps will be created using available Area Master File (AMF) data. EMR is preparing the provincial maps and remaining rural maps, using 1:250 000 NTS map files and National Atlas Information System (NAIS) 1:2M data, as well as examining legal descriptions, and coordinating production, printing and distribution.



Surveys, Mapping and
Remote Sensing Sector

For the current redistribution following the 1991 Census, more than 430 maps being planned will be done entirely by digital means. This will accelerate the redistribution process by allowing faster response when the Commissions report, in preparation for public hearings on the proposed boundaries. It will also allow quicker and cheaper production of the final maps in order to facilitate future elections.

The decision to use digital production will bring Elections Canada closer to its goal of introducing GIS into the electoral administration environment. By taking advantage of existing data and new technology, and by working cooperatively with other federal government departments, the value of efficient geomatics applications is made evident.

For more information on electoral mapping, please contact Carol Lesage, Asst. Director (Operations), Elections Canada, 1595 Telesat Court, Gloucester, Ontario, K1A 0M6. FAX: (613) 954-2874.

Federal Geomatics Bulletin

This newsletter is intended as a vehicle for the communication of information on geomatics activities within the Canadian federal government. It is published several times a year under the auspices of the Inter-Agency Committee on Geomatics. Articles pertain to the methods, procedures and technology associated with systems for the collection, manipulation, display and dissemination of geographically referenced digital data. The editorial board consists of Gordon Plunkett (chairman), Brian Cromie, David Ellwood and Joel Yan. Editorial and production support is provided by Diane Blondin, Martine Couture, Barbara McAulay and Stefan Palko. Submissions for Volume 4 #1, which should be submitted before **March 30, 1992**, are most welcome. Subscription requests, queries, comments or submissions should be sent to:

Federal Geomatics Bulletin
GIS Division, EMR
615 Booth Street
Ottawa, Ontario
K1A 0E9
Fax: (613)952-0916

The 1992 Canadian Conference on GIS

This major international GIS event, scheduled for March 23-26, 1992, will be held for the fourth time at the Ottawa Congress Centre. The Conference is being organized by the Surveys, Mapping and Remote Sensing Sector of Energy, Mines and Resources Canada, in cooperation with the Canadian Institute of Surveying and Mapping, and the Inter-Agency Committee on Geomatics.

The Conference program will assemble many of the foremost GIS personalities, scientists and practitioners from Canada and abroad at a variety of plenary sessions, panel discussions, technical and poster sessions. In addition, a series of workshops will be held at the beginning of the Conference to give the registered workshop participants an opportunity to gain more in-depth, hands-on experience with state-of-the-art GIS technology, management and applications. Finally, many leading GIS companies are expected to exhibit and demonstrate their latest technological developments throughout the Conference. Technical tours of selected GIS organizations in the Ottawa area will be available for registered participants at the end of the Conference.

The plenary sessions speakers will address the themes of GIS Applications and GIS Infrastructure; panel sessions will discuss the issues of Copyright and Intellectual Property, and Strategic Technologies in GIS. Concurrent and poster sessions will include over 80 presentations which will be of interest to the Conference participants from the areas of GIS Management, Applications and Case Studies, Technological Research and Development, and Education and Training.

The Conference will provide an opportunity to meet with over 1 000 participants representing GIS at the municipal, provincial and federal levels of government, universities and colleges, as well as those in the private sector. For additional information about the 1992 Canadian Conference on GIS, please contact Lou Aubrey, Conference Director, Surveys, Mapping and Remote Sensing Sector, Energy, Mines and Resources Canada, 615 Booth Street, Ottawa, Ontario, K1A 0E9.
Tel.: (613) 995-0266;
Fax: (613) 995-6001.

Mineral Potential Mapping with GIS

Forty geologists from eight countries attended a five-day short course sponsored by the Department of Geology, University of Ottawa. Graeme Bonham-Carter, Frits Agterberg and Danny Wright from the Mathematical Applications Section, Geological Survey of Canada, were the principal lecturers.

The objectives of the course were to show how GIS can be used to integrate diverse types of regional geoscientific data. Strong emphasis was placed on the Bayesian weights of evidence method for combining evidence from maps to evaluate the mineral potential. Other methods included weighted logistic regression, decision trees and inference network modelling. Heavy emphasis was placed on using the GIS functions for spatial data modelling. In addition, a number of custom and commercial packages were used for the laboratory exercises.

On the last day of the course, participants were given the locations of about 60 mineral occurrences, from which they had to induce the spatial relationships between mineralization and geochemical, geophysical, geological and structural map patterns, followed by the prediction of new areas with elevated potential.

For more information, contact:
Dr. Graeme Bonham-Carter, Mineral Resources Division, Geological Survey of Canada, 601 Booth St. Ottawa, Ontario, K1A 0E8. Fax: (613) 996-3726.

Resource and Environmental GIS Data Base for East Coast Regions

A geographic information data base has been completed for the ecologically sensitive and economically important coastal and ocean region of the Bay of Fundy, Gulf of Maine and Georges Bank (FMG). Information and base maps, which were digitized at a scale of 1:2M., are available for the entire ocean and coastal region from Cape Cod to Halifax. Topics include geology, ocean climate, fish habitat, socioeconomic data, and environmental issues such as oil spills and sensitivity to acid rain.

Almost 100 research departments and scientists from both U.S. and Canadian public and private sector sources provided data and validated the manuscripts compiled from printed literature, data bases and various government, university and private contributors. All sources are fully referenced with citations to printed literature as well as providing listings of other sources, including organizations and personnel. Over 1000 pages of text describe the themes, data, and sources.

The FMG Data Base was developed for Environment Canada by a research and technical team from Saint Mary's University, Dalhousie University and the Land Registration and Information Service (LRIS), Amherst. It took over three years to complete and cost almost \$0.5 M. Funding for the FMG Data Base was provided by the Council of Maritime Premiers, Texaco Canada Resources Ltd. and five Canadian federal government departments: Supply and Services Canada, Fisheries and Oceans, Energy Mines and Resources Canada, Communications Canada and Environment Canada. Environment Canada was the lead agency and retains control of the FMG Data Base.

For additional information, contact:
Alan McIver, Environment Canada,
Atlantic Region, 45 Alderney Dr.,
Dartmouth, Nova Scotia, B2Y 2N6.
Fax: (902) 426-9709.

SMRSS Becomes More Business-Like



The Surveys, Mapping and Remote Sensing Sector concluded an agreement with Treasury Board that will see the Sector operate a pilot project under the Public Service 2000 initiative. This agreement, known as IMAA (Increased Ministerial Authority and Accountability), allows the Sector to retain 100 per cent of revenues from licensing its databases and software; 80 per cent of revenues from any consulting services or training that the Sector provides; and 50 per cent of all new revenue that the Sector can generate from product sales over and above the funds raised in 1989-90. This agreement will provide substantial incentives for the Sector to operate in a more "business-like fashion", and to be more responsive to client demands.

For more information, please contact:
Ed Shaw, SMRSS, EMR Canada, 580
Booth Street, 14th Floor, Ottawa, Ontario,
K1A 0E4. Fax: (613)943-8838.

New IACG Chairman



Dave Carney, left, with René Gareau at the National GIS Technology Centre in Ottawa.

Mr. Dave Carney, Director of the Topographic Mapping Division, Surveys, Mapping and Remote Sensing Sector of EMR, has been appointed Chairman of the IACG. The appointment follows the retirement of the previous chairman, Mr. Les O'Brien, formerly Director General of the Canada Centre for Mapping. Dr. Mosaad Allam will continue as Technical Secretary and Mr. Doug Selley as Administrative Secretary.

Mr. Carney (ex-Colonel), former Director of Geographic Operations,

Department of National Defence, has a great deal of experience in the geomatics area. One of the first tasks the new chairman has initiated, is to develop a strategic plan for the IACG. We wish Mr. Carney all the best in his new position.

For more information on the IACG, contact Dave Carney, Chairman, IACG, EMR/SMRSS, Topographic Mapping Division, 615 Booth St., Ottawa, Ontario, K1A 0E9, Fax: (613) 995-8737.

What is Geomatics?



Reader response to the article in the last issue of the *Federal Geomatics Bulletin* (Vol. 3, No. 1), regarding a definition of the term Geomatics, provided a number of clever definitions. Some of the more interesting definitions, that were received as a result of the article, are as follows:

Alastair MacDonald of the Survey and Mapping Alliance in Southampton, U.K., writes that he is studying the Geomatics Industry in the U.K. and is using the following draft definition of the geomatics industry:

"The Geomatics Industry provides and manages the spatial information requirements for the management of the natural and man-made environment and of the objects related to it."

Michaël-Charles Le Duc of the Royal Institute of Technology and Stockholm University in Sweden noted a dichotomy in the definition given in the previous issue. He noted that the definition mixes the conceptual/theoretical perspectives and the practical perspectives. He proposes the following concepts and definitions:

"Geomatics (or GeoInformatics) is the scientific and technical discipline aimed at solving real-world problems by geoinformation, i.e., information that can

be related to a specific position on earth. A Geomatic System (or GeoInformatic System) is a concrete informatic system where Geomatics, and other pertinent disciplines, have guided its design and implementation and for which geoinformation is critical."

Yves-L. Hudon from the Quebec Ministry of Communications sent in the following definition (originally submitted in French) that originated from the Office of the French Language of Quebec (OLFAQ):

"Geomatics is defined as the discipline having the purpose of the management of spatially referenced data by the integration of the sciences and technologies related to their acquisition, their storage, their processing and their distribution. [Note: Geomatics includes principally the following disciplines: mathematics, physics, computer science, cartography, geodesy, photogrammetry and remote sensing.]"

Annick Jaton from Laval University sent in the following three definitions (originally submitted in French) along with their sources:

"Geomatics is a field of scientific and technical activities which, using a systemic approach, integrates all means used to acquire and manage spatially referenced data used in the process of producing and managing spatially-related information."

[Ref: *Geomatics: An Integrated, systemic approach to meet the needs for spatial information*; Gagnon, Pierre and David J. Coleman. *CISM Journal ACSGC*, Vol. 44, No. 4, Winter 1990, pp. 383-389.] This is the definition used by the University of Laval. It was also suggested by Pierre Gagnon, University of Laval.

"Geomatics is the field of activities of science and engineering which requires the application of information technologies and communications to the collection, storage, analysis, presentation, distribution and the management of spatially referenced information for helping in decision making." [Ref: *GIAC/CISM*, 1990. *Proposal to undertake a study on human resource planning for the Geomatics industry in Canada.*]

"Geomatics is the field of activities which integrates (according to a systemic approach), the means of acquisition and of the management of land based data." [Ref: *Beaulieu, D., Y. Bédard, L. Bhérier,*

M Boulanger, G. Boutin and F. Dutil, 1990. Geomatics guide. Geomatics for municipal services and the MRC. Ordre des arpenteurs-géomètres du Québec, p. 80.]

Congratulation go out to both Richard Groot, Surveys, Mapping and Remote Sensing Sector, Geographical Services Division, and to Pierre Gagnon of Laval University, Faculty of Forestry and Geomatics, for identifying the definition given in the last edition of the *Federal Geomatics Bulletin*. The definition given, with references, is as follows:

"Geomatics is the science and technology dealing with the character and structure of spatial information, its methods of capture, organization, classification, qualification, analysis, management, display and dissemination, as well as the infrastructure necessary for the optimal use of this information" [Ref: *Groot, R.; Geomatics: A Key to Country Development?*, ITC Journal 1987-4, pp. 277-283, and *Groot, R., Education and Training in Geomatics in Canada - A Discussion Paper*, May 1991.]

Many thanks to all those other readers who responded with their definitions. It is clear that there are many definitions of the term Geomatics and that they all define the concept from different perspectives. It is left as an exercise for the readers to select the definition that best suits their circumstances.

Two Million Dollars in Research Grants Awarded

The Department of Energy, Mines and Resources (EMR) and the Natural Sciences and Engineering Research Council (NSERC) have awarded a total of \$2 million in research grants for 1991-92 under EMR's Research Agreement Program. The Research Agreement Program's primary aim is to encourage the use of external expertise to support EMR research priorities, and to promote the exchange of information and innovative technology between the Government of Canada and the private sector.

For further information, please contact: George W. Cameron, Coordinator, Research Agreements Program, EMR, 601 Booth St., Ottawa, Ontario, K1A 0E8.

New Edition of Mineral Map Released

EMR Canada has released the 40th edition of the "Principal Mineral Areas of Canada" map. The new edition details mineral mines, oil and gas fields, existing and proposed oil and gas pipelines, geological formations, bathymetric contours, and an inset map of the Atlantic Continental Shelf extension. Charts give 1989 mineral production statistics by province and territory for fuels and minerals. Per capita mineral production in Canada for various years is also provided.

To order limited quantities of the map, please contact: Communications Branch, Energy, Mines and Resources Canada, 580 Booth Street, Ottawa, Ontario, K1A 0E4. Fax: (613)996-9094.

IACG Steering Committee Approves Activities

At the annual IACG steering committee meeting, the senior federal government executives reviewed the activities for FY 1990-91 and approved planned activities and funding for FY1991-92. Highlights of the 1990-91 activities are as follows:

- 1) Mr. Dave Carney was appointed chairman of the IACG, replacing Mr. Les O'Brien, who retired.
- 2) Dr. Phyllis Charlesworth replaced Dr. Sid Witiuk as chairperson of the IACG User Needs and Applications subcommittee. Dr. Witiuk resigned as chairman, following his acceptance of a position in the Department of National Defence.
- 3) The IACG Data Models subcommittee was integrated into the IACG Standards subcommittee.
- 4) A report entitled "Report on the Current Status and Trends in Federal Digital Geographic Data in Canada" was produced and distributed.
- 5) All IACG subcommittees participated in the IACG exhibit at the 1991 GIS Conference in Ottawa.

- 6) Canadian standards development activities continued through the Canadian General Standards Board - Committee on Geomatics.
- 7) A mechanism was established for the approval, by Treasury Board Information Technology Standards (TBITS), of a Federal Geomatics Standard.
- 8) The compilation of a user needs mini-survey, the arrangement of seminars and workshops, and a script for a geomatics video were activated.

A report detailing the 1990-91 IACG subcommittee activities is available by contacting: IACG Technical Secretariat, GIS Division, EMR/SMRSS, 615 Booth Street, Ottawa, Ontario, K1A 0E9, Fax: (613) 952-0916.

The following items were approved as funded activities of the IACG technical subcommittees for fiscal year 1991-92.

- 1) An on-line service for the IACG survey of federal geomatics data holdings, including an update of the existing survey data.
- 2) The continued production and distribution of the *Federal Geomatics Bulletin*.
- 3) The continued support for the secretariat of the Canadian General Standards Board - Committee on Geomatics.
- 4) Support for additional seminars and workshops for the coming year.
- 5) Support for the completion of the geomatics video.
- 6) Support for the IACG Secretariat.

It was also decided at the steering committee meeting, that a long-term plan was required stating where the IACG should be going. To fulfil this requirement, an ad-hoc IACG Strategic Planning Committee has been created to formulate a strategic plan for the IACG before the next steering committee meeting, to be held in the first quarter of 1992.

For further information on the IACG Steering Committee, contact: J. Hugh O'Donnell, Chairman, IACG Steering Committee, 580 Booth Street, Ottawa, Ontario, K1A 0E4, Fax: (613) 995-0842.

Northern Information Network (NIN)



During the consultations for Canada's Green Plan, northerners expressed the need for easier access to information. In response, the Department of Indian Affairs and Northern Development identified the Northern Information Network (NIN) as one of the elements in the Arctic Environmental Strategy.

NIN will be a multi-disciplinary network, and will provide for the sharing of data bases among governments, native groups, business and industry, educational and research institutions, libraries and communities that are located in the north or that are involved in northern issues and northern development. Small, isolated communities in the north will be able to derive particular value from improved access to geographical information because NIN will enhance their resource management capabilities.

Like other networks, NIN should maximize the use of existing information, simplify access to existing data bases, reduce duplication, provide an incentive to keep data bases up to date, and facilitate the integration of scientific data and traditional knowledge in the planning process. Compatibility with other networks, the adoption of any existing national standards that are appropriate, the reflection of northern needs and conditions, and affinity with the Canadian Polar Information System are demanding particular consideration. Planning of NIN has also had to take into account the provincial type of responsibilities being transferred to the territorial governments, and the new administrative structures arising from the settlement of comprehensive claims.

The concept of the project has been introduced at meetings in both territories. At a workshop in Yellowknife last April, potential users and providers of information were encouraged to participate in the evolution of NIN and to identify the kinds of information they would be seeking in a data base directory. The first draft of the directory is almost completed, and will be

used in part of a data distribution pilot project in the north in 1992.

Three reports dealing with GIS in the north have influenced the way NIN is proceeding. "A Report on the Application of Computer Technologies to Computer-based Environmental Assessment in Inuvialuit Settlement," was prepared by Price Waterhouse in February 1990. "Northwest Territories Land Use Planning Commission: GIS Workshop Final Paper," was written by A.G. Levinsohn Consulting, Inc. in June 1990. "GIS Strategy Report: Strategy for Land and Resource Information Systems in the Yukon Territory," by Tomlinson Associates Ltd., is dated July 1990.

NIN is only in its infancy. However, it is off to a promising start and with the continued cooperation of all parties, the networking of geo-referenced databases will contribute to environment/economy integration in the north.

For further information, contact: Valerie Hume, Department of Indian Affairs and Northern Development, Terrasses de la Chaudière, 10 Wellington St., North Tower, Hull, Que., K1A 0H4. Fax: (819) 997-0511.

Committee on Geomatics Charts a Course for Canadian Geomatics Standards



The Canadian General Standards Board (CGSB) - Committee on Geomatics (COG) met in Ottawa on June 26, 1991 and made some major decisions regarding the future direction of Canadian standards activities. More than 30 people from across the country met to find a consensus on what activities should be performed to develop a Canadian geomatics standard.

Sylvain Latour, CGSB-COG Technical Secretary, reported on the "Town Hall" meetings, where the technical evaluations of the various proposed formats (ref: *Federal Geomatics Bulletin*, Vol. 3, No. 1, page 2), were presented and a course of action was proposed. Other attendees presented their views on the course of action, and at the end of the day, the following had been agreed to:

- 1) The CGSB-COG should propose and support a draft Canadian Geographic Interchange Standard based on the Spatial Archive and Interchange Format (SAIF).

- 2) A new working group (WG 5), responsible for liaising with international geomatics standardization committees, should be formed.
- 3) A new working group (WG 6), responsible for developing a national transition and implementation strategy for SAIF, should be formed.
- 4) The Data Transfer/Interchange (WG 1) and Data Models (WG 2) working groups have completed their tasks and should now be disbanded.
- 5) The Feature Identification working group (WG 3) should be disbanded and replaced with a working group (WG 7) to populate the feature identification model that was developed by WG 3.
- 6) Working Group 4 will continue the development of standards for descriptive cataloguing and data directories.

Terms of reference for the new working groups are being drawn up and an initial meeting will soon be held. For further information contact: René Gareau, Chairman, CGSB - COG, Canada Centre for Geomatics, 2144 King Street West, P.O. Box 2598, Sherbrooke, PQ, Canada, J1J 3Y5. Fax: (819)564-5698.

Environmental Information System from Statistics Canada



Statistics Canada made available its Environmental Information System to all interested users in June 1991. The system contains a wide variety of socio-economic data series, and provides the facility to combine this data with external environmental data. The system's outputs can be readily structured, tabulated and displayed to suit the specific needs of environmental consultants and researchers.

Data is available from the system in geographic units, as follows: river basins, ecological zones, soil zones, and wetland regions. Forms of system output include:

spreadsheets, ASCII files, micro-computer data bases, tables on paper, export files, PC screen formats, and hard-copy maps on paper or film.

The cost of each individual request is based upon its size and complexity. More information on the Environmental Information System is available from: Phil Fong, National Accounts and Environment Division, Statistics Canada, R.H. Coats Bldg., 21st Floor, Ottawa, K1A 0T6. Fax: (613) 951-9031.

GIS at the National Archives



Of the 35 federal institutions surveyed last year by the IACG, the National Archives of Canada placed among the top five in terms of the number of datasets it retains. "And the figure is only going to get bigger," says David Brown, an archivist with the Cartographic and Audio-Visual Archives Division. "Under the new Archives Act passed in 1987, the National Archives of Canada was given a very clear mandate to collect the memory of the government of Canada, no matter what the media."

The Act referred to by Brown requires all federal departments to obtain the permission of the National Archivist before destroying their records, whether they take the form of electronic data, paper records, maps, photographs, or films. If the records have historical, legal or evidential value, the Act also provides for their transfer to the National Archives of Canada for permanent retention once they are no longer considered operational by the department. With the National Archives Act now enshrined in law, the Archives has collected some 13 GIS datasets from a variety of federal institutions, most notably Environment Canada, Forestry Canada, and the Geological Survey of Canada.

To some, this must seem an odd contradiction. The institution that is well known for its collections of the oldest paper-based records of the government is now turning its attention to the most sophisticated, electronic data bases ever created. "Our goal is the retention of Canada's national memory," reiterates senior archivist Terry Cook. "Since Canada is a world leader in the development of GIS, we are quite prepared to take whatever steps are necessary to document this achievement for future generations."

Unfortunately, electronic records are extremely fragile and transient, and many

of the original datasets that were created back in the 1970s are now lost forever. Officials usually had no idea what data were being collected by their departments, let alone where they might find it. Since government departments had little interest in managing their information, decisions on the retention of electronic records were generally left to the discretion of junior personnel who had no concept as to how the information might be used by future researchers.

But with the help of Treasury Board's new policy on the Management of Government Information Holdings, federal departments are now beginning to recognize their electronic records as a corporate asset. The new policy calls for a "designated senior official" to represent the department and take responsibility for implementing a corporate perspective on the management, and later, the efficient disposition, of all information in all media within his or her organization.

This policy has established new precedents, and it has helped the National Archives of Canada to be one of the first in the world to collect electronic records and GIS datasets. In combination, the National Archives Act and Treasury Board's policy have enabled the National Archives to implement a planned approach to the disposition of government records. Over the next few years, archivists will be reviewing all the holdings of major government departments in order to identify records of national significance. It is hoped that the result will enable a more complete and systematic preservation of GIS datasets throughout federal institutions.

Further information on the GIS holdings of the National Archives of Canada can be obtained by writing to Mr. David Enns, Director, Reference and Researcher Services Division, National Archives of Canada, 395 Wellington Street, Ottawa, Ontario, K1A 0N3. Fax: 995-6274.

Developments in Geomatics



- The Surveys, Mapping and Remote Sensing Sector, Energy, Mines and Resources Canada, has prepared a publication entitled, *Contracting-Out Bulletin for the Private Sector: Budgetted Expenditures in 1991-92*, dated March 1991. The Bulletin includes overviews of individual Divisions of the Sector, estimated

contract values, brief descriptions of projects involved and a list of contacts.

- Two Memoranda of Understanding pertaining to the area of geomatics were signed by Energy, Mines and Resources Canada and Laval University in February 1991.

The first Memorandum is designed to emphasize closer cooperation between both partners on projects in the development and application of geomatics techniques, and on the integration of programs designed to train experts in geomatics.

The second Memorandum indicates that EMR Canada and Laval University agreed to cooperate in establishing an on-the-job training program for geomatics students.

- Energy, Mines and Resources Minister Jake Epp and Carleton University President, Robin Farquhar, signed a Memorandum of Understanding in March 1991 encouraging closer cooperation in the development of post-graduate studies in Geographic Information Systems (GIS) through joint research projects, specialist training and continuing professional development.

For more information on the above three items, please contact: Robert Batterham, Office of External Relations, Surveys, Mapping and Remote Sensing Sector, EMR Canada, 580 Booth St., Room 1448, Ottawa, Ontario, K1A 0E4. Fax: (613)943-8838.

- A Memorandum of Understanding (MOU) was signed in Leningrad (now Saint Petersburg), in April 1991, by EMR Deputy Minister Bruce Howe and Dr. V.R. Jashenko, President of the Main Administration of Geodesy and Cartography (GUGK) of the Council of Ministers of the former USSR. The federal mapping agencies of both countries have agreed to cooperate in sharing technology and developing business opportunities in the geomatics industry.

For further information, please contact: P. Chagarlamudi, Office of External Relations, Surveys, Mapping and Remote Sensing Sector, Energy, Mines and

Resources Canada, 580 Booth St., Ottawa, Ontario, K1A 0E4. Fax: (613) 943-8838.

Toponymic Data Base Changes Its Name



In recent years confusion has arisen because of two similar acronyms within EMR—the National Topographic Data Base (NTDB) managed by the Canada Centre for Geomatics, and the National Toponymic Data Base (NTDB) managed by the Toponymy Section, Geographical Services Division. To remedy this situation, it was decided in September 1990, to change the name of the National Toponymic Data Base to the Canadian Geographical Names Data Base (CGNDB).

The digital component of this data base contains over 460 000 name records of the Canadian Permanent Committee on Geographical Names (CPCGN), the national coordinating body responsible for the development of standards and policies for the treatment of geographical names and terminology.

The base scales for storing names information are the 1:50 000 and the 1:250 000. However, because of recent demand, name files are being created and stored at the 1:1M, 1:2M and the 1:7.5M map scales.

For further information regarding the acquisition of digital information from the CGNDB, please contact: Barbara Bowler, Energy, Mines and Resources Canada, Geographical Services Division, National Atlas Information Service, Toponymy Section, Room 650, 615 Booth St., Ottawa, Ontario, K1A 0E9. FAX: (613)943-8282.

Federal Government Databases for Environmental Reporting



An inventory of federal government databases that have the potential to be applied to the comprehensive analysis of environmental issues is nearing completion. The compilation of this inventory has been a joint effort between Statistics Canada and the State of Environment Reporting (SOE) Branch at Environment Canada. Presently, three reports combine to form this inventory, and are primarily intended to assist Statistics Canada and Environment

Canada in the development of the Database Reference System, which is one component of the Environmental Information System within Statistics Canada.

During the database collection phase, the SOE Branch carried out an inventory of 129 Environment Canada Databases and released this information in two reports as part of their SOE Technical Report Series. Statistics Canada completed an inventory of 235 databases from the remaining federal government departments and in January 1991 a draft report was completed. These three reports will be combined to form a catalogue of environmentally relevant databases to be published in the second quarter of 1992. It is anticipated that the final report will comprise well over 500 environmentally relevant federal government databases. A diskette version of the inventory is also in preparation. The highlights of the Database Reference System are:

- documents and facilitates access to information on available environmental databases;
- guides potential client users to these data;
- increases public awareness about environmental databases and stimulates interest in, and use of, these information resources;
- stimulates action towards environmental protection by encouraging cooperation among database managers;
- identifies gaps in information for critical environmental indicators and highlights needs for critical monitoring;
- provides a model for environmental database organization for other jurisdictions;
- provides government departments with an overview of environmental information they hold as well as information of potential use that is available within other departments;
- enables government departments to identify gaps in the coverage of their own databases.

For more information on the inventory, please contact: Murray Cameron, National Accounts and Environment Division, Statistics Canada, 21st Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, Ontario, K1A 0T6, Fax: (613) 951-9031.

Data Base Survey Report Available



The IACG Data Dissemination and Government Data Bases Subcommittee contracted Tomlinson Associates Ltd. to perform a survey of geomatics data sets held in the federal government. The report identifies 314 data sets in 35 agencies. For a copy of the report or digital file, contact: Gordon Plunkett, IACG Geomatics Data Sets Survey, Geographic Information Systems Division, Surveys, Mapping and Remote Sensing Sector, EMR, 615 Booth Street, Ottawa, Ontario, K1A 0E9, Fax: (613) 952-0916.

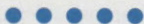
GÉOinfo, 29th Issue



GÉOinfo is a monthly bulletin consisting of four pages, published by the Quebec Ministry of Communications. Its first issue was published in February, 1989. The bulletin currently has over 1000 subscribers from Canada and abroad. Published in French, it gives up-to-date information on geomatics and spatial information system developments in the Government of Quebec.

For a subscription or additional information, please contact: Bulletin GÉOinfo, c/o Yves-L. Hudon, Direction générale des technologies de l'information, Ministère des Communications, 1500-B, boul. Charest Ouest, 1^{er} étage, Sainte-Foy (Québec), G1N 2E5. Fax: (416) 646-3571.

IACG Seminar Series



Another successful IACG seminar was held recently in Camsell Hall. Dr. Gene Thorley from the United States Geological Survey spoke on the formation of the Federal Geographic Data Committee (FGDC). For more information on the seminar series, contact: IACG Technical Secretariat, GIS Division, EMR/SMRSS, 615 Booth Street, Ottawa, Ontario, K1A 0E9. Fax: (613) 952-0916.

Revised NTDB Standards and Specifications



A new version of this document, the Second Edition of the Standards and Specifications for the National Topographic Data Base (NTDB), was released by the Surveys, Mapping and Remote Sensing Sector of Energy, Mines and Resources Canada in April, 1991. This new version integrates altimetric and planimetric data specifications for the NTDB, and adds new altimetric features to the Data Dictionary. As well, a new section, which describes how NTDB data are represented in the Canadian Council on Geomatics Interchange Format (CCOGIF), has been added to the document.

For additional information, please contact René Gareau, NTDB Secretariat, Canada Centre for Geomatics, P.O. Box 2598, 2144 King St. West, Sherbrooke, Quebec, Canada, J1J 3Y5. Fax: (819) 564-5698.

GIS Calendar of Events, 1992



March

Fourth International Conference on Geographic Information Systems, Ottawa, Ontario.

March 23-26

June-December

15th Canadian Symposium on Remote Sensing, A world of Applications, International Space Year, Toronto, Ontario.

June 1-4

International Workshop on Standards for the Exchange of Geographic Data, sponsored by CISM in cooperation with the University of Toronto, Toronto, Ontario.

June 2-4

Cartography 1992, Joint Meeting Canadian Cartographic Association and Association québécoise de cartographie, Montreal, Quebec.

June 2-6

85th Canadian Institute of Surveying and Mapping (CISM) Annual General Meeting, Whitehorse, Yukon.

June 23-26

Urban and Regional Information Systems Association (URISA) Annual Conference, Washington, D.C.

July 12-16

American Society of Photogrammetry and Remote Sensing (ASPRS)/American Congress on Surveying and Mapping (ACSM) Convention, Washington, D.C.

August 3-7

XVII International Society for Photogrammetry and Remote Sensing (ISPRS) Congress, Washington, D.C.

August 8-14

Geomatics IV, Edmonton, Alberta.

October 5-9

GIS/LIS'92 Annual Conference and Exposition and ASPRS Fall Convention, San Jose, California.

November 6-12