

Supplement

Canadian Archivists Speak Out: Results of the Surveys Conducted by the ACA Select Committee on Electronic Records

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Introduction: The ACA and Electronic Records

Ask any Canadian archivist about electronic records today and no matter what the specific question, you will likely get in response a great sense of frustration. For years, we have agreed that electronic records present archives and archivists with thorny problems ranging from appraisal and acquisition through conservation and public service. Electronic records have been the theme of an entire Association of Canadian Archivists (ACA) Annual Conference (Hamilton, 1987), the subject of articles in the *ACA Bulletin* and *Archivaria*, and the topic of discussion at many meetings of archivists. Yet what has been done within Canada to deal with the issues raised by electronic records?

The ACA has been faced with the problem of being asked to provide direction and guidance on the issues relating to electronic records, both from outside and within the archival community. In the autumn of 1989, the Committee on Computing of the Canadian Historical Association (CHA) approached the ACA proposing the establishment of a joint ACA-CHA position on the conservation of electronic records. Without having considered these issues in any depth, the ACA could not hope to respond positively to the overture by the CHA. The Association was at that time also unable to answer other recent requests by archivists and institutions for material relating to "standards to govern electronic information storage media; standards to govern electronic exchange of information; [or] policies and/or procedures concerning the management of electronic information."¹

The ACA's response to this situation was to form the Select Committee on Electronic/Digital Records in early 1990. The Committee's mandate was not to provide the ACA with definitive answers to the myriad of electronic records problems facing Canadian archives and archivists, but "the task of studying the issues related to the management of electronic records and advising the Board on what sort of permanent body (Standing Committee or Special Interest Section) would be most appropriate, as well as on the agenda that such a body should pursue."² The Select Committee was to have reported to the Board at the 1991 Annual Conference in Banff, Alberta, but a series of events led to the suspension of its activities in February 1991. At the Banff meeting, however, a group of interested archivists re-formed the committee, with the same mandate and goals. Initially limited to a membership of six due to the structure of a select

committee, the membership of this new Select Committee on Electronic Records was extended to include a number of corresponding members, in order to ensure that there was full geographical representation, which had been lacking in the previous effort.

When it began its work in January 1992, the Select Committee recognized that the lack of direction regarding electronic records in the Canadian archival community stemmed in part from the different impressions of the status of these records in Canadian archives over many years. Some have expressed the view that very few institutions except the National Archives of Canada and some of the larger institutions have seriously addressed the issues of the acquisition, preservation, and dissemination of electronic records. Others, however, have long felt that it is these small archives that have made the greatest advances in the area. Furthermore, it is often said that Canadian archivists want more education and training on electronic records, but rarely does one ever hear about the form which that education and training should take. How can any national professional association such as the ACA, which is responsible for taking a leadership role, chart a reasonable course for future action if it does not know in some detail what has already occurred?

In order to fulfil its mandate to provide the ACA with recommendations designed to provide focus and direction with regard to electronic records, the Select Committee undertook two large surveys during the spring of 1992 to gather some of the necessary evidence. It reported its findings, including a summary of the results of the *Survey of Archivists* and the *Survey of Institutions*, to the ACA Board in August 1992 and was then dissolved following the Annual General Meeting in Montréal in September—to be replaced, as it recommended, by a permanent body: the Special Interest Section on Electronic Records (SISER). This article is intended to bring the results of those surveys to the attention of the ACA membership at large.

Survey Methodology

Both surveys were drafted by Catherine Bailey, Survey Coordinator for the Select Committee, and further refined through consultation with the Committee members. The process of developing the questionnaires can only be described as unscientific, in that no attempt was made to apply the principles governing the statistical validity of social science research. This decision was a direct result of the short time the Committee had in which to develop the questionnaires, tabulate the results, complete the research, and present the findings to the ACA Board. In addition, few members had formal training in statistical research principles. Instead, the surveys concentrated on gathering information in order to generate a broad overview of the needs and wishes of Canadian archivists and the activities of Canadian archives with regard to electronic records. Emphasis was placed on questions that would stimulate free-text answers, and respondents were encouraged to make comments on the questions, as well as to attach further comments or documentation if they so wished. Copies of the survey questions are found in **Appendix A**.

The Surveys' Audiences

The Survey of Archivists was sent to all 625 individual members of the ACA in good standing as of 1 April 1992, while the Survey of Institutions was sent to 174 institutions across Canada, all chosen from the Canadian Council of Archives *Directory of Canadian Archives* (1990). The selection criteria for those institutions to receive a survey questionnaire were subjective, but designed to elicit a good cross section of responses from large and small archives across the entire country. All of the (then) five collecting divisions of the National Archives of Canada had addressed the question of electronic records within the last few years; they therefore received separate questionnaires, in order to collect information on electronic records as they relate to different media collections. Each provincial and territorial archives received a ques-

tionnaire, as did each university archives listed within the *Directory*. In the category of Cities/Municipalities, recipients were chosen for their size and geographic representativeness. Thematic and corporate archives were selected for the same reasons. Religious archives were chosen so that each province would have as many denominations as possible represented. Finally, a selection from each province of "other institutions" not fitting into these categories was made after assessing the description of the institution's holdings in the *Directory*. In some cases, institutions were chosen because the description of the nature of their holdings suggested that they might have acquired electronic records. Examples included the Legal Archives of British Columbia, the Mennonite Heritage Centre, the Maritime Command Museum, and the Newfoundland Pharmaceutical Association. In addition to the institutions chosen from the *Directory*, any institutional member of the Association not listed in the *Directory* also received a questionnaire. A list of those institutions that responded to the Survey of Institutions is found in **Appendix B**.

Two further comments on the Survey of Institutions should be made before reporting its results. An examination of the location of respondents shows that the response rate for archives from the province of Québec was quite small. During the survey development stage, it was decided that, since the mandate of the Select Committee was to advise the ACA on the course it should take regarding electronic records, the only institutions in Québec which would receive questionnaires would be members of the ACA, and three anglophone universities (McGill, Bishops, and Concordia), where staff had expressed an interest in the Survey to the Committee. It was felt that the Association des archivistes du Québec (AAQ) was better suited to provide guidance to archives and archivists in that province.

It also soon became clear while tabulating the results of the questionnaire that the term "electronic records" should have been defined. Archivists in the larger institutions who discuss the processing of computer records on a regular basis have gradually moved away from referring to them as "machine-readable records" and are now referring instead to electronic records. However, several respondents included videotape, audio tapes (oral history), and microfilm in their responses to the various questions—presumably in the belief that these special media, too, are machine-readable records and therefore included in the term "electronic records."

Results of the Institutional Survey

Overview of the Responding Institutions

Fifty-five completed questionnaires were received—a response rate of 31.6 per cent.³ Questions 1 through 5 asked respondents for information on the name, nature, location, staff size, and establishment date for the institution. The distribution of institutions by province and by institutional type were as follows:

Table I: Distribution by Province

Yukon	1	Ont.	21
N.W.T.	0	Que.	0
B.C.	8	N.B.	2
Alta.	6	N.S.	5
Sask.	1	P.E.I.	0
Man.	5	Nfld.	6

Table II: Type of Institution⁴

National	3	(5.5%)
Provincial/Territorial	6	(10.9%)
City/Municipal	9	(16.4%)
Corporate/Private	3	(5.5%)
Religious	12	(21.8%)
University/College	15	(27.3%)
Museum	3	(5.5%)
Other	9	(16.4%)

Of those fifty-five institutions, thirty-six (65.5 per cent) of them reported having five or fewer staff members, including the fourteen responses (25.5 per cent) that noted having only one staff member. A further ten responses (18.2 per cent) stated their complement was between six and ten staff members, and six institutions (10.9 per cent) employed between eleven and twenty-

five persons. Only three respondents (5.5 per cent) said that they had more than twenty-five employees; they were the Government Archives and Cartographic and Audio-Visual Archives Divisions of the National Archives of Canada, and the Provincial Archives of New Brunswick.

Nature of Electronic Records Programme

Respondents were then asked in Section II whether their institution had the responsibility to acquire and preserve electronic records and, if so, to provide more information on the nature of their mandate. Twenty-nine of the fifty-five responding institutions (52.7 per cent) reported that they had a mandate to acquire and preserve electronic records. Several respondents indicated that there was more than one basis for this mandate:

Table III: Nature of the Institutional Mandate

internal archives' policy	11
information management policy	9
other (specify)	5
other policy of supporting institution	4
provincial legislation	3
municipal legislation	3
national legislation	2
territorial legislation	1
ecclesiastical legislation	1

Question 9 at the end of Section II asked respondents,

If your institution does not currently have an official mandate to acquire/preserve records in electronic form, does it plan to establish or implement one in the future?

Fifteen of the twenty-six institutions that did not have a mandate to acquire and preserve electronic records stated that their institution had no plans to establish or implement such a mandate. Twenty-five institutions chose to answer the supplementary question, which asked them to explain why their decision to implement or not implement an electronic records mandate had been taken. From the responses received, it appears that the existence of a mandate to acquire and preserve electronic records is not a function of the size of the institution. For those institutions reporting a staff complement of five or fewer, 66.6 per cent did not have an electronic records mandate, whereas among institutions with six or more staff 60.0 per cent had a mandate.

Question 7 was designed to determine what methods institutions are using to acquire electronic records. Respondents were presented with five suggested acquisition methods; twenty-six institutions checked off at least one of the five suggested methods, and several indicated that they use more than one. Fourteen use formal records schedules/authorities, thirteen use direct transfer, thirteen reported private donations, two purchase electronic records, and four specified other methods.

Generally, institutions do not have specific budgets allocated to the acquisition and preservation of electronic records (Question 8). Nineteen respondents left the question blank, and a further twelve replied "n/a." Eighteen of the twenty-four respondents who gave an answer made remarks such as "no budget," "0\$," "nil specifically earmarked," "zippo," "not allocated," or "nil." Only six (10.9 per cent) of all survey respondents reported having any significant budget at all; three of these reported it as part of a larger archival or records management budget, and two were divisions of the National Archives.

Acquisition

Under Section III (Questions 10 through 13), only sixteen institutions (29.1 per cent) of those responding reported that they had actually acquired electronic records (Question 10). Thirty-two respondents went on to give detailed textual answers as to why their institution had not acquired such records, and thirty-four explained where the acquisition of electronic records fell on their institutional priority list. Of the sixteen institutions that had acquired electronic records, eleven had five or fewer staff (including five responses from single-employee institutions), three had staff of fifteen or less, and two had staff over twenty-five (again, the two divisions of the National Archives). It seems that actual activity in terms of the acquisition and preservation of electronic records is found mainly in two distinctly different spheres: that of the National Archives of Canada, and that of the smaller archival institutions across the country.

A small number of institutions indicated that they had formal appraisal criteria and/or procedures for electronic records. Only five (9.1 per cent) of the fifty-five institutions responding to this question reported that they had such criteria/procedures, while thirty-nine (70.9 per cent) said they did not, and eleven (20.0 per cent) left the question blank. Sixteen respondents elaborated on their criteria or lack thereof in the subsequent question, while thirty-nine others left the question blank.

It is difficult to give more than a general overview of the sources and nature of the records acquired by institutions, either with or without formal appraisal criteria or procedures for electronic records. In several cases an institution indicated in Question 10 that it had not acquired any electronic records at all, yet went on to answer the following questions about sources (11) and nature of the records (12) as if they had actually done so. Much of the blame for this confusion must rest with the wording of Question 12, which asked, "What is the nature of the electronic records which your institution has acquired?" then went on to give eight different options and a place to mark "acquired," "plan to acquire," and "don't know." By attempting to discover both an institution's present acquisition of electronic records as well as its future acquisition plans, the survey elicited conflicting answers.

We can, nonetheless, glean some information from the answers received. **Table IV (i)** gives the breakdown of sources of electronic records acquired and planned for acquisition, while **Table IV (ii)** shows the nature of such records:

Table IV (i): Sources of Electronic Records

	Acquired	Plan to Acquire
federal government depts etc.	5	1
provincial/territorial depts. etc.	3	0
city/municipal depts. etc.	0	1
corporations/private organizations	2	1
universities/colleges	2	1
religious organizations	2	0
private citizens	4	3
other (specify)	4	0

Table IV (ii): Nature of Electronic Records

	Acquired	Plan to Acquire
longitudinal info. collection (surveys like census)	5	1
one time info. collection (unique surveys)	3	1
transaction data from corporate operational systems	2	4
scientific data	3	2
documents from office automation	6	9
geomantic applications (maps)	2	2
photos/audio visual in digital form	3	3
other (specify)	0	1

The breakdown of the nature of electronic records acquired or planned for future acquisition both confirms an existing impression of the nature of archivally-valuable electronic records, and reveals a new trend. It is no surprise to learn that archival institutions are preserving longitudinal information collection tools such as the census, and one-time (or "one shot") surveys; these are the two formats of electronic records traditionally preserved by archives.

It is interesting to note, however, that in addition to the more "traditional" electronic records, a number of institutions reported that they had acquired or were planning to acquire records from corporate operational systems, scientific data, and documents from office automation systems—sources which have in the past been considered of little or no archival value. In part, this is simply a reflection of the effect of technological changes over the past twenty years; the "first generation" archivists acquiring electronic records in the 1970s were not faced with the need to appraise, select, or preserve relational databases or hypermedia, documents because such records had not yet been fully developed.⁵

Yet these results also reflect a deeper change in the world of archives and electronic records. Rapid technological advances have so altered the nature of record-keeping practices that archivists can no longer afford to consider any kind of electronic record "non-archival" without first giving the matter careful thought and analysis. For example, for quite a long time, many archivists thought of records produced by an office automation system as "just word processing documents," hardcopy versions of which were later put on registry files. This meant that such office automation systems were considered to have little or no archival value, and were therefore low on any priority list for acquisition.⁶

Recent experience has shown that this is not necessarily the case, that many organizations are relying more and more on office automation systems, and that electronic mail is gaining in its importance both to the organization and to future researchers (witness the recent controversy in the United States over electronic mail messages dispatched during the Iran-Contra affair). Electronic documents are not being printed automatically and preserved as hardcopy on registry files. Acquisitions such as the electronic records of the Trade Negotiations Office (TNO) at the National Archives of Canada are reinforcing the growing importance of such formerly "non-archival" material—thereby resulting in a shift in the nature of archival holdings of electronic records.⁷

Arrangement and Description

Not surprisingly, given the few institutions reporting that they had acquired electronic records, this portion of the survey was largely unanswered. Asked whether their institution described electronic records separately from the rest of their archival holdings, seven institutions (12.7

per cent) said yes, twenty-three (41.8 per cent) said no, and twenty-six (47.3 per cent) left the question blank.⁸ Twenty institutions explained why the situation existed, and seventeen went on to indicate whether the situation was likely to change in the next five years. When asked what standards are used to describe their holdings, twenty-three institutions responded.⁹ Six (26.1 per cent) identified *Anglo-American Cataloguing Rules, 2nd Edition*; two (8.7 per cent), Sue Dodd's *Cataloguing Machine Readable Data Files*; and eight (34.8 per cent), other systems such as the Nova Scotia Subject Authority Headings, the *RAD* fonds/series description, or internal descriptive systems. Ten institutions (43.5 per cent) reported using no descriptive standards at all.

In other questions, respondents were asked whether the description of their holdings, either of electronic or of other materials, included cross-references to other media types. Of the twenty-two institutions responding to the question of electronic records description including a cross-reference to other media, ten (45.5 per cent) said yes while twelve (54.5 per cent) said no. To the complementary question, that of other media including cross-references to electronic records, only thirteen institutions responded at all, nine (69.2 per cent) saying yes and four (30.8 per cent) saying no.

Conservation and Public Service

The section on Conservation and Public Service asked respondents questions about the steps taken to conserve electronic records, the types of media acquired/planned for acquisition, the nature of the institution's conservation facilities, the nature of public service offered for electronic records, and any planned enhancement to an electronic records programme. As was the case with the section on Arrangement and Description, much of this section was left blank—apparently a direct result of the fact that very few archival institutions have actually acquired electronic records. Furthermore, since many institutions also reported that they had only basic conservation facilities for textual records, it might be assumed that this has not yet become a serious enough concern for most institutions, when compared with other more pressing issues, such as the proper management of existing textual records (including acceptable storage facilities) and obtaining adequate resources (such as staff and funding).

Some very general information, however, can be reported from this portion of the Survey. Twenty-four respondents gave detailed textual answers as to which steps, if any, their institutions were taking to preserve electronic records. When asked whether their conservation activities were carried out in-house or by other facilities, nineteen institutions reported some in-house activity, while twelve said that they used other facilities. Twenty-one textual answers describing in more detail the institution's in-house activities were given, as were eighteen similar answers to the question of special precautions for electronic records media and storage areas. Finally, twenty-three respondents gave a summary of the type of public service provided for electronic records.

Future Directions

The final two questions of the Survey were designed to elicit information which would allow the Committee to make recommendations to the ACA Board on a future course of action. Question 24 asked,

What plans does your institution have to increase or enhance its electronic records programme in the next five years?

Out of the fifty-five returned surveys, thirty-two (58.2 per cent) answered this question. Of those responding, fourteen stated that they had no plans or did not know what they would be doing to enhance their electronic records programme within the next five years. The majority of those fourteen responses came from institutions where the staff complement was less than ten.

Of those surveys in which the question was answered in more detail, the responses were varied. One institution merely replied "optical disk" without elaborating. A common complaint was the lack of funding. One respondent stated that there were plans to increase the electronic records programme, but limited resources meant that doing so would take time. Another said that everything relating to electronic records was dependent on the construction of an adequate archival facility, which the institution currently lacked.

Institutions with both a responsibility to a sponsoring body and a wider acquisitions mandate (which may embrace other agencies or the general public) saw the immediate challenge as gaining better control of their sponsor's records before branching out. ("Gaining better control" included such straightforward tasks as developing storage areas for electronic records that are free from the hazards of dust and magnetic fields, records scheduling, and archival input to computer systems at the design stage.) Still others anticipate that, while the development of an electronic records programme will become a concern in the future, the present record-keeping practices of their sponsoring bodies remain paper-based for those records of archival value and therefore do not require immediate attention.

Archives whose acquisition responsibility is limited to material from their sponsoring body seem to be concentrating on making electronic records part of a global, integrated records management programme. One respondent reported that a new records manager had been hired in the corporate archives and would be making recommendations for increased awareness of electronic records and scheduling, while another said that they had just started their electronic records programme.

Three large organizations responded. Two of them, the Provincial Archives of New Brunswick and the Government Archives Division (GAD) at the National Archives of Canada, answered this question in detail. PANB reported that the development of a "strategy to ... acquire funding, technical support, storage, staffing, and capabilities for preservation of EDP records" was a priority for them in 1992; they hoped to have a full programme in place by 1999. GAD replied that the growing importance and volume of federal government electronic records has influenced the Division's adoption of a planned approach to scheduling the records of federal departments, regardless of medium. The Division anticipated an increase in the in-house servicing of electronic records, and the refinement and expansion of service functions, as soon as demand for such records increases.

The final question (25) gave the respondents an opportunity to make any other comments on electronic records to the Committee on behalf of their institutions. Twenty-two respondents replied to this question. The responses often revealed frustration and lack of direction regarding electronic records, particularly among those archivists in single-employee institutions. Some specific responses were:

Restraints on staff time is the major reason why a programme has not been implemented to date. Steps are currently being taken to give the Archives Committee responsibility for all records management functions for the Conference. ... It is assumed that the Archives will take responsibility for electronic records as part of records management mandate. (7)

At present, I don't know how our institution could hope to accept electronic records and be able to provide access. ... I can't see our budget providing for anything else for the foreseeable future. WHAT DO YOU SUGGEST? (33)

The reluctance of many archives and archivists to accept electronic records that they cannot adequately preserve and make available comes through clearly in the response to this question in questionnaire number 12, from an institution with a single archivist on staff:

I am sure that issues on electronic records are important, and that I will have to face them. The only set of floppies we have been given are in fact 8" size from an old MICOM word processor. We do not have the hardware for using the disks or the documentation. It is a lovely parable that may indicate why I am not thrilled about electronic records in the archives. (12)

It has been twenty years since the "first generation" of electronic records archivists started writing and speaking about the impact of electronic records on archives and archivists. In the intervening time, a great deal of attention has been devoted to theorizing and assessment, usually by a recognizable subset of the profession as a whole. This intellectualizing is important, but in dealing with electronic records there must be a balance between theorizing or strategic planning about electronic records and carrying out practical activities on the records themselves. Any such activity undertaken without prior assessment and careful planning will likely be less than one hundred per cent successful. On the other hand, it can be all too easy to spend so much time developing theoretical approaches or the strategic plan that little or no substantive activity is carried out.

Unfortunately, there has been little in the way of exchanges of "practical information" from those in the profession outside that group of archivists who have been developing and applying theoretical principles to their own individual situations. Electronic records have now been around long enough that a growing number of archivists, in both large and small institutions, have been forced to deal with them and have probably come up with new perspectives on the theories expressed by others, or different implementation strategies which others in the field might find useful. Perhaps what is needed now is a method of ensuring that more of this "practical" information on all archival aspects of electronic records is disseminated to archivists across Canada, preferably within the context outlined in the ACA's *Education Programme and Plan* (July 1992):

Those of us just starting out or planning to implement an electronic records programme would appreciate some information on how to go about this. Maybe some technical bulletins, information bulletins or training sessions offered regionally would be of help. Most archivists traditionally have dealt with mainly paper based or photographic materials, EDP records are "new" and we would like to know the best methods for their care, preservation and storage. (16)

We hope that more will be known about storage and care of electronic information in the near future; and that you and your survey may not be the end of your interest and activity in this kind of venture for archivists and the information which they manage and dispense to searchers who come for service. Education seems to be generally a need in other more conventional types of archival care and management. (29)

like to see various institutions' methodologies for inventorying, classifying, scheduling electronic records published as a means of exchanging information. (15)

Help! More training, please. Can't be too basic, in my opinion. (44)

A perceived need to develop very specific, hands-on courses and workshops in this area. (55)

One notes here the emphasis on the need for training and tools, as opposed to education. There is now in Canada a large body of knowledge about the archival treatment of electronic records at the theoretical level, and the beginnings of some practical expertise in acquisition, preservation, and dissemination. The problem is that this knowledge is concentrated in certain institutions, most notably the National Archives. The key will be communicating that knowledge to other archivists searching for direction and assistance, whether it be through courses, workshops, conference papers, publications, or staff exchanges.

The last and most optimistic statement on the subject came from the National Archives. Although it is the largest and most experienced institution in terms of electronic records, this fact does not diminish the essential truth :

Archives are right to be cautious, but should not be overly so. Archives now have a great deal of experience with standard survey records in electronic form. Fairly modest outlays in terms of physical facilities - storage, and even computer equipment. Most essential is computer knowledge and skills, which would have to be bought. As a minimum, one experienced person. Development of in house expertise could follow. Good interaction with archivists essential to success of the programme. (34)

Results of the Survey of Archivists

Overview of Respondents

A total of 155 ACA members answered the Survey of Archivists, a response rate of 24.8 per cent.¹⁰ The Survey was divided into three sections, the first of which asked respondents to indicate the nature and location of the institution for which they worked. Completed questionnaires were received from a wide variety of institutions in all ten provinces, the two territories, the United States, and the Netherlands.

Table V: Nature of Institution¹¹

National	17	(11.0%)
Provincial/Territorial	47	(30.3%)
City/Municipal	13	(8.4%)
University/College	21	(13.6%)
Corporate/Private	17	(11.0%)
Museum	8	(5.2%)
Religious	19	(12.3%)
Other	20	(12.9%) ¹⁴

Table VI: Location of Institution¹²

British Columbia	21	(13.6%)
Alberta	20	(12.9%)
Saskatchewan	5	(3.2%)
Manitoba	8	(5.2%)
Ontario	65	(41.9%) ¹³
Quebec	4	(2.6%)
New Brunswick	5	(3.2%)
Nova Scotia	11	(7.1%)
Prince Edward Island	3	(1.9%)
Newfoundland	5	(3.2%)
Yukon	3	(1.9%)
N.W.T.	2	(1.3%)
Other ¹⁵	4	(2.6%)
<i>Not given</i>	1	(0.7%)

Section II, Education/Background, was designed to elicit a general picture of the educational background of each respondent, and to determine the extent and nature of his/her education and training with regard to electronic records. Most respondents gave their present position as "archivist," or a variation such as reference archivist,¹⁶ and many also noted that they filled dual positions, such as archivist/records manager. Most also reported that they had been in their present position for less than five years. This should not be taken to mean that only recent entrants to the archival field answered the survey; as Canadian archivists all know, there is a high degree of mobility in this field, and the question asked only for the *present* position, not length of time in the profession.

Table VII: Present Position of Respondents

archivist	87	(56.1%)
manager	37 ¹⁷	(23.9%)
consultant	6	(3.9%)
assistant archivist	5	(3.2%)
librarian	4	(2.6%)
curator	3	(1.9%)
archives technician	2	(1.3%)
records analyst	2	(1.3%)
records manager	2	(1.3%)
archives adviser	1	(0.7%)
policy/procedures analyst	1	(0.7%)
hist. records supervisor	1	(0.7%)
information manager	1	(0.7%)
processor	1	(0.7%)
descriptive standards officer	1	(0.7%)
prof, archival studies	1	(0.7%)
keeper	1	(0.7%)
unemployed	1	(0.7%)
<i>Not Given</i>	5	(3.2%)

Table VIII: Length of Time in Present Position

less than 1 year	9	(5.8%)
1 to 5 years	80	(51.6%)
6 to 10 years	33	(21.3%)
11 to 15 years	16	(10.3%)
16 to 20 years	7	(4.5%)
21 to 25 years	2	(1.2%)
unemployed	1	(0.7%)
<i>Not given</i>	7	(4.5%)

Canadian archivists are a highly-educated group of professionals from diverse educational backgrounds, as evidenced by the figures relating to the highest level of education completed and subject specializations of the survey respondents:

Table IX (i): Highest Level of Education

high school	2	(1.3%)
college/technical school	2	(1.3%)
university (undergrad)	35	(22.6%)
university (graduate)	116	(74.8%)

Table IX (ii): Graduate Degrees¹⁸

Master of Arts (MA)	80
Master of Archival Studies (MAS)	15 ¹⁹
Ph.D	11
Other (26)	
<i>Master of Library Science</i> ²⁰	18
<i>Master of Education (M.Ed.)</i>	2
<i>LLB</i>	1
<i>Archive Administration</i>	1
<i>M.T.S.</i>	1
<i>M.Red.</i>	1
<i>Master of Science (MSC)</i>	1
<i>Master of Fine Arts (M.F.A.)</i>	1

Table X: Subject Areas of Post-Secondary Degrees²¹

history (unspecified)	75	psychology	2
library science	25	archaeology	1
history (Canadian)	25	biology	1
archival studies	15	economics	1
English	12	film studies	1
education	7	geography	1
political science	7	German	1
anthropology	6	history (American)	1
English literature	6	Italian literature	1
archive administration	5	intellectual history	1
Canadian studies	4	journalism	1
information science	4	Latin American Studies	1
theology	4	linguistics/dialectology	1
art history	3	Near Eastern studies	1
folklore	3	physics	1
history (European)	3	public administration	1
music	3	public history	1
records management	3	religious education	1
creative writing	2	sociology	1
French	2	women's studies	1
historical geography	2	zoology	1
international relations	2		
Latin literature	2	<i>Not given</i>	15
library science & archives management studies	2	<i>Not Applicable</i>	2

In addition to eliciting these contextual facts on the education level and subject specialization of Canadian archivists, the questionnaire also sought to discover the nature of education and/or training received by archivists specifically on the subject of electronic records. Of the 130 people who responded "yes" to the question,

Have you received any formal archival training? (By formal, we mean any course for which you had to register and then received a certificate, such as the MAS programmes, the National Archives Course, or conference workshops.),

122 went on to answer the supplementary question on the nature of the training. Fifty-nine respondents stated that they had taken the Public (National) Archives of Canada Archives Course; thirty-two said they took courses or a series of courses from universities and colleges such as Simon Fraser University, the University of Alberta, and George Brown College. Eighteen people took Master of Archival Studies courses at the University of British Columbia, and forty indicated attendance at workshops sponsored by various associations such as the ACA, the Association of Records Managers and Administrators (ARMA), and provincial associations. A further ten respondents cited subject workshops without noting their sponsors, while eight others reported unique opportunities, such as Bentley fellowships, a cartographic archivists' seminar, a National Archives and Records Service (NARS) case study, and a course given by Hugh Taylor. When asked whether this formal training included sessions on electronic records, sixty-five respondents (41.9 per cent) said that their formal training had included such sessions, seventy-one (45.8 per cent) said theirs did not, and nineteen did not answer the question.

In Section III: Needs and Goals for the Future, the questionnaire began by asking whether the respondent currently had records management or archival responsibility for electronic records. Eighty said that they did, seventy-four said 'no', two said 'maybe', and one respondent checked off both 'yes' for archival responsibility, and 'no' for records management. Two supplementary questions were then asked, depending upon a 'yes' or 'no' answer. If the respondents said that they did in fact have some responsibility for electronic records, they were then asked to give a more detailed description of those tasks. Eighty-five respondents answered this question in some detail. Respondents stating that they had no responsibility for electronic records were then asked whether they foresaw the need for them or someone with whom they worked to address activities relating to electronic records within the institution. They were given four choices (the next year, two years, five years, or never) and asked to explain their answer. One respondent said "Now," twenty-four said the next year, twenty-five said two years, twenty-one said five years, and four said never. Only sixty-three respondents chose to explain their answers more fully.

In terms of receiving training from the employing institution, twenty-two respondents (14.2 per cent) reported that they had received some training on electronic records from their institution, while 129 (83.2 per cent) said that they had not, one (0.7 per cent) reported having received some, and three (1.9 per cent) left the question unanswered. It should be noted that the figure for those receiving training may be somewhat misleading, since many of the respondents answering "yes" to the question work for the National Archives of Canada, which has recently mounted a series of training sessions on a variety of issues relating to electronic records.

Those who have received training from their institutions were asked to explain the nature of that training. Their responses varied. Apart from training geared to deal with institution-specific situations,²² respondents indicated that they had received training on the nature of electronic records, general information and direction, appraisal, scheduling, processing, current database technology, systems design, computer literacy, word-processing, specific computer languages (such as JCL and WYLBUR), and description. Some respondents noted that their training had come from conference participation, local workshops and courses (presumably funded by the institution), and professional discussions, while one asked,

What about training in the electronic records we produce while using micro-computers?

Training in that area has been haphazard, inconsistent, uncoordinated and of limited utility. (6)

Not one of the detailed answers to this question from anyone outside the National Archives pointed to the existence of a planned, comprehensive approach to training in the archival treatment of electronic records.

The responses to the following question, "If you have not received training, explain why" are quite revealing. While it is difficult to give precise figures, 109 respondents cited the following as some of the reasons why they had not received training in the management of archival electronic records (with the number of responses indicated in parentheses): lack of availability (twenty-eight); lack of immediate relevance to the respondent or his/her institution (nineteen); not applicable either to the institution or to the respondent's specific job (twelve); other priorities more important (ten); lack of funding available (ten); not enough electronic records within the institution yet (eight); still developing strategies for electronic records (five); no time (three); respondents are expected to train themselves (three); have not sought such training (two); and not sure whether institution will be acquiring electronic records (two).

These responses, combined with the result of the following question, "Does the post-appointment training to which you have access, offered by various provincial and local associations, offer sessions/courses in electronic records?", clearly show that there is a lack of available training in electronic records available to the Canadian archival community. While fifty-

five people said that the provincial and local associations offered such sessions and courses, sixty-nine said they did not, twenty said they did not know or were not sure, and twelve did not answer the question.

If, as has been suspected for some time, there is a lack of training in electronic records available to Canadian archivists, and the ACA is expected to fill that gap, then what sorts of tools and activities should be used to do it? Respondents were asked to rate a number of ACA tools such as the *Bulletin* and *Archivaria*, and activities such as workshops, round-table discussions and conference papers, in order of importance in order to determine which of them would best suit their needs. Tables showing the number of responses and ratings of the various items are found below. The most requested ACA tool is a "handbook" of key items that have not previously been available to the profession at large (i.e., institutional policies, basic procedures, position papers, etc.). *Archivaria* articles were rated second, followed closely by an annotated bibliography and *Bulletin* items. In terms of ACA activities, specialized workshops of any level were rated highest by respondents, who were also given the opportunity to indicate the level of course which they would prefer. Forty people (33.3 per cent of replies) asked for beginner level, seventeen (14.2 per cent) for an advanced level, and sixty-three (52.5 per cent) for a structured, graduated series.

Table XI (i): Ratings of ACA Tools

	handbook	annotated bibliography	<i>Archivaria</i> articles	<i>Bulletin</i> items
Ranking 1-5				
1	81	17	15	7
2	15	35	41	26
3	10	25	40	25
4	9	26	11	42
5	1	1	5	2
Total²³	116	104	112	102

Table XI (ii): Ratings of ACA Activities²⁴

	specialized workshops	roundtable discussions	ACA conf. papers	archival exchanges
Ranking 1-5				
1	85	15	3	10
2	21	32	27	32
3	9	40	24	21
4	-	12	37	28
5	-	-	2	1
Total²⁵	115	99	93	92

The most revealing portion of the Survey of Archivists, however, came at Question 14, where respondents were asked what they felt would be the most important electronic records issues facing the Canadian archival profession within the next five years; of the 155 returned questionnaires, 123 (79.4 per cent) answered this question. It is difficult to give an exact break-

down of the responses because most respondents felt that there was a variety of important issues, many of which overlapped each other. It is possible, however, to group the responses according to broad subject areas and comments, and to observe similarities and trends.

Changing Technology

By far the greatest concern of those surveyed was the challenge of technological change. Thirty two respondents rated it as one of the most important issues confronting the Canadian archival profession in the next five years. Most respondents simply made reference to developments in hardware and software, obsolescence, transferability, compatibility, and the diversity of technology; others gave more specific answers such as:

What will be the standard parameters & what equipment should we assume will be available in 2000 or 2010? (62)

being knowledgeable enough about current, past & future software programmes used for electronic records, so that records may be identified and scheduled. (103)

Keeping up with technological changes so that existing records aren't forgotten in obsolete machinery. (131)

Three respondents took the issue of technological change a step further and cited the need to ensure that archivists get the training necessary to deal with these changes. One stated,

The technology is proceeding much faster than the ability of the Archivist to handle it. How can the Archivist handle these expanding responsibilities with no proper formal training, and no funds made available to implement training programmes. The problem is much larger than most people think. (91)

Combining these findings with the responses to Question 13, given in **Table XI (ii)**, makes it clear that Canadian archivists are looking for training in electronic records, perhaps even a forum in which they can discuss the impact of technological changes on their own situations.

Resources

This is not a new issue to the archival field, where funding has always been difficult to find, regardless of the medium of the records involved. Twelve respondents felt that resources, the lack thereof, or the need to pursue them was an important, if not the most important, issue facing the Canadian archival profession with regard to electronic records.

Acquisition and Records Management

Twenty-six of the persons answering this question made reference to the importance or difficulty of appraising electronic records. Sixteen of the replies dealt with the subject in generalities, often stating only the word "appraisal" on their questionnaires. Several responses clearly stated the conviction that appraisal was the most important future issue:

I see this first and foremost an appraisal issue and acquisitional issue - the traditional methods of disposition of paper records need to be modified. (107)

- appraising electronic records & acquiring those of true archival value rather than acquiring records simply because they are in electronic form & we are therefore unsure of their archival value. (102)

One respondent felt so strongly that stressing proper contextual appraisal was the key to dealing with electronic records that he covered nearly the whole last page of the questionnaire expanding on his position!

Many of those responding appeared to want clear, standardized guidelines for appraising electronic records; given that there already exist several good theoretical treatments of the subject, perhaps what is actually needed is a work which applies those theoretical guidelines to the practical reality of appraising certain kinds of electronic records, especially newer forms that did not necessarily exist when the appraisal of electronic records was first discussed. This hypothesis is strengthened by those replies that made reference to the appraisal problems posed by newer electronic records such as electronic mail, the "paperless office" system, and databases—particularly those that share data with other parts of the creating organization, or with external agencies.

In addition to the twenty-six replies dealing in some fashion with "appraisal," eight questionnaires called for improvements in records management in general and scheduling in particular. Such a response dovetails with a related issue raised by twelve other respondents: in the matter of electronic records, archivists need to be more closely connected both to records creators and to their records management personnel (when they are not already embodied in the archivist), because it is otherwise difficult or even impossible to acquire electronic records of archival value. One archivist wrote,

The single most important issues [*sic*] should be the integration of records management and information processing in organizations that create archival records, and a greater role for archivists-records managers in creating computer systems. (101)

This sentiment was echoed directly by eleven other respondents, using phrases such as

... persuading [electronic records creators] to take archival aspects of info management into account. (5)

... we have to be concerned that we are not being permitted access to EDP records. (8)

... these records will be handled by other information professionals who do not understand the historical significance [of these records]. (10)

... Electronic "attics" will develop just as they did with textual records. (19)

... the perception of the public, resource allocators, and some information systems managers that archives are only concerned with "old stuff". (28)

This is not a particularly new issue, having been articulated in the early 1980s in relation to the scheduling of electronic records at their design stage. The fact that it is being raised again as potentially one of the most important issues over the next five years shows that archivists have made very little substantive progress in this area and still need to work at ensuring cooperation among archivists, records/information managers, and creators.

Arrangement, Description, and Public Service

Appraisal quite naturally leads into a discussion of arrangement and description, as one respondent pointed out in his reply:

Description and public service are issues coming out of appraisal & acquisition. The issue of appraisal & acquisition is driven both by archives & records creators, but records creators have little interest in what happens afterwards. Archives will be alone to face these issues. (128)

Despite the number of respondents who felt that acquisition, appraisal, and records management would be the most important electronic records issues facing Canadian archivists over the next five years, and that arrangement and description of archival material (regardless of medium) flows from appraisal, only ten questionnaires out of the 123 mentioned description as an important future issue. Four respondents simply stated the terms without further clarification;

two others treated description as part of a larger issue, such as “knowing how current archival functions (e.g., description, conservation) apply to electronic records” (103), or “description/responding to researchers needs” (123). The other four respondents gave slightly more detailed answers, citing “comprehensive description” (21), “descriptive issues (descriptive standards)” (43), “provenance versus subject indexing” (117), and “R.A.D. application” (153) as important issues confronting electronic records archivists.

In terms of public service, respondents were overwhelmingly concerned about access to electronic records: twenty-seven replies dealt with the subject and covered a range of specific details. Seven respondents cited “access” (without providing specific details) as an issue. Eight replies saw physical access to the records and the implications of changing technologies as problems with which electronic records archivists should be concerned. Two of those eight went beyond a general indication of the problems of technological change to mention two rapidly emerging issues: “access [to] electronic records via on-line network” (85) and the need to develop “preservation standards and access protocols for post-custodial archives.”²⁶ Seven respondents said that archivists should be, as one put it, “tackling the challenge of researcher use” (80). One reply posed a series of questions that seemed to sum up this aspect of the “access” issue:

How to make the electronic records accessible to the researcher? Can we print out all the data? Some of the data? Set up a computer for the researcher & transfer magnetic tape to floppy disk or transfer to the computer hard drive? (59)

This subject leads directly to another issue of importance to archivists now and prospectively over the next five years: the implications of freedom of information and privacy legislation for electronic records. Six respondents made direct reference to the importance of this issue. One asked, “How to include Freedom of Information/Privacy criteria in databases (i.e., how to facilitate FOI inquiries)” (9). Another cited “privacy concerns (in situations where there is no Privacy Act)” (54). While there has been an increasing number of works written on the subject of freedom of information legislation and its implications for electronic records, it seems to be a relatively new area of research that will continue to grow—especially in view of the operation of the Nova Scotia’s second (1990) *Freedom of Information Act*, the recent introduction of FOI legislation in Ontario, and its development in British Columbia.

Conservation

Thirty-six respondents dealt with the subject of conservation, preservation, and storage of electronic records. The large majority of them (twenty-eight) merely identified the issue, using phrases such as the “long-term preservation of electronic records” (66) without specifying aspects of this broad agenda that needed to be addressed over the next five years. Two respondents highlighted as an issue the cost of maintaining proper/adequate storage facilities for electronic records, while six others were more specific, citing the “establishing of media standards for storage” (80) or the need to investigate the longevity of new storage media such as optical disks, and to develop standards (105).

Other Issues

In addition to these major areas of concern, a variety of other issues were raised: the originality of the record; the legal status of computerized records; the need for archivists to receive training for specific tasks; the use of networks by archivists to exchange information, both among themselves and with researchers; the problem of trans-border data flow; the need for standards in archival automation; computer viruses; and the need to define the role of archives in relation to other branches of information management.

The questionnaire ended by asking the respondents, "Are there any other comments on issues relating to electronic records that you would like to make to this Committee?" Thirty-five respondents took the opportunity to present further opinions on the questionnaire and the state of the profession regarding electronic records, or to suggest goals/tasks for the ACA and its members. Rather than try to summarize them all, I have divided the comments into two main categories, where they can best speak for themselves.

Electronic Records and Archivists in the Field

"HELP !!!!" (79)

"It was an excellent idea to send out this questionnaire -and I like the tone of educating us re. electronic records. I know I'll need to know a great deal more about them in order to function in coming years - they're a Pandora's box!" (61)

"A word of caution? When talking about [electronic] records to archivists in repositories without electronic records do not assume that you're talking to technological idiots! Lack of resources in our smaller institutions does not preclude personal interest or ability in these areas!" (18)

"Do not, of course, limit your attention to government created machine readable records; and learn whatever one can from SAA & NARA on this important subject." (112)

"This is a very important issue and I feel the profession needs to see more in print on this subject." (46)

"I have no problem regarding knowledge of computers & scheduling / appraisal techniques. My problem is: what do I do when these records land on my doorstep? I cannot store, preserve or provide access to electronic data at the moment. Also, my institution does not seem to want to tackle this problem anyway." (66)

"I would like to see this committee address the issues with the widest impact first. Textual electronic records are going to be a concern to all archives large & small, whereas data files are the domain, for the most part, of larger institutions. Get small archives involved ASAP." (128)

"The assumption of this questionnaire that one can be trained for "electronic records" much as we might be for film or cartography with their long and distinctive "history" [?] is quite false. Given the dramatic ways that computer communications are changing office procedures and practice virtually any training anyone may have had in the past will be irrelevant in any case." (40)

"What's going on in the world? Are we leading (scary) or is anyone doing anything we should know about? I think we should be representing our needs to manufacturers of hardware & software i.e. the need to be able to freeze and archive electronic data so that a permanent, "non-temperable" record is created. We need to be more vocal - guiding the industry instead of following two steps behind." (131)

Suggestions for Specific Projects, Products, and Tasks

"How about a "White Paper" of some sort?" (21)

"I am presently exploring ... the feasibility of establishing a teleconferencing facility ... on the subject of electronic records management... accessible via the Internet." (24)

"[Canadian Council on Archives] should fund a major effort in electronic records, similar to the one for conservation. We should establish a coordinated national agenda through the [Federal, Provincial, Territorial] Records Council and the FPT Archives Councils." (56)

"There needs to be a clear line of distinction made between ACA's role & CCA's role." (116)

"Please review the [Planning Committee on Descriptive Standards'] RAD chapter on machine readable records, or have members do so individually." (123)

"More training on the handling of EDP records is definitely needed. This can either be in the form of workshops or through publications. Training sessions should be offered locally and not in one central area." (8)

One respondent made a comment about what he/she perceived to be the direction of the Survey that is worth repeating and discussing in some detail, because it underlines once more the Select Committee's mandate and goals:

I assume your questions are directed at those responsible for the care and handling of electronic records - not training received in use of. Your "results" might be more representative had a copy been sent to the archivist responsible for electronic records at each institution. (124)

On a purely practical level, it would have been impossible to send the Survey to only those ACA members who actually had some existing responsibility for electronic records. The ACA membership list has no such designation, nor would it have been easy to determine this distinction from another source. In an archives having one staff member, for example, it might be reasonable to suppose that one archivist does it all and therefore should respond to the questionnaire; on the other hand, the institution may have had nothing to do with electronic records. In such a case, the archivist will have had neither responsibility for nor training in electronic records. In larger institutions with more staff and resources, the majority of archivists will probably have some responsibility for or even simple exposure to electronic records. It cannot be said that only these archivists—the ones who are already more advanced than many—can provide the "representative results" that the ACA will use to shape the future.

Given that the mandate of the Select Committee was to provide the ACA with recommendations as to what it should do to provide long-term direction for electronic records, it would be simplistic to assume that only those who currently have responsibility for electronic records could offer representative results. Many institutions and archivists are only now coming to grips with the issues surrounding electronic records, and will therefore require training and support to fulfil their functions. Unless their needs and widely varying educational backgrounds are taken into account in the early planning stages of any ACA programme, the Association cannot possibly hope to provide adequate leadership in the area.

Conclusion

The results of the Survey of Institutions and Survey of Archivists have not presented the ACA with a wealth of new and startling information about the state of electronic records in the Canadian archival community. Rather, they have provided clear evidence of the present situation of archives and archivists dealing with electronic records and a glimpse of what will be needed in the future. By confirming or, in some cases, refuting commonly-held assumptions about the archival treatment of electronic records, the Surveys have provided a solid basis upon which the ACA may develop its future electronic records tools and activities.

The final report of the Select Committee on Electronic Records, approved by the ACA Board in the autumn of 1992, drew upon the results of the Surveys as well as direct input from the members of the Committee and discussions with other archivists in the field, in order to present the Board with a list of issues relating to electronic records and a series of nine recommendations. In order to begin the process of defining priorities and goals with respect to electronic records, the Committee recommended that, in addition to the creation of a Special Interest Section on Electronic Records (SISER), a Steering Committee be created and charged "to meet during 1992-93 and study the survey results and members' expressed wishes, establish priorities among the many possible suggested activities and develop a short- and long-term workplan ... to implement the priority items." The Steering Committee met in Ottawa on 5-6 March 1993 and drafted a strategic plan; once approved by the Board, the plan will be publicized through the *ACA Bulletin* to ensure that its contents are made available to the Canadian archival community.

A large number of archivists in Canada have been sufficiently exposed to electronic records, through either education, training, or practical experience, to have created a solid base of knowledge on which to base discussions of a more practical nature. The seventy-eight respondents to the Survey of Archivists who indicated at least some interest in joining an ACA special interest section or standing committee on electronic records showed that there is a strong desire for some regular ACA forum for the exchange of information on electronic records, an impetus which bodes well for the future of SISER.

As one respondent succinctly put it, "Most of the literature available talks about the need to come up with criteria, the need to set standards, etc. It's time to take steps beyond this" (81). With the results of both the Survey of Institutions and the Survey of Archivists, and direction and focus by SISER and its Steering Committee, the Association should be well on its way to helping Canadian archivists take those steps.

Appendix A: Questions Posed by the Survey of Institutions and the Survey of Archivists

SURVEY OF INSTITUTIONS

*In order for the Select Committee to make proper recommendations to guide the Association in future electronic records initiatives, it is necessary to find out what has already transpired in archives across Canada with regards to electronic records. This survey is designed to increase general knowledge of the state of Canadian archives, or archival programmes within larger functions such as libraries or records management services, with respect to electronic records. Like its companion **Survey of Archivists** which was distributed previously, this survey will also serve to highlight those institutions that have already grappled with changes wrought by electronic records and allow us to identify concentrations of valuable expertise. Results of this Survey will be summarized in the Committee's report to the ACA and a future issue of *Archivaria*.*

In Sections IV (Arrangement and Description) and V (Conservation and Public Service), you'll notice that the questions are structured in such a way that they seem to assume that your institution has already acquired electronic records, or plans to do so in the near future. If you find that many of these specific questions do not apply to your institution, we encourage you to tell us about that in the more free-form questions; it is as important to identify areas of little or no activity in electronic records as it is to find and describe established or soon-to-be-established programmes.

Above all, we encourage you to make comments on this survey; if there isn't enough room provided for your responses, attach separate pages. Thanks!

SECTION I: GENERAL INFORMATION ON THE INSTITUTION

1. Name of institution _____
2. Nature of archival institution

National	<input type="checkbox"/>	Provincial/Territorial	<input type="checkbox"/>
City/Municipal	<input type="checkbox"/>	University/College	<input type="checkbox"/>
Corporate/Private	<input type="checkbox"/>	Museum	<input type="checkbox"/>
Religious	<input type="checkbox"/>	Other (specify)	_____
3. Location of institution

B. C.	<input type="checkbox"/>	Alta.	<input type="checkbox"/>	Sask.	<input type="checkbox"/>	Man.	<input type="checkbox"/>	Ont.	<input type="checkbox"/>	Que.	<input type="checkbox"/>
N.B.	<input type="checkbox"/>	N.S.	<input type="checkbox"/>	P.E.I.	<input type="checkbox"/>	Nfld.	<input type="checkbox"/>	Yukon	<input type="checkbox"/>	N.W.T.	<input type="checkbox"/>
4. Total staff size _____

archivists	_____	archival assistants	_____
		technical support	_____
5. When was your archives established? _____

SECTION II: INFORMATION ON ELECTRONIC RECORDS PROGRAMME

6. Does your institution currently have the responsibility to acquire and preserve records in electronic form?

Yes No

 - 6a. If "yes", what is the basis for this mandate? Specify and where possible, attach copies of relevant documents.
 - Legislation
 - national
 - provincial
 - territorial
 - municipal
 - Internal archives' policy
 - Information management policy of the archives' supporting institution(s)
 - Other policy of supporting institution(s) (specify)
 - Other (specify)
 - 6b. If the basis of your institution's mandate is an information management policy, does it have
 - a records management component? an archival component?
 - 6c. Is your institution responsible for scheduling electronic records?

Yes No
7. By what method does your institution acquire electronic records?
 - formal records schedules/ direct (unscheduled) transfers
 - disposition authorities
 - private donation purchase
 - other (specify)

8. What is your institution's budget for this electronic records programme?
- 8a. How is this budget broken down for various archival functions? (For example, how much for appraisal, acquisition, arrangement/processing, description, conservation and public service?)
9. If your institution does **not** currently have an official mandate to acquire/preserve records in electronic form, does it plan to establish or implement one in the future?
- Yes () No ()
- 9a. Explain how your institution proposes to go about establishing such an official mandate, or why it will not be doing so.

SECTION III: ACQUISITION

10. Has your institution acquired records of archival value in electronic form?
- Yes () No ()
- 10a. If "no", give the reason(s) why your institution has not acquired records in electronic form.
- 10b. Where does acquiring electronic records fit on you institution's priority list (i.e. are a new building or storage space, exhibitions, etc. taking precedence)? Why?
11. From what sources has your institution acquired electronic records?
- () federal government departments, agencies, organizations
 () provincial/territorial government departments, agencies, organizations
 () city/municipal government departments, agencies, organizations
 () corporations/private organizations
 () universities/colleges
 () religious organizations
 () private citizens
 () Other (specify)
12. What is the nature of the electronic records that your institution has acquired?
- | <i>type</i> | <i>acquired</i> | <i>plan to acquire</i> | <i>don't know</i> |
|---|-----------------|------------------------|-------------------|
| a. longitudinal information collection
(i.e. surveys such as census) | () | () | () |
| b. one time information collection
(surveys such as "Teen drug use in Alberta, 1975") | () | () | () |
| c. transaction data from corporate operational systems (i.e. licensing, land registry etc.) | () | () | () |
| d. scientific data | () | () | () |
| e. documents from office automation systems | () | () | () |
| f. geomantic applications (maps) | () | () | () |
| g. photos/audio visual in digital form | () | () | () |
| h. other (specify) | () | () | () |
13. Does your institution have formal appraisal criteria and/or procedures for electronic records?
- Yes () No ()
- 13a. Please elaborate. For example, does your institution practise early identification/appraisal of electronic systems at the system design or records inventory stages?

[There was no question number 14]

SECTION IV: ARRANGEMENT AND DESCRIPTION

15. Are electronic records described separately in your institution (not integrated with related textual material)?
 Yes () No ()
- 15a. Explain why electronic records are/are not described separately.
- 15b. Is this situation likely to change in the next five years? Explain.
16. What standards are used to describe your institution's electronic records holdings?
 () *Anglo-American Cataloguing Rules (2nd ed)*
 () Sue Dodd, *Cataloguing Machine Readable Data Files*
 () None
 () Other (specify)
17. Does the description of the electronic records include cross-references to related archival records (textual, audio-visual, cartographic)?
 Yes () No ()
- 17a. If "yes", does the description of other media include the related cross-references to the electronic records?
 Yes () No ()
18. If your institution does not have a separate electronic records programme, outline the nature of the functional integration of electronic and textual material (i.e., for appraisal, acquisition, control/description, conservation, public service).

SECTION V: CONSERVATION AND PUBLIC SERVICE

19. What steps does your organization take to conserve electronic records, if any?
20. What type of media does your institution acquire/ plan to acquire?
- | <i>type</i> | <i>acquire</i> | <i>plan to
acquire</i> | <i>don't
know</i> | |
|-------------|----------------|----------------------------|-----------------------|-----------|
| a. tape | () | () | () | |
| b. disks | () | () | () | |
| c. cd | () | () | () | |
| d. other | () | () | () | (specify) |
21. Are your institution's conservation activities carried out in-house or by other facilities?
 In-house () Other facilities ()
- 21a. Describe your institution's "in-house" facility.
22. Are any special precautions taken in your institution's electronic records' storage area(s) to protect the information on the media as well as the physical media itself? If so, what are they?
23. What type of public service does your institution provide for electronic records (i.e., bulletins, finding aids, brochures)?

24. What plans does your institution have to increase or enhance its electronic records programme in the next five years?
25. Are there any other comments on issues relating to electronic records that you would like to make to this Committee on behalf of your institution?

SURVEY OF ARCHIVISTS

This survey has several purposes. First, it is designed to determine the nature and level of education that members of the ACA have received on the subject of electronic records. Second, by asking you to indicate where you work, we may be able to identify concentrations of people with experience or knowledge of electronic records in the various regions. Third, by asking you about your training needs or wishes, we will be able to make recommendations to the Association on future electronic records initiatives.

We encourage you to make comments on this survey, and if there isn't enough room provided for your responses, attach separate pages. Thanks!

I: Your Institution

1. Nature of the archival institution you work in:

National	()	Provincial/Territorial	()
City/Municipal	()	University/College	()
Corporate/Private	()	Museum	()
Religious	()	Other (specify)	

2. Location

B. C.	()	Alta.	()	Sask.	()	Man.	()	Ont.	()
Que.	()	N.B.	()	N.S.	()	P.E.I.	()	Nfld.	()
Yukon	()	N.W.T.	()	Other (specify)					

II: Education/Background

3. What is your present position?
4. How long have you been in this position?
5. What is the highest level of formal education that you have completed?
- high school () college/technical school () university undergraduate ()
 university (graduate) ()
 check one: MA () MAS () Ph.D () Other (specify)
6. For post-secondary work, in what subject area(s) did you receive your diploma(s)/ degree(s)?
7. Have you received any **formal** archival training? (By formal, we mean any course for which you had to register and then received a certificate, such as the MAS programmes, the National Archives Course, or conference workshops.)
- Yes () No ()
- 7a. If "yes", of what has that training consisted? (For example, what was the name of the course? What subjects were covered? What were the prerequisites, if any?)
- 7b. Did that formal training include sessions on electronic records?
- Yes () No ()

7c. If yes, state the duration:

- | | | | |
|-------------------|-----|-------------------------|-----|
| less than one day | () | 1/2 year course | () |
| 2-3 days | () | full year course | () |
| 4-5 days | () | part of a larger course | () |

7d. In general, state the nature of the electronic records sessions. (For example, what was the objective of the session? What topics were covered?)

III: Needs and Goals for the Future

8. Do you presently have some records management or archival responsibility for electronic records?

Yes () No ()

8a. If "yes", what are the specific duties that you perform? (e.g., records management, records scheduling/disposition, archival appraisal, arrangement, description, public service)

8b. If "no", do you foresee the need for you or someone you work with to address activities relating to the electronic records of your parent institution(s) or collecting jurisdictions within:

the next year () 2 years () 5 years () never ()

Please explain

9. Have you received training from your institution for these electronic records responsibilities?

Yes () No ()

10. If you have received some training, what was the nature of that training? (For example, what was the objective of the session(s)? What topic(s) was/were covered?)

11. If you have not received training, explain why.

12. Does the post-appointment training to which you have access, offered by various provincial and local associations, offer sessions/courses in electronic records?

Yes () No ()

13. What of the following ACA tools or activities would you find useful in terms of learning more about archival electronic records? (Rank the two sections separately, using "1" for your first choice or priority.)

Tools

- _____ a handbook of key items which have not previously been available to the profession at large (i.e. institutional policies, basic procedures, position papers, etc.)
- _____ an annotated bibliography of selected published works specifically on electronic records
- _____ articles/ reviews in *Archivaria*
- _____ items in *The Bulletin*
- _____ other (specify)

Activities

- _____ specialized workshops (check one)
beginner () advanced () a structured, graduated series ()
_____ roundtable discussions with more experienced colleagues
_____ papers given at the ACA conference
_____ archival exchanges to work in existing electronic records programmes
_____ other (specify)

14. In the next five years, what do you think will be the most important issues facing the Canadian archival profession with regards to electronic records?
15. Would you be interested in joining an ACA Special Interest Section or Standing Committee on electronic records?
Yes () No () Maybe ()

If you are interested, please send your name and address separately to the undersigned.

16. Are there any other comments on issues relating to electronic records that you would like to make to this Committee?

Appendix B: List of Respondents to the Survey of Institutions

Anglican Church of Canada, Diocese of Calgary
Anglican Church of Canada, Diocese of Ontario Archives
Anglican Church of Canada, Diocese of Western Newfoundland
Anglican Church of Canada, General Synod Archives
Archives of the Anglican Provincial Synod of British Columbia and of the Anglican Diocese of New Westminster
Archives de l'Université d'Ottawa
Archives of the Diocese of Rupert's Land
Brock University Archives
Centre for Newfoundland Studies
Chancellor Paterson Library Archives (Lakehead University)
City of St. John's Archives (NFLD)
City of Thunder Bay Archives
City of Toronto Archives
City of Victoria Archives
Colchester Historical Society Archives (NS)
Delta Museum and Archives
Fortress of Louisbourg Archives
Hamilton Public Library (Special Collections)
Hudson's Bay Company Archives, Provincial Archives of Manitoba
Insurance Corporation of British Columbia
Jewish Historical Society of Western Canada
Maritime Command Museum
Maritime History Archive
McMaster University Library, Archives and Research Collections
Metropolitan Toronto Archives
Mutual Life of Canada Archives
National Archives of Canada - Cartographic and Audio-Visual Archives Division
National Archives of Canada - Government Archives Division
Newfoundland Pharmaceutical Association
Prince Rupert City and Regional Archives
Provincial Archives of Alberta
Provincial Archives of New Brunswick
Provincial Archives of Newfoundland and Labrador

Queen's University Archives
Region of Peel Archives
Roman Catholic Archdiocese of Halifax Archives
The Salvation Army Heritage Centre
Toronto Harbour Commission
United Church of Canada, BC Conference Archives
United Church of Canada, Conference of Manitoba and Northwestern Ontario
United Church of Canada, Maritime Conference Archives
United Church of Canada/Victoria University
University of Alberta Archives & University of Alberta Data Library
University of Calgary Archives
University of Guelph
University of Lethbridge Archives
University of Manitoba, Special Collections
University of New Brunswick, Archives and Special Collections
University of Regina Archives
University of Toronto Archives
University of Waterloo Library
Vancouver City Archives
Whyte Museum of the Canadian Rockies
Yukon Territorial Archives

Notes

- * The major part of this article is taken from the *Summary of Survey Results* contained within the Report of the ACA Select Committee on Electronic Records (August 1992).
- 1 Jay Atherton to Catherine Bailey, 22 December 1989, page 1.
 - 2 *Ibid.*, p. 2.
 - 3 A single response to this survey was received after the figures were tabulated, and was therefore not included in the statistics presented in this article.
 - 4 Five responses to the survey checked off more than one type of institution. Therefore, the percentages calculated here add to a total greater than 100 per cent. Those five responses included university/college and religious, university/college and other, provincial/territorial and other, religious and museum, and national and museum. One response also checked off university/college but noted that the replies referred to a religious archives; it was therefore included in the total of religious archives instead of that of universities and colleges.
 - 5 Terry Cook uses the term "first generation" archivists in his article "Easier to Byte, Harder to Chew: The Second Generation of Electronic Records Archives," *Archivaria* 33 (Winter 1991-92), pp. 203-16. His description of the early electronic records archives, the first generation archivists, and their interaction with social scientists, statisticians, and other early users of electronic records (p. 203) is a good description of what I have thought of as the "traditional view" of electronic records archives. The types of electronic records "traditionally" considered to be of archival value may also be inferred from the emphasis on the informational or secondary value of computer records in works such as Charles Dollar, "Appraising Machine Readable Records," *The American Archivist* 41 (1978), pp. 423-30, and Margaret Hedstrom, *Archives and Manuscripts: Machine Readable Records* (1984), in which she states that "most machine-readable data files currently being preserved contain numeric data used primarily for statistical analysis" (p. 41); or even from the widespread use of Sue Dodd's *Cataloguing Machine-Readable Data Files - An Interpretive Manual* (1982) as a standard for describing computer records.
 - 6 As recently as 1989, the Government Archives Division of the National Archives of Canada, in a report entitled "Acquisition Issues Related to Electronic Records," rated personal computers and related office systems as the fifth of six acquisition priorities for electronic records, behind operational (programme) data, cumulative or longitudinal data, survey data, and administrative data.
 - 7 See Paul Marsden, "Archival Processing of Electronic Records," *Machine Readable Records Bulletin* 7, no. 2, p. 2. In this article, Marsden discusses the comparison of the electronic and paper records systems of the Trade Negotiations Office.
 - 8 One survey reported that electronic records were, described both separately and with the rest of the institution's archival holdings.
 - 9 Three institutions indicated that they used more than one of the options given.
 - 10 A single response to the Survey of Archivists was received after the figures were tabulated and is therefore not included in the statistics presented in this article.
 - 11 Seven responses checked off more than one type of institution. There were two university/college and religious, two religious and other, one provincial/territorial and religious, one corporate/private and museum, and one city/municipal and museum.
 - 12 Two responses checked off more than one location.
 - 13 This figure includes seventeen responses from the National Archives of Canada.
 - 14 The category of "other" included university-based folklore/oral history archives; institutional; provincial council; university library; student; provincial records and archives programme; local board of a municipal government; Ontario government agency Archives - open to the public; unemployed; "Ministry of Social Services ... Not archives primarily but Records Mgt."; social history institute; federal; free-Jance contract work; ethno-cultural; archival studies programme at the University of Manitoba; regional; Glenbow, and President/Editor/Archival Consultant.
 - 15 These included three from the United States and one from the Netherlands.
 - 16 The designation "archivist" included the following: Records and Archives Assistant; Assistant University Archivist; Manuscript Curator; University Archivist; Religions Archivist; Senior Archivist; Project Archivist; Government Records Archivist; Conference Archivist; Contract Archivist; Archival Appraisal Specialist; Chief Archivist, Manuscript and Reference; Corporate Archivist; Reference Archivist; Associate Archivist; Archivist in charge of court records; Curator of Manuscripts and Archives; Chief Audio-visual Archivist; Cartographic Archivist; Manuscript Archivist; Historic Records Archivist; City Archivist; Chief Archivist; Archivist - Head of Archives; Assistant Chief Archivist; Head Archivist; and Municipal Historian and Archivist.

- 17 Respondents classified as managers included the following: Assistant Director General; Chief, Government Archives Division; Portfolio Manager; Administration; Archivist of PEI; Supervisor; Director; Head of Institution; Acting Provincial Archivist; Director, Nova Scotia Records Management; Administrator, Records & Archives; Director, Libraries and Archives; Head, Textual Records and Public Service; Archives Manager; Acting Head, Film/Sound Division; Director of Libraries/Archives; Manager, Private Sector Records; Provincial Archivist; Chief, Art Acquisition and Research; Archives Supervisor; Director, Information Services; Associate Provincial Archivist, Private Sector; Administrator; Director of Archives and Research Collections; Director, Government Records; Chief, Access; Manager, Historical Records Section; Manager of Corporate Records; Manager and Research Officer.
- 18 The numbers here do not add up to the 116 graduate degrees mentioned in Table V (i) because many respondents checked off more than one degree.
- 19 In addition to this figure, seven respondents noted that they had completed all course work and were in the process of writing their theses.
- 20 Includes both Master of Library Science (MLS) and Master of Library and Information Science (MLIS).
- 21 The numbers here do not add up to the 151 post-secondary degrees mentioned in Table IX (ii) because many respondents gave more than one subject area.
- 22 The Government Archives Division of the National Archives of Canada, for example, developed an interconnected series of four seminars for its archivists in order to address the shift to a more “functional” approach to the appraisal of government records. One seminar dealt exclusively with electronic records, while the other three addressed a variety of appraisal issues related to electronic records and paper textual records together.
- 23 In addition to the totals given for each of the items, a number of respondents did not give a numerical ranking but merely indicated interest by a check mark. The results were seventeen for the handbook, sixteen for the annotated bibliography, twenty-one for *Archivaria* articles, and seventeen for *Bulletin* items.
- 24 Of the 155 returned questionnaires, ten respondents did not complete this section on activities.
- 25 In addition to the totals given for each of the items, a number of respondents did not give a numerical ranking but merely indicated interest by a check mark. The results were twenty-four for specialized workshops, twelve for roundtable discussions, thirteen for papers at the ACA Annual Conference, and twelve for archival exchanges.
- 26 This “post-custodial archives” refers to David Bearman’s assertion that archives should not try to acquire and preserve electronic records. Instead, archivists should appraise them for archival value and allow them to remain in the custody of the creating agency (which is better able to support the hardware and software needed to use the records), where the material would be protected according to standards developed and monitored by the relevant archives.