CLASSIFICATION STANDARD

SOCIAL SCIENCES SUPPORT

Technical Category



CLASSIFICATION STANDARD

SOCIAL SCIENCE SUPPORT

TECHNICAL CATEGORY

Issued by:

Classification, Human Resources Information Systems and Pay Division Personnel Policy Branch October 1987 Effective date July 1, 1987



TABLE OF CONTENTS

	PACE
INTRODUCTION	1
CATEGORY DEFINITION	3
GROUP DEFINITION	4
LEVELS AND POINT BOUNDARIES	5
FACTOR DEFINITIONS AND RATING SCALES	6
BENCH-MARK POSITION DESCRIPTION INDEX	14
BENCH-MARK POSITION DESCRIPTION SPECIFICATION	15

I NTRODUCTI ON

The classification standard for the Social Science Support Group is a point-rating plan consisting of an introduction, definitions of the Technical Category and the occupational group, rating scales and bench-mark position descriptions.

Point-rating is an analytical, quantitative method of determining the relative values of jobs. Point-rating plans define characteristics or factors common to the jobs being evaluated, define degrees of each factor and allocate point values to each degree. The total value determined for each job is the sun of the point values assigned by the raters.

All methods of job evaluation require the exercise of judgment and the orderly collection and analysis of information in order that consistent judgments can be made. The point-rating method facilitates rational discussion and resolution of differences in determining the relative values of jobs.

Factors

The combined factors do not describe all aspects of jobs. They deal only with those characteristics that can be defined and distinguished and that are useful in determining the relative values of jobs.

Four factors are used in this plan, two of which have more than one dimension and are defined in terms of two elements, and two of which are single-element factors.

Factor Weighting and Point Distribution

The weighting assigned to each factor reflects its relative importance. Similarly, point values have been assigned to the degrees of the factors.

Rating Plan

In the rating plan the following factors, elements, factor weights and point values are used.

		<u>Percentage</u>		
		<u>of Total</u>	<u>Poi nt</u>	<u>Val ues</u>
<u>Factor</u>	El ement	<u>Poi nts</u>	<u>Mi ni mum</u>	<u>Maxi mum</u>
Skill and				
Knowl edge		40	88	400
Problem Solving		40	80	400
	Scope for Initiative			
	and Judgment			
	Complexity of the			
	Subject Area			
Doonanaihilitu				
Responsi bility for Contacts		4.0		4.00
TOI COITTACTS	Purpose and Nature of	10	24	100
	Contacts			
	Persons Contacted			
Supervi si on		10	00	100
	Nature of Supervisory	10		
	Responsi bi li ty			

Bench-mark Positions

Bench-mark position descriptions are used to exemplify degrees of factors. Each description consists of a position profile, a list of the principal duties with the percentage of time devoted to each, and specifications describing the degree of each factor to which the position is rated. The bench-mark positions have been evaluated and the degree and point value assigned to each factor are shown in the specifications.

The rating scales identify the bench-mark position descriptions that exemplify each degree. These descriptions are an integral part of the point-rating plan and are used to ensure consistency in application of the rating scales.

Use of the Standard

There are six steps in the application of the classification standard.

- The position description is studied to ensure understanding of the position as a whole. The relation of the position being rated to positions above and below it in the organization is also studied.
- 2. Allocation of the position to the category and the group is confirmed by reference to the definitions and the descriptions of inclusions and exclusions.
- 3. Tentative degrees of each factor in the position being rated are determined by comparison with degree definitions in the rating scales. Uniform application of degree definitions requires frequent reference to the descriptions of factors and the notes to raters.
- 4. The description of the factor in each of the bench-mark positions exemplifying the degree tentatively established is compared with the duties or the description of the factor in the position being rated.
 Comparisons are also made with descriptions of the factor in bench-mark positions for the degrees above and below the one tentatively established.
- 5. The point values for all factors are added to determine the tentative total point rating.
- 6. The position being rated is compared as a whole to positions to which similar total point values have been assigned, as a check on the validity of the total rating.

Determination of Levels

The ultimate objective of job evaluation is the determination of the relativity of jobs in each occupational group. Jobs that fall within a designated range of point values will be regarded as equal and will be allocated to the same level.

CATEGORY DEFINITION

Occupational categories were repealed by the Public Service Reform Act (PSRA), effective April 1, 1993. Therefore, the occupational category definitions have been deleted from the classification standards.

GROUP DEFINITION

For occupational group allocation, it is recommended that you use the <u>Occupational Group Definition Maps</u>, which provide the 1999 group definition and their corresponding inclusion and exclusion statements. The maps explicitly link the relevant parts of the overall 1999 occupational group definition to each classification standard.

CLASSIFICATION LEVEL POINT BOUNDARIES

POI	NTS	LEVEL
Minimum	<u>Maximum</u>	
192	235	1
236	335	2
336	435	3
436	535	4
536	635	5
636	745	6
746	855	7
856	1,000	8

SKILL AND KNOWLEDGE

This factor is used to measure the difficulty of the work in terms of the requirement for knowledge of a subject area and the principles of a social science discipline, and for skill in applying that knowledge in performing the duties of the position.

Definitions

"Knowledge of the subject area" refers to the requirement for degrees of knowledge in any field of activity in which data are compiled, studies and tests are conducted; library, museum or gallery materials are identified, catalogued and classified; assistance on legal problems is provided or legislation is edited.

"Knowledge of the principles of a social science discipline" refers to the requirement for degrees of knowledge of the concepts and theories of a social science discipline.

"Skill" refers to the requirement for facility in applying a knowledge of social science principles and of the subject area.

Notes to Raters

Skill and knowledge are normally acquired by formal study, continuing on-the-job training by professional staff, in-service training including organized study sessions, and work in related and progressively more responsible jobs.

The degrees of the Skill and Knowledge factor assigned to the bench-mark positions have been established by comparative ranking. The nine degrees of the factor are not directly related to years spent acquiring skill and knowledge, but indicate the relative and incremental skill and knowledge requirements of positions within the occupational group:

- 1. The degree of knowledge of the principles, practices, techniques and procedures used in the subject area, and relating to:
 - the concepts and theories of a social science discipline;
 - the techniques and practices of other disciplines such as data processing, accounting and their application within the subject area;
- Knowledge of the intent, objectives and definitions of projects, and other criteria used to govern action to be taken;
- Knowledge of the organization, structure, development and operation of establishments in the subject area;
- 4. Knowledge of the reliability of information and of its sources;
- 5. Skill in interpreting and devising definitions, objectives and other criteria;
- 6. Skill in identifying, evaluating and adjusting inconsistencies in data;
- 7. Skill in anticipating and identifying developments in the subject area;
- 8. Skill in developing good working relations and resolving differences.

The degree tentatively selected is to be confirmed by comparing the duties of the position being rated with the duties and specifications of the bench-mark positions that exemplify the degree.

RATING SCALE - SKILL AND KNOWLEDGE

Degree of Skill and Knowledge	Points	Bench-Mark Position Description	
1	88	Technical Officer Cataloguing Assistant Control Officer	Page 1.1 2.1 3.1
2	127	Economic Analysis Assistant Information Specialist Specialist, Oral Literature Agricultural Statistics Officer	4.1 5.1 6.1 7.1
3	166	Technical Assistant Statistical Officer/Researcher Land Titles and Research Officer Para-Legal Specialist	8.1 9.1 10.1 11.1
4	205	Head, Operations	12.1
5	244	Head, Statistical Support Services Head, Systems and Data Retrieval Group Chief, Documentation Control Section	13.1 14.1 15.1
6	283	Chief, Systems and Operations, Industrial Prices	16.1
7	322	Chief, Data Capture, Census of Canada	17.1
8	361		
9	400	Assistant Director, Census of Merchandising	18.1

PROBLEM SOLVING

This factor is used to measure the difficulty of the work in terms of the scope for initiative and judgment, and the complexity of the subject area within which the duties of the position are performed.

Definitions

- "Scope for initiative and judgment" refers to the freedom to resolve problems within the framework of instructions or guidance.
- "Guidelines" refers to the instructions, interpretations, regulations, methods and techniques established to carry out the work.
- "Project" refers to a unit of work, created by the division of work within an organization, to which personnel are assigned with authority and responsibility to carry out a part of the activities.
- "Precedent" refers to the solution of a previous similar problem, that can be adapted or applied to the resolution of a current problem.

Notes to Raters

In evaluating positions under the Scope for Initiative and Judgment element the availability of direction or supervision and the degree of authority delegated by superiors are to be considered.

The four degrees of the Complexity of the Subject Area element are illustrated by the bench-mark position descriptions. Characteristics of the subject area, such as the following, are to be considered in determining the tentative degree of this element:

- the variety and complexity of the subject area, methodology and/or associated technology considering:
 - the extent to which the subject area is subdivided;
 - the intricacy of the relationships that exist between subdivisions;
 - the extent and rapidity of the changes and developments taking place;
 - the extent to which dissimilar concepts, standards and processes must be reconciled in the creation, integration, location and access of data;
- the difficulty of obtaining information and data, ranging from the selection of readily available information and data, to the seeking out, identification and application of obscure sources of information and data;
- the impact of decisions and recommendations in terms of their effect on the definition and conduct of projects, and/or on the quality of the work performed;
- the extent to which problems are solved by the application of practical knowledge of a social science and other specialized fields.

Such characteristics contribute to the complexity of the subject area, and the extent to which one or more apply is to be considered in selecting the degree of complexity.

The degrees of the two elements of the Problem Solving factor tentatively selected are to be confirmed by comparing the position being rated with the duties and specifications of the bench-mark positions that exemplify those degrees tentatively selected.

RATING SCALE - PROBLEM SOLVING

		Scope for Initiative ar	nd Judgment, and Degree		
Complexity of the Subject Area, and Degree	Some judgment and initiative are required to select and apply established guidelines, including the adaptation of precedents.	A moderate degree of judgment and initiative is required to identify the need to modify established guidelines to accommodate change in the subject area, and in applying principles to determine courses of action. Direction is sought if solutions are not within the intent of project objectives.	A significant degree of judgment and initiative is required to determine the validity of guidelines for existing projects. Recommendations for changes are authoritative. The implications of courses of action on other projects are difficult to determine.	A high degree of judgment and initiative is required to develop guidelines for various existing and new projects. Substantial contribution is made to the planning of major projects. Problems are solved within the intent of the objectives of the organization.	
	A	В	С	D	
	80/ Page	133/ Page	186/ Page	Page	
Limited 1	Technical Officer 1.1 Cataloguing Assistant 2.1 Control Officer 3.1	Specialist, Oral Literature 6.1 Agricultural Statistics Officer 7.1			
	134/	187/	240/	293/	
Moderate 2	Economic Analysis Assistant 4.1 Information Specialist 5.1	Technical Assistant 8.1 Statistical Officer/ Researcher 9.1 Land Titles and Research Officer 10.1 Para-Legal Specialist 11.1 Head, Operations 12.1			
	188/	241/	294/	347/	
Significant 3		Head, Statistical Support Services 13.1 Head, Systems Data Retrieval 14.1 Chief, Documentation Control 15.1	Chief, Systems and Operations, Industrial Prices 16.1	Chief, Data Capture, Census of Canada 17.1	
Major 4		295/	348/	Assistant Director, Census of Merchandising 18.1	

RESPONSIBILITY FOR CONTACTS

This factor is used to measure the difficulty and importance of the duties in terms of the purpose and nature of contacts and the persons contacted.

Definitions

"Federal department" and "federal service" refer to those departments and agencies named in Schedule I of the Public Service Staff Relations Act.

Notes to Raters

Only those contacts that are an integral part of the work and that result from the duties assigned or sanctioned by management, and the requirements imposed by these contacts to work and communicate with others are to be considered.

If such contact warrants application of more than one combination of persons contacted and nature of contacts, the points for each contact are to be determined and the highest point value used.

Only if the duties of the position being rated include responsibility for signing letters or memoranda are points to be assigned for written contacts.

RATING SCALE - RESPONSIBILITY FOR CONTACTS

			Purpose and Nature of Contacts, and Degree	
Persons Contacted, and Degree		To give, obtain or exchange information requiring explanation or discussion.	To elaborate and clarify problems and/or provide advice in order to reach a solution. To investigate and resolve major issues where differences in opinion and interest exist and to negotiate and obtain the support and participation of others, usually requiring significant expenditure of effort and resources.	
Employees in Federal Service.	1	A 24/ Page Technical Officer 1.1 Cataloguing Assistant 2.1	-	Page 16.1 17.1
Persons other than employees in Federal Service	2	Control Officer 3.1 Economic Analysis Assistant 4.1 Information Specialist 5.1 Specialist, Oral Literature 6.1 Agricultural Statistics Officer 7.1 Technical Assistant 8.1	Research Officer 10.1 Census of Para-legal Specialist 11.1 Merchandising Head, Operations 12.1 Chief, Documentation	18.1

SUPERVISION

This factor is used to measure the continuing responsibility for the work and guidance of other employees.

Notes to Raters

The assignment of a position to a degree is made by comparing the duties of the position with the characteristics described at each degree and selecting the degree that best corresponds or relates on the whole with the duties of the position.

A position which does not have direct line supervisory responsibilities, but which is required to manage the work of a departmental project team as an integral part of the duties may be assigned to Degree A or B depending upon the size and nature of the project.

A position which has no substantive responsibility for supervision will be awarded no points under this factor.

Occasional supervision and that performed during absences of the supervisor on annual or sick leave, is not to be rated.

RATING SCALE SUPERVISION

NATURE OF SUPERVISORY RESPONSIBILITY, AND DEGREE		POINTS	BENCHMARK POSITION DESCRIPTION	PAGE
No supervision.		0 0 0 0 0 0	Technical Officer Cataloguing Assistant Control Officer Economic Analysis Assistant Information Specialist Technical Assistant Land Titles and Research Officer Para-legal Specialist	1.1 2.1 3.1 4.1 5.1 8.1
Supervises a small group performing basically the same tasks. Instructs subordinates in procedures and techniques. Maintains check of work in progress to ensure standards of quality and quantity are maintained or to ensure compliance with established procedures. Evaluates performance of subordinates or discusses their performance with own supervisor.	A	10	Specialist, Oral Literature Agricultural Statistics Officer Statistical Officer/Researcher	6.1 7.1 9.1
Plans work on a short-term basis involving activities or minor changes in systems or volume. Assigns works to immediate subordinates and reviews work during performance or upon completion. Makes recommendations concerning staff and financial requirements, evaluates performance of subordinates and provides guidance on improvement. Resolves employees relations problems covering such aspects as attendance, leave and conduct.	В	30	Head, Operations Head, Statistical Support Head, Systems and Data Retrieval	12.1 13.1 14.1
Plans work operations on an intermediate-term basis considering such aspects as activity projections, priorities, target dates, budget and personnel resources. Assigns work, adjusts workloads or makes short-term allocations of staff between units to balance workloads or to meet deadlines. Makes changes in structure, methods and procedures to accommodate changes in work patterns, priorities and staff capability. Reviews completed work or operating reports to ensure compliance with established policy or the attainment of other criteria, such as costs or target dates. Develops and administers budget for organization(s) responsible for a single function or for a distinct part of a program or major function. Evaluates subordinate supervisors and reviews evaluations prepared by them. Ensures that established personnel policies are carried out by subordinate supervisors and reviews personnel actions recommended by them.	С	60	Chief, Documentation Control Chief, Systems and Operations, Industrial Prices	15.1 16.1
Plans and directs the planning of work operations over established long-term planning periods to meet program or major goals. Coordinates major functions, establishes broad priorities and division of responsibility and allocates resources. Develops or approves standards governing policies and procedures. Reviews accomplishments of the organization in relation to program policies, goals and objectives or to other performance indicators such as budget variances. Develops or directs development of and administers a budget for a program or several major functions. Establishes and monitors a system of employee appraisal and approves appraisals on subordinate supervisors.	D	100	Chief, Data Capture, Census of Canada Assistant Director, Census of Merchandising	17.1

BENCH-MARK POSITION DESCRIPTION INDEX

BENCH-MARK

LEVEL	BENCH-MARK POSITION NO.	DESCRIPTIVE TITLE	PAGE
1	1	Technical Officer	1.1
1	2	Cataloguing Assistant	2.1
1	3	Control Officer	3.1
2	4	Economic Analysis Assistant	4.1
2	5	Information Specialist	5.1
2	6	Specialist, Oral Literature	6.1
2	7	Agricultural Statistics Officer	7.1
3	8	Technical Assistant	8.1
3	9	Statistical Officer/Researcher	9.1
3	10	Land Titles and Research Officer	10.1
3	11	Para-Legal Specialist	11.1
4	12	Head, Operations	12.1
5	13	Head, Statistical Support Services	13.1
5	14	Head, Systems and Data Retrieval	14.1
5	15	Chief, Documentation Control	15.1
6	16	Chief, Systems and Operations, Industrial Prices	16.1
7	17	Chief, Data Capture, Census of Canada	17.1.
8	18	Assistant Director, Census of Merchandising	18.')

BENCH-MARK POSITION DESCRIPTIONS - SPECIFICATION CHART

FACTOR SPECIFICATION DEGREE - POINTS

B.M. NO.	DESCRIPTIVE TITLE	PAGE	SKILL AND KNOWLEDGE	PROBLEM SOLVING	RESPONSIBILITY FOR CONTACTS	SUPERVISION	TOTA POINTS	
1	Technical Officer	1.1	1-88	A1-80	Al-24	_	192	1
2	Cataloguing Assistant	2.1	1-88	Al-80	Al-24	_	192	1
3	Control Officer	3.1	1-88	Al-80	A2-43	-	211	1
4	Economic Analysis Assistant	4.1	2-127	A2-134	A2-43	-	304	2
5	Information Specialist	5.1	2-127	A2-134	A2-43	_	304	2
6	Specialist, Oral							
	Literature	6.1	2-127	81-133	A2-43	A-10	313	2
7	Agricultural Statistics Officer	7.1	2-127	B1-133	A2-43	A-10	313	2
8	Technical Assistant	8.1	3-166	B2-187	A2-43	_	396	3
9	Statistical Officer/ Researcher	9.1	3-166	B2-187	B1-52	A-10	415	3
10	Land Titles and Research Officer	10.1	3-166	B2-187	B2-71	_	424	3
11	Para-Legal Specialist	11.1	3-166	82-187	B2-71	_	424	3
12	Head, Operations	12.1	4-205	82-187	B2-71	B-30	493	4
13	Head, Statistical Support Services	13.1	5-244	B3-241	81-52	B-30	567	5
14	Head, Systems and Data							
	Retrieval	14.1	5-244	133-241	B1-52	B-30	567	5
15	Chief, Documentation Control	15.1	5-244	в3-241	132-71	C-60	616	5
16	Chief, Systems and Operations, Industrial Prices	16.1	6-283	C3-294	C1-81	C-60	718	6
17	Chief, Data Capture, Census of Canada							
1.0		17.1	7-322	D3-347	C1-81	D-100	850	7
18	Assistant Director, Census of Merchandising	18.1	9-400	D4-400	C2-100	D-100	1,000	8

BENCH-MARK POSITION DESCRIPTION

1.1

Bench-mark Position Number: 1 Level: 1

Descriptive Title: Technical Officer, Point Rating: 192
Financial Flows

Position Profile

The work involves providing technical support to economists engaged in the production of preliminary release data, a quarterly publication and special requests for information on capital flows. Data is compiled and reconciled in the production of statistical tables. The work requires the manipulation of data by use of software packages to meet specific requirements.

Duties % of Time

Compiles statistical and economic data in aggregate form on financing instruments (equity, bonds, notes, etc.) issued and held by the various sectors of the Canadian economy to provide information used by economists in analyzing the flow of capital and its impact upon the economy by:

50

- obtaining data on financial transactions, capital formation and savings from survey questionnaires and other sources such as the Bank of Canada, other government departments and divisions within the department;
- adjusting data obtained to conform to the definitions used in the Financial Flows Accounts;
- identifying unusual or irregular figures in the data, checking supplementary or related data to verify the occurrence and reporting these to the Economists;
- verifying the accuracy of data and obtaining explanations or supplementary information;
- making adjustments and calculations to resolve data inconsistencies; and
- preparing summaries and explanatory notes on the results.

Produces statistical tables outlining financial instruments issued and held by sectors and sub-sectors of the economy for inclusion in the quarterly publication "Financial Flow Accounts", two quarterly advance releases, annual reviews and occasional publications by:

35

- obtaining financial data from a variety of internal and external sources;
- updating and revising the main database either on-line or by batch processing;
- executing computer programs to produce the various groups of tables and reviewing the results;
- modifying the contents and/or layout of the tables following comments and requests made by the Economists or users; and
- liaising with service areas to arrange the final layout, presentation and printing of tables.

Assists the professional staff of the section in performing data quality checks and in the analysis of financial market trends by:

10

- maintaining and updating a financial information data base;
- assessing and obtaining data from other information databases (CANSIM);
- manipulating data using statistical packages to generate additional tables and charts or calculate supplementary measures (ratios, rates of change, linear regressions, etc.); and
- reconciling data from different sources to determine deficiencies in the coverage and scope of existing series.

B.M.P.D. No. 1

%of Time

Performs other duties, such as carrying out historical revisions of data, conducting preliminary testing of data for special projects, extracting subject matter information from periodicals and news information, and editing and reviewing studies, tables and reports.

5

Specifications

Degree/ Points

Skill and Knowledge

1 / 88

Knowledge is required of the inter-relationships between the real and financial aspects of the economy, between financial categories and a variety of sectors of the economy. The work requires knowledge of the structure and operation of Canadian financial institutions and of the basic accounting practices of major industry groups; it requires know ledge of economic activities that give rise to capital movements and of the sources and methods of collecting and recording such data. Knowledge is required of the statistical and economic concepts of the Canadian System of National Accounts and of the role of financial flows data therein.

Knowledge is required of departmental utility and statistical packages, such as TSO, and of the programming and coding requirements of associated systems, such as JCL and SAS graph.

Skill **is** required in analyzing and converting source data to meet the statistical concepts of financial flows data, in reconciling information from different sources; and in using micro-computers and data terminals to access, organize and present financial flows data in easy-to-use format.

This skill and knowledge is normally acquired by post-secondary education in statistics, accounting and computer applications.

Problem Solving Al / 80

Initiative and Judgement are required in compiling financial data in aggregate form from individual survey returns and other sources, where the reporting procedures, statistical concepts and accounting practices used do not conform to the concepts and definitions used in the Financial Flows Accounts. The work requires the identification of probable sources of error, or data irregularities, researching related data and making the necessary corrections or adjustments. Surveys conform to an established pattern, and methods and procedures are adapted to meet specific requirements. Directions concerning the area to be reviewed, methods of collection, analysis and presentation are defined by professional officers. Results are referred with comments to the officer in charge of production.

The variety and complexity of the area is limited as the main task is to collect financial data from well-defined sources, and to review and present such data using procedures and methodology that are well established because of the recurring nature of the work. Decisions relating to changes in compilation of the data or problems associated with data quality are normally reviewed by the supervisor or professional officers.

Degree/ Points

Responsibility for Contacts

Al / 24

The work requires telephone contacts with officials of other federal departments and agencies to obtain supplementary data or explanations of reported information.

Supervision

The work may require explaining techniques and procedures to support staff.

LINEAR ORGANIZATION CHART

FINANCIAL FLOWS

Chief, Financial Flows Section	ES-6
-Head, Current Analysis	ES-5
-Research Officer	ES-3
-Junior Research Officers (2)	ES-2
-Head, Production Unit	SI-3
-Technical Officer	SI-1
-Statistics Clerk (2)	CR-3
-Head, Data Development	ES-5
-Research Officer	ES-3
-Statistics Clerk	CR-3

BENCH-MARK POSITION DESCRIPTION

Bench-Mark Position Number: 2 Level: 1

Descriptive Title: Cataloguing Assistant Point Rating: 192

Position Profile

The work is operational in nature and is performed under the general instructions of the librarian responsible for the cataloguing function. It includes extracting and analysing information to classify and catalogue a range of selected library materials and providing technical support in the field of economics.

<u>Duties</u> % of Time

Catalogues selected library publications such as books, pamphlets, and other library materials in the field of economics in accordance with cataloguing principles and procedures to provide a source of information for users of the library by:

2.0

- by examining the item to determine such information as its precise nature, the author, publisher, date of publication and edition;
- by determining the appropriate form of catalogue entry and the cross-references prescribed by cataloguing rules and the extent of additional descriptive detail required;
- by searching in reference sources for missing information;
- by originating catalogue cards showing the author, title, publisher, date of publication and edition and details such as bibliographies, maps and illustrations;
- by recording details such as form of catalogue entry selected, reference sources where information was obtained and cross-references made, for the information of future searchers.

Classifies and assigns subject code designations to selected books and other library material in the field of economics, to determine its location on the shelves in relation to other library items and to facilitate retrieval by:

20

- examining the table of contents, introduction and summary of the item; selecting and reading passages of the text; and selecting and obtaining additional information from reference sources; determining the main subject and other characteristics that are of interest to library users;
- comparing the theme and content of the item with the sub-division descriptions within the library classification system; and
- assigning the subject code designation indicated by the classification system to the item.

Selects and devises subject headings, explanatory summaries and cross-references for library items for the catalogue, including articles from professional journals not already indexed, consistent with the intent of the library system and considering the interests of library by:

55

- examining the material to determine the treatment given the subject, the problems approached and the themes developed and other characteristics;
- selecting from the Library of Congress Subject Heading Lists, or other similar subject listings, headings suitable for bringing problems and themes treated in the item to the attention of the library users;

B.M.P.D. No. 25

% of Time

- varying headings of the Subject Heading List or devising specialized headings compatible with the headings already used in the catalogue;
- composing explanatory summaries of the content of the library item; and
- preparing catalogue records describing the item under the subject headings selected

Performs other duties such as drawing to the attention of library users available or newly acquired material in which they may be interested.

5

Specifications

Degree/ Points

Skill and Knowledge

1 / 88

The work requires a knowledge of the terminology, elementary characteristics and conceptual organization of theoretical economics; of important authors, and of conceptual distinctions implicit in the Library of Congress and other classification systems for this subject. It requires familiarity with those areas of economics with which library users are concerned. It requires a practical knowledge of the techniques and practices of cataloguing and classifying library material and of reference sources in the economics area within and outside the library, and of the relationship of cataloguing services to public service needs.

Skill is required in examining information material for content, in determining the treatment given to the subject, the problems approached and the themes developed in the material and in summarizing this information for use on catalogue records. This skill and knowledge is normally acquired through post-secondary school study in economics, some private study under departmental guidance in the area of economics associated with the departmental responsibilities and some library experience directly related to the work.

Problem Solving Al / 80

The work requires examining written material in the field of economics, determining the treatment of the subject and the approaches used to problems and the themes developed, and analyzing and summarizing this information. It also requires identifying the subject sub-division within the library classification system from the analysis of the material examined and allocating material to its correct place in the system by assignment of a subject code designation. The classification system and the subject heading list form precedents. Further guidance and advice on library principles and techniques is available from the librarian. The work is reviewed to ensure conformity with these principles. Problems in determining suitable classification and subject headings are discussed with subject-area specialists in the department.

The work requires consideration of a wide area in theoretical economics and its relationship to the conceptual breakdown of the subject classification system.

Responsibility for Contacts

Al / 24

The work requires contacts with departmental staff and librarians and library assistants to obtain information.

Degree/
Points

Supervision

The work require demonstrating to junior support staff library techniques and the resources of the library collection.

B.M.P.D. No. 27

LINEAR ORGANIZATION CHART

LIBRARY SERVICES

Director, Library Services	LS-4
-Chief, Technical Services	LS-3
-Head, Acquisitions Unit	LS-2
-Head, Cataloguing Unit	LS-2
-Cataloguer	LS-1
-Cataloguing Assistant	SI-1
-Cataloguing Clerk	CR-4
-Chief, Reference Services	LS-3

B.M.P.D. No. 3

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 3

Descriptive Title: Control Officer Point Rating: 211

Position Profile

This work is operational in nature and is performed under the general instruction of an archivist on collections of archival records in some measure of order. It includes preparation of finding aids, eliminating non-essential material, providing a reference service, and reviewing, according to established schedules, the physical state of items within the collections.

<u>Duties</u> <u>% of Time</u>

Organizes and prepares detailed indexes and finding aids to make collections of archival 40 records accessible to staff and researchers, by:

- ascertaining the original system of organization through an examination of the original indexes, related records and the physical order of the collection;
- deciding if the original organization is usable and if not, by reorganizing it according to established systems;
- determining if ancillary information pertaining to the records in question is correct, and usable, and cross-referencing as necessary;
- identifying the content of individual items by applying rules of internal evidence and following basic research procedures;
- matching documents to ascertain precisely the contents of a collection; and
- determining if a relationship exists between the collection in hand and other collections within the divisional holdings.

Selects items for preservation or destruction by:

20

- screening heterogeneous accessions of records and, using established criteria, separating historically valuable items from those of no historical value;
- recommending destruction of those records having no historical value; and
- writing brief introductory reports commenting on the general contents and condition of collections and on important items within the collections.

Implements and maintains systems for the storage and conservation of collections and provides information on storage methods by:

25

- examining each assigned collection to determine the type of storage material required (e.g., acid-free files, envelopes, boxes, etc.) and the volume of storage space necessary;
- monitoring the usage of storage space to identify the amount of space available for new collections;
- providing information to other departments, provincial archives, and private institutions on what storage materials are available, source of supply, or how particular storage problems are handled in the Division;
- applying stated criteria for detecting damage or deterioration in archival items;
- separating those items falling within the criteria; and
- recommending conservation treatment in consultation with the Chief Archivist.

% of Time

Provides reference service in response to verbal and written requests from researchers, publishers, government officials, television and film producers, private institutions and the general public by:

10

- ascertaining the needs of the researcher and clarifying the request;
- searching for, locating, accumulating and showing the requested items; and
- making a final selection of items, preparing descriptive memoranda when necessary, providing verbal replies, or drafting written replies.

Performs other duties such as preparing statistical and progress reports and assisting in training of Divisional staff.

5

Degree/ Points

Specifications

Skill and Knowledge

1 / 88

The work requires a general knowledge of the history of Canada and of general archival techniques and practices; specialized knowledge of the techniques for the archival orga nization of paper and/or non-paper records, knowledge of the general criteria governing the selection of records for their historical value and archival retention, knowledge of the past, current and potential uses of these records.

Skill is required in assessing collection arrangements, the location and content of descriptive information, and the physical aspects of archival records. Skill is also required in recognizing the subject content, nature and historical value of items and in identifying the needs and interests of researchers. Further skill is required in guiding others in performing similar organizational and indexing tasks, on other collections. Some writing skill is required in the preparation of evaluation reports and general introductions to collection content.

The skill and knowledge is normally acquired by completion of post-secondary school studies in Canadian history, experience in archival or research units, in-service and on-the-job training in archival principles and techniques and some experience in organizing and indexing.

Problem Solving

Al / 80

Problems are solved within the framework of established guidelines of the Section and the usual practice of the Division.

Organization, indexing and finding aid preparation is done by following established guidelines and the original state of each particular collection. Initiative and Judgement is required in facilitating access to the collections by staff and researchers.

The complexity of the subject area requires the identification of the relationship of a particular item to an occurrence, place, personality, or thing, and to the collection and subject field as a whole and by comparing the material to similar items already evaluated in other collections.

Reference work involves determination of researcher's requirements and of the existence and relevance of particular documents or information to those requirements.

<u>Degree/</u> <u>Points</u>

Responsibility for Contacts

A2 / 43

Contacts are made with departmental professional and support employees and members of the general public to explain the organizing, indexing, and finding aids of collections and to give and receive administrative information. Periodic contacts with researchers, the general public and private donors are to discuss and provide information about known sources, references and various finding aids.

Supervi si on

The work requires demonstrating tasks to other employees and occasionally overseeing clerical operational staff working on individual projects.

LINEAR ORGANIZATION CHART

DOCUMENTATION AND CONTROL

Division Director		
-Chief Archivist	HR-3	
-Senior Archivist	HR-2	
-Archivist	HR-1	
-Archival Assistant	SI-2	
-Control Officer	SI-1	
-Archival Clerk	CR-4	
-Clerk/Receptionist	CR-3	

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 4 Level: 2

Descriptive Title: Economic Analysis Assistant Point Rating: 304

Position Profile

The work is operational in nature; it includes the collection of biological and physical data, and the analysis of agricultural production information which contributes to the development of agricultural policy and setting of research priorities.

<u>Duties</u> % of Time

Prepares technical, economic, biological and physical data for use in papers and reports relating to agricultural production models, farm production economics and agricultural policy by:

60

- reviewing market summaries, industrial publications, professional journals and technical literature in order to identify information such as machinery prices, and crop and livestock statistics;
- contacting industrial equipment and retail outlets and provincial agricultural engineers and agricultural representatives to obtain price information and technical specifications:
- contacting provincial agricultural extension staff and farmers to obtain biological, physical and economic data such as time and motion studies of farm activities, hay cutting, drying and harvesting times, weather data and quantity and quality of crop harvested; and
- selecting appropriate scales and preparing the data in a graphical form suitable for $\operatorname{\mathsf{publ}}\nolimits\, i$ cation.

Conducts computer analyses of agricultural production data to provide information for calculating agricultural cost of production, developing and evaluating agricultural policy, evaluating research priorities and for publications by:

20

- writing, coding and entering computer programs and data of mathematical models for both economic analysis and simulation into remote and local computers;
- writing and maintaining a Users Manual which incorporates changes in operating procedures as required;
- maintaining and manipulating disc and tape files on local and remote computers in order to obtain listings of computer job outputs and programs on file;
- initiating computer job execution on local and remote computers via terminal in both interactive and batch modes;
- checking computer programs for logic, accuracy and efficiency and correcting both syntax and logical errors in order to ensure the validity of published results; and
- verifying that computer programs perform the required functions and where necessary taking appropriate corrective action to modify the programs accordingly.

Provides consulting services and instructions on the use of local and remote computers to station professional and support staff by:

15

- operating the computer including preparing and maintaining all required documentation including user manuals and, changing the operating system as required to incorporate the latest technological developments;
- contacting suppliers to arrange maintenance of manufacturer supplied computer hardware and software;

% of Time

- operating station computer reservation and borrowing systems and distributing magnetic discs for data storage to station users;
- liaising with the on-Station statistician or regional statistician, Statistical Research Service, Data Processing Division, and computer service organizations to help station users solve their EDP problems; and
- installing and maintaining manufacturer supplied software.

Performs other duties such as serving on the Station Computer Liaison Comittee, ordering computer supplies and maintaining office files.

5

Degree/ Points

Speci fi cati ons

Skill and Knowledge

2 / 127

The work requires knowledge of agricultural production in order to locate and assess the suitability of data to be used as economic, biological, physical and technical input to systems; computer operation and programming and mathematical modeling of agricultural production systems. Skill is required in selecting and evaluating data and presenting it in an appropriate graphical fashion. Skill is required in instructing personnel in the operation of computer equipment, and the provision of a consultative service to the employees of the Research Station. Skill and knowledge are normally acquired through post-secondary school study in agribusiness, computer programming and statistics, on-the-job training and experience directly related to the work.

<u>Problem Solving</u> A2 / 134

The work requires selecting and evaluating data for use in developing mathematical models and modification of software as required to permit evaluation of the agricultural production systems. Data evaluation includes consideration of the characteristics and interrelationship of agricultural production systems involving the use of readily available production data and reconciling these with experimental data gathered from research studies and projects. The work also requires evaluation of computer hardware and software needs for computer users at the Research Station.

Responsibility for Contacts

A2 / 43

Regular contacts are made with provincial agricultural engineers and representatives to discuss and obtain technical specifications, and with farmers to obtain biological, physical and economic data.

Supervi si on

There is an occasional requirement to show other employees how to use station computing facilities.

LINEAR ORGANIZATION CHART <u>ECONOMIC ANALYSIS ASSISTANT</u>

Director	EX-2
-Section Head, Forage/Livestock	SE-RES-2
-Economist	ES-4
-Economic Analysis Assistant	SI-2

BENCH-MARK POSITION DESCRIPTION

Bench-Mark Position Number: 5 Level: 2

Descriptive Title: Information Specialist Point Rating: 304

Position Profile

The work is operational and advisory in nature. The operational element includes conducting specialized . computer searches using knowledge of data bases, information technology, and the subject field. The advisory element includes acting as a technical expert in the subject field, and assisting in the development of computerized information systems.

<u>Duties</u> % of Time

Provides a library information awareness service in the field of transportation to meet the needs of clients involved in policy, planning and research programs, by:

40

- identifying activities which might require the support of a current awareness service, i.e., new programs, project or policy committees, etc.;
- advising program directors, policy advisors and other potential clients, of the availability and content of internal and external information services;
- scanning professional journals, technical reports and publications, or by visiting other resource centres to identify developments in the field, or to locate other potential sources of information;
- developing subject profiles for clients and periodically reviewing and updating them;
- reviewing the content of new data bases and assessing their suitability and use for the subject field and recommending their acquisition;
- attending library management meetings to present a technical view-point on various proposals;
- drafting and monitoring the application of procedures for the distribution of subject profiles to clients by support staff.

Provides an information research service in the field of transportation planning and engineering using both computerized and manual information retrieval methodologies, by:

5 (

- clarifying the precise nature, scope and extent of the information required by a particular reference request;
- consulting with the reference librarian on requests which cover more than the subject field and determining the treatment;
- structuring search strategies; applying a variety of controlled vocabularies; analyzing and evaluating the results of searches; modifying the searches as required;
- analyzing the information available and selecting items to be retrieved from the collection, or to be borrowed from other sources;
- evaluating the identified material for content and selecting the material relevant to the request;
- drafting replies to requests for technical information.

Performs other duties such as:

- training or providing advice to clerical staff;
- representing the library on departmental committees;

% of Time

- providing input into systems design and standards;
- presenting and explaining proposals and recommendations to library management.

Specifications Points Points

Skill and Knowledge 2 / 127

The work requires a broad knowledge of the transportation field, with particular emphasis on transportation planning and management. It requires a knowledge of developments in the subject area and of the terminology used to characterize the latest concepts in the main and related disciplines. It requires a thorough knowledge of the information sources and computer-based retrieval systems that are available, the principles upon which they are structured, and the various systems used to access the contents. A knowledge of the information resources of other libraries, resource and documentation centres is required. The work also requires a knowledge of departmental programs, objectives. and goals, particularly in relation to the information support that is required for policy analysis and decision-making. The work requires skill in anticipating the changes and developments in the documentation of the subject area, in analyzing and interpreting requirements for information, in formulating searches on computer-based retrieval systems and in applying a variety of systems for vocabulary control. The work also requires skill in bibliographic research using a variety of sources and media and in analyzing, evaluating and documenting the information collected.

This knowledge is normally acquired by post-secondary education in computer science/library technology and several years of experience in the subject field.

Problem Solving A2 / 134

Initiative and judgement are required in analyzing specific information needs and constructing search strategies to locate the required information. Some searches require the adaptation or the modification of search patterns or processes to locate obscure information. The complexity of the subject area requires the consideration of such aspects as the location, extraction and evaluation of the data contained in various data bases; the overlap of data between data bases; the changing terminology within the subject field; evolving data base structures; the cost; and the urgency of requests.

Contacts A2 / 43

The work requires contacts with senior program and research officers in the department to discuss and clarify requirements for information. Clients of the information retrieval service also include economists, statisticians, planners or engineers from other federal departments or other levels of government, representatives from private sector agencies, university professors, consultants, students or members of the general public.

Supervision

There is no direct supervision involved in this position; there is an occasional requirement to train other staff members.

LIBRARY SERVICES

Director, Library Services	LS-5
-Chief, Technical Services	LS-3
-Head, Cataloguing Unit	LS-2
-Head, Acquisitions Unit	LS-2
-Chief, Information Services	LS-3
-Reference Librarian	LS-2
-Library Technician	SI-1
-Information Specialist	SI-2
-Head, Circulation Unit	LS-2
-Circulation Clerk	CR-3
-Circulation Clerk	CR-3

Level: 2

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 6

Point Rating: 313 Descriptive Title: Specialist, Oral Literature

Position Profile

The work is analytical in nature and involves research and study of lyrics from archival records. It also involves identifying folk songs with specific catalogue/classification systems. There is a need to edit volumes of texts in Oral Literature to conform with established criteria.

% of Time <u>Duties</u>

- provide a source of information for users of Centre's archives, by: analyzing the theme and content of the song, tale, legend, etc.;
- determining the appropriate form of catalogue entry;
- researching published and unpublished sources for additional or missing information;

Classifies Lyrics of English and French folk songs, folk tales and Legends in order to

- designing or modifying an appropriate classification system;
- preparing details such as form of catalogue entry selected, reference sources, cross-references, etc. for the information of future users;
- composing summaries of the content of collections classified; and
- reporting to the Curator difficulties encountered in the application of selection criteria or classification systems.

Provides a reference service for students, researchers and the general public to assist them in locating and using material in the Centre's collections, by:

- determining the interests and needs of the enquirer;
- searching through classified and unclassified material to locate items;
- answering questions on the operation of the Centre's programs; and
- preparing summaries, reports, etc. in response to requests.

Verifies the quality and completeness of transcriptions of French and English oral literature prepared by temporary staff, by:

- prioritizing work to be undertaken;
- explaining standards to be met and procedures to be followed;
- demonstrating the use of archival references, guides and indexes available; and
- correcting and reviewing work completed.

Edits volumes of texts in Oral Literature to ensure conformity with established criteria, by:

- selecting and arranging material and information related to the subject;
- writing introductions, explanations, comments and interpretations;
- comparing the information gathered and prepared against requirements, similar texts and other information; and
- recommending changes and additions to improve content and clarity.

Performs other duties, such as training other employees, recommending acquisition of new material, reporting inadequacies in retrieval and storage systems, etc.

5

55

10

10

<u>Degree/</u>

Specifications

Points

<u>Skill and Knowledge</u> 2 / 127

The work requires a knowledge of Canadian folk culture, its history, evolution and theories, and of the ways in which this culture is expressed in folk songs, stories, legends, and other types of oral literature. It also requires a knowledge of electronic and manual record keeping principles, procedures and practices and of the international classification systems used to classify the various types of oral literature. Skill is required in quickly and accurately assessing the contents and historical significance of oral literature, identifying the needs and interests of researchers and in devising storage and retrieval systems to meet these needs. This skill and knowledge is usually acquired by post-secondary school studies in Canadian history and several years experience in a related subject field.

Problem Solving 81 / 133

The work requires determining and appraising the contents of oral literature against established selection criteria and classifying contents in accordance with national and international classification systems. It also requires determining the individual needs of researchers, searching for, locating and identifying factual material and evaluating the relevance of the material to requirements. Judgement is required in determining the need for modification or adaptation of classification systems to suit specific needs, within the general framework of the Centre's programs.

Responsibility for Contacts

A2 / 43

Daily contact is necessary with the Centre's staff, researchers and support staff. Frequent contact is also required with the staff of other divisions and other government departments, various public and private agencies, other folk culture specialists and students, and the general public in order to discuss and identify their needs and interests and provide the appropriate information.

Supervi si on A / 10

The position is required to supervise students undergoing training in the Centre's archives and temporary staff engaged for specific oral transcription projects.

SPECIALIST ORAL LITERATURE

Chi ef, Canadi an Center for Folk Culture Studies	HR-4
-Specialist, Oral Literature	SI -2
-Transcription Clerks (2 Terms PYs)	CR-3

Point Rating: 313

20

BENCH-MARK POSITION DESCRIPTION

Level: 2 Rench-mark Position Number: 7

Descriptive Title: Agricultural Statistics Officer

Horticultural Crops

Position Profile

The work is primarily operational in nature; it involves directing and co-ordinating the collection, processing and publication of horticulture and food statistics. There is some responsibility for the technical certification of data quality prior to release. The work also involves assessing and undertaking automation and data integration through the use of micro-computers. Data are collected throughout the year from provincial and federal departments as well as from producer/processor surveys.

Duti es % of Time

Co-ordinates and participates in the planning, implementation and maintenance of programs involving the collection, analysis and publication of horticulture and food statistics by:

40

- assessing the capabilities of respondents to provide consistent and valid data;
- revising and/or designing new questionnaires and making recommendations to the Unit Head:
- reviewing data elements in relation to user requirements and recommending changes, additions, or deletions;
- suggesting and implementing new procedures designed to increase response rates (i.e. questi onnai re re-desi gn);
- implementing appropriate changes to the processing activities (i.e. editing, coding, data capture, tabulating and publishing);
- liaising with service areas to ensure the scheduling of various activities is carried out in a timely and efficient manner;
- determining the potential of automation and data integration in using micro-computers;
- advising on the sample to be used for surveys and ensuring that it is representative
- reviewing and approving respondents lists; and
- recommending changes to the content of publications (i.e. deletion, expansion and/or addition of tables).

Analyzes and reviews past and present data in order to improve and expand the series and participates in the development of definitions related to the measurement and estimate

- appraising source data to determine limitations in its use due to deficiencies in coverage and methods of compilation;
- reviewing weighting factors and recommending changes;
- studying data prepared by other areas to determine its suitability for food and horticultural statistics, and devising and recommending methods by which it can be empl oved:
- devising methods to be applied in making estimates designed to improve inadequate data and/or to correct inconsistencies in data; and
- revising historical estimates to achieve compatibility with data obtained from the qui nquenni al Census of Agri cul ture.

Maintains communications with officials at all levels within the department, of other federal departments and of provincial government departments, and with executives of trade associations and private industry to facilitate the collection and dissemination of reliable information by:

20

% of Time

- responding to requests for data and information on survey procedures;
- advising users on the significance of the statistics generated in the Unit;
- conducting correspondence with respondents to determine their capabilities to supply information and to explain surveys;
- liaising with users to discuss developing areas and to gain their co-operation in future surveys;
- monitoring research findings and studying publications and journals to keep informed of industry developments; and
- attending conferences, seminars and meetings to explain the units programs.

Supervises support staff engaged in the editing and compilation of data by:

15

- preparing and maintaining instructions for subordinate staff;
- ensuring that the work is performed in accordance with established quality standards;
 and
- scheduling work flow to ensure effective utilization of staff.

Performs other duties such as preparing special reports, writing procedures, etc.

5

Specifications

Degree/ Points

Skill and Knowledge

2 / 127

The work requires a knowledge of the structure, organization and development of the horticultural and food industries in Canada, as well as a knowledge of the administration, marketing and other trade practices in use in different regions of the country. Knowledge is required of the theory and techniques of conducting census type and sample surveys in the Agricultural sector, as well as of the methods and procedures used to obtain, adjust, present and evaluate data on horticultural crop production and stocks. Knowledge is required of electronic data processing techniques involved in the capture, manipulation and retrieval of large volumes of data, as well as of the capabilities and limitations of micro-computer processing in a statistical environment.

Skill is required in applying definitional and classification systems and in data collection and evaluation, in order to ensure that results reflect actual industry conditions and to recommend changes and improvements in procedures. Developments in the subject area, the requirements of users and technical and human resource constraints must all be assessed when devising and initiating new or revised collection programs. Skill is also required in compiling survey and supplementary data required by users; and in identifying and using various micro-computer software packages.

This skill and knowledge is normally acquired by post-secondary school study in statistics, economics and business administration, on-the-job training and experience directly related to the work.

Degree/ Points

Problem Solving B1 / 133

Initiative and Judgement are required in evaluating the data which **is** variable due to the scope and diversity of the horticultural and food industries in Canada, and the variety of conditions under which it is collected (surveys, censuses, administrative records, etc); in identifying inconsistencies in current and historical series; and in determining the need for changes to specifications, definitions and processing procedures.

There is a requirement to identify and undertake the evaluation of new sources of information, and to develop and implement changes and improvements in the collection and processing of data. The analysis and evaluation of data involve consideration of changes and interactions within the subject area.

The subject area is well defined and change normally occurs gradually over a period of time. Marketing and distribution practices vary from province to province, but the underlying methods and concepts are consistent. Problems are solved within the context of the Section's overall program, which is well-established because of its recurring nature.

Responsibility for Contacts

A2 / 43

The work requires contact with officials of federal and provincial departments and agencies, and trade producer associations, to identify their statistical requirements and to explain the uses and limitations of data. Contact is also required with representatives of the horticultural sector to explain survey requirements, identify their capabilities to supply data and arrange satisfactory collection procedures.

Supervision A / 10

There is a requirement to supervise up to six clerical staff performing similar tasks by instructing in work procedures and techniques, checking work in progress and reviewing overall standards of quality.

	LINEAR ORGANIZATION CHART	
	AGRICULTURE DIVISION	
Director, Agriculture Division		EX-2
-Chief, Crops Section		ES-6
-Head, Grain Marketing Unit		ES-4
-5 positions (CR-3 to ES-3)		
-Head, Crop Reporting Unit		ES-4
-6 positions (CR-3 to ES-3)		
-Head, Horticultural Crop Unit		ES-5
-Analyst		ES-3
-Research Assistant		SI-2
-Junior Analyst		ES-2
-Agricultural Statistics Officer		SI-2
-Senior Clerk		CR-4
-Editing Clerks (5)		CR-3

Point Rating: 396

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 8 Level: 3

Descriptive Title: Technical Assistant

Social and Economic Studies

Position Profile

The work consists in providing technical support to Research Economists engaged in quantitative analysis of social and economic data. It involves location, collection, manipulation and presentation of data using microcomputers, in order to obtain data banks suitable for analysis.

<u>Duties</u> % of Time

Locates, collects and evaluates, as assigned by a Research Economist, social and demographic data from various sources within and external to the department by:

60

- determining the most appropriate method of obtaining the data, assessing the technical difficulties of such a method, and developing data collection and extraction procedures;
- liaising with professional and technical staff to obtain information and to discuss incomplete or inconsistent data;
- examining source data to determine limitations in its use due to deficiencies in coverage and methods of compilation;
- assessing the concepts and definitions applied to the source data against the intent of the research project;
- devising methods to determine the reasonableness of the data, whether anomalies and unexpected trend exist within the data, whether the data fall within expected ranges, whether there are missing data; and
- writing progress and final reports on assignments with recommendations on the use and application.

Plans and organizes the retrieval and manipulation of the data for research or developmental projects, lays out and produces charts and tables and conducts a preliminary analysis of the data by:

- choosing and using the appropriate high level programming language (FORTRAN, PL/1, etc.), utility programs (TPL, STATAPE, etc.) or statistical analysis programs (SAS, SPSS, BMPD, etc.) to retrieve the data;
- performing necessary manipulation (e.g. using ratios, means, multivariate analysis, non-standard computations used in modelling, etc.) and producing the output required;
- undertaking the more complex compilation and manipulation of data in hard copy form, and special calculations required for correlation tests etc.;
- reviewing the output to verify that no errors exist due to programming and classification in the original data; and
- designing the chart and table output to indicate the relationships of interest in the data, and producing such charts and tables, either manually or using the appropriate software.

% of Time

Determines and utilizes the appropriate software or methods for accessing various data files, creating research data files, manipulating large files and accepts responsibility for other aspects of managing computer files used in research by:

15

- examining existing, proposed or new software programs and systems to determine their feasibility and adaptability to the needs of the area;
- assessing the relative advantages and disadvantages of various kinds of file structures and choosing the file structure for a particular purpose;
- using utility programs (TPL, STATAPE, F-SPLIT, etc.), high level languages (FORTRAN, PL/1, etc.) or statistical analysis packages (SAS, SPSS) in data processing applications; and
- establishing maintenance procedures for research files, and applying the principles of file management to the maintenance, updating and manipulation of computer files.

Performs other duties such as proofreading publications, representing the Division in technical meetings, seminars and cooperative projects within the bureau, etc.

5

Specifications

Skill and Knowledge

3 / 166

Degree/ Points

The work requires a knowledge of a variety of statistical techniques and definitions and a general appreciation of the underlying statistical and economic principles and concepts used in the collection, manipulation and evaluation of social data. The techniques include those used in calculating various experimental indexes, regression analysis and other multivariate analysis. The concepts themselves are often subject to modification by economists. The work requires a good working knowledge of information processing, data-base management, file structures and high level programming languages such as PL/1, FORTRAN and COBOL, and some statistical analysis software.

Skill is required in selecting and evaluating and acquiring data from a variety of sources, identifying variations in the data and applying techniques to reconcile and present data (eg. computer graphics). Skill is also required in working with senior officials of federal and provincial departments and agencies to identify data, discuss limitations and arrange acquisition.

This skill and knowledge is normally acquired by post-secondary education in economics, statistics and computer sciences together with directly related experience in computer based statistical operations.

<u>Problem Solving</u> 82 / 187

The work involves locating micro and aggregate data to be used in a wide variety of non-recurring social research and analysis projects into such aspects as employment and training, language, demography and regional disparities. It requires evaluating the data, which are often variable due to different concepts and definitions and the conditions under which they are collected and stored, for consistency, reliability and appropriateness. Typically each project employs different data sources and techniques. The location, assessment and development of procedures to collect, manipulate and present the data are performed within general guidelines and instructions and there is a requirement to solve day-to-day operational problems.

Degree/ Points

The complexity of the work involved includes such aspects as accessing computer files from a number of different sources; creating research data files; transferring data among different types of equipment; applying statistical analysis packages on large and complex data files; writing programs in high level languages for non-standard analyses as developed by the Research Economist; checking for inconsistencies in data sources; reviewing output for errors; and conducting graphical analyses and producing illustrations.

Responsibility for Contacts

A2 / 43

Contacts are made with departmental professional and technical staff to obtain information and to discuss problems or inconsistencies in the data. The work also requires contacts with provincial government and other data sources outside the department to locate and obtain data or additional information.

Supervi si on

There is an occasional requirement to show other employees how to perform tasks.

SOCIAL AND ECONOMIC STUDIES DIVISION

Director, Social and Economic Studies	EX-2
-Research Methodologist	STAT-5
-Seni or Soci al Researchers	ES-6
-Seni or Economi c Researchers	ES-6
-Assistant Director	ES-7
-Coordinator, Special Projects	ES-6
-Seni or Anal yst	ES-4
-4 positions (CR-3 to ES-2)	
-Seni or Anal yst	ES-4
-4 positions (CR-3 to ES-2)	
-Seni or Anal yst	ES-4
-Techni cal Assi stant	SI -3
-Anal yst	ES-2
-Research Clerk	CR-4
-Cl erk	CR-3

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 9 Level: 3

Descriptive Title: Statistical Officer/Researcher Point Rating: 415

Position Profile

The work is operational in nature; it consists in providing technical support to a staff of experts and advisors in the Policy Branch. Assignments range from collecting and evaluating statistics on development assistance and related subjects to developing procedures for collecting, extracting and verifying statistics.

<u>Duties</u> % of Time

Collects, compiles and evaluates statistics on development assistance, international trade, commodities and numerous aspects of developing countries such as labour, production and employment, for the formation of data banks and for use in the analytical work of the Policy Branch by:

 studying detailed specifications of the characteristics of statistics for information and for analysis;

- locating sources of statistics in several fields of economics, and by examining the suitability of each source;
- evaluating statistics with respect to their original source, scope, methods of compilation, concept, limitations, definition and reliability;
- developing procedures for collecting, extracting and verifying statistics;
- designing and producing regular and special tabulations and diagrams;
- advising the Chief Statistical Officer and individual subject-matter experts on the development of new sources and data; and
- writing reports explaining the origins, concepts, definitions and reliability of statistics provided.

Conducts analyses and calculations using practical statistical methods and techniques for use in studies by subject-matter experts and advisers by:

- consulting subject-matter experts to clarify their requirements;
- studying standard statistical techniques such as measures of dispersion or association and special techniques developed within the Policy Branch;
- assisting in the development and testing of new methods and techniques;
- applying existing and new methods and techniques to analysis being conducted;
- designing work-sheets, compiling tables and diagrams complete with sources, and by verifying sources and procedures; and
- verifying completed calculations for conformity to the procedures prescribed, internal consistency, significance and accuracy.

Performs other duties such as assisting in conduct of surveys and training part-time employees.

5

60

Degree/
Specifications Points

Skill and Knowledge 3 / 166

The work requires a knowledge of the department's current and prospective programmes of development assistance. It requires a knowledge of particular studies planned and in progress by the subject-matter experts and advisers of the Policy Branch, and of the statistical requirements of each project. It requires developing a knowledge of many institutional sources of statistics throughout the world on development assistance; developing countries, and different aspects of their economies; and on international trade and commodities. It requires a knowledge of techniques for collecting and evaluating statistics and developing statistical series. It requires knowledge of techniques of statistical analysis and computation such as measures of dispersion and association, and of the operation of computer utility programs.

Skill is required in creating, selecting and testing data from many sources throughout the world, and in evaluating aspects such as scope, reliability, etc. It entails skill in maintaining liaison with institutions supplying original data in order to be aware of developments, particularly of new or modified data.

The analytical work requires skill in practical methods and techniques such as tests of significance and in operating calculating equipment.

This skill and knowledge is normally acquired by post-secondary school study in Statistics and Economics.

Problem Solving B2 / 187

Initiative and judgement are required in consulting with subject-matter experts to identify specific data needs in terms of type and quality, and to understand the final use of statistics and calculations; in locating sources, investigating the quality of reliability of data with respect to the original source, concept, definition, etc., in relation to the use and to the concepts and definitions specified by the expert; and in studying existing elementary techniques of statistical analysis and computation in order to apply them to the given problem, with adequate provisions for verifying that each stage is correctly followed and consistent.

The work involves providing statistics from a wide range of original and secondary sources, both from inside Canada and outside Canada, such as international institutions (e.g. the GATT; OECD, World Bank) and developing countries directly or through its field staff. The data are available in a variety forms (e.g. printed tables, computer files, etc.). The work entails collecting statistics for three data banks by examining the availability of data, the original sources, concepts and reliability of large numbers of statistical series; maintaining correspondence and supplying a variety of tabulations to meet both recurrent and special analytical needs.

Responsibility for Contacts

The work requires contact with experts and advisers within the department to assess their needs for statistics and to explain and resolve problems related to the processing of data

131 / 52

<u>Degree/</u> <u>Points</u>

The work also requires establishing and maintaining liaison directly or through correspondence with officials in a large number of international institutions or organizations in order to obtain information about all relevant aspects of the statistics.

Supervision A / 10

There is a requirement to supervise one employee engaged in entering data and preparing input forms for computer programs used in International Organizations.

POLICY, PLANNING AND ANALYSIS

Director, Policy, Planning and Analysis	SM
-Senior Policy Analyst	PM-6
-Policy Analysts (3)	PM-5
-Chief, Statistical Unit	SI -5
-Statistical Researchers (2)	SI -3
-Data Clerk	CR-3

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 10 Level: 3

Descriptive Title: Land Titles and Research Officer Point Rating: 424

Position Profile

The position is engaged in research to determine title boundaries and ownership of Crown Land. The department has a mandate to protect outstanding natural areas and historic places of Canadian significance across the country.

<u>Duties</u> % of Time

Investigates and determines title to five categories of Crown Land, so that these lands may be established as National Parks, National Historic Parks, Recreation Areas, or may be disposed of in accordance with land-use requirements of the Department by:

researching and evaluating archival and current records, records of provincial Land
Title and Land Registry Offices, Privy Council Office, Parliamentary Library, Supreme
Court of Canada Library, records of federal and provincial Surveyors General and
other offices;

- contacting park planners, historians, solicitors, land surveyors and officials in land titles registration offices in order to obtain information and/or assistance in the interpretation of documents, legal acts, etc;
- studying and analyzing past and existing legislation, interpreting documents and examining land survey plans to determine their effect on the assigned project;
- preparing land status reports identifying land title problems and land survey irregularities, and making recommendations on resolution; and
- summarizing the effects of legislation and documentation on land titles in order to compile Land Title Abstracts.

Resolves problems relating to land title and land survey irregularities, verifies title to lands owned or previously owned by the Crown, serving among others, federal, provincial and municipal governments; federal and provincial land surveyors; solicitors with the federal Department of Justice; solicitors representing the public, and the general public by:

- selecting evidence for Court proceedings to resolve land title problems or other issues dependent on land title;
- identifying the category of land to ensure that the history and legislation specific to the category are applied;
- identifying the type of problem, i.e. whether land title, survey, documentation or authorization;
- studying legal opinions to determine whether they relate to a similar problem;
- contacting solicitors, land surveyors representing all levels of government, or representing clients in the private sector, and Land Titles or Land Registry officials, in order to obtain and clarify information, obtain legal opinions, and assistance in interpretation of documents; and
- preparing land status reports, identifying problems relating to land title survey irregularities and making recommendations for resolution.

35

% of Time

Prepares submission for Privy Council approval setting aside lands as National Historic Parks in accordance with the National Parks Act by:

- ensuring that title to the lands meets the qualifications necessary for National Historic Parks status;
- ensuring that the conditions of any existing federal/provincial agreements relating to the specific Parks have been complied with;
- procuring legal land descriptions and compiled survey plans from the Surveyor General's Office, ensuring that copies of all researched documentation covering lands to be included in the Park are provided and that previous related survey plans are identified:
- ensuring that the correct name under which the Park is to be known is obtained, by contacting departmental historians;
- drafting covering submission to Council for preliminary approval of Legal Counsel and the Privy Council Office in accordance with the Statutory Instruments Act;
- preparing final submission for the Minister's signature;
- obtaining from historians, a briefing on the history of the specific Park to accompany the submission; and
- distributing resultant Order in Council to appropriate Regional Office, the Surveyor General's Office and to the National Historic Parks Branch, notifying them of the legal status of the land so set apart as a National Historic Park.

 Speci fi cations
 Degree/

 Points

Skill and Knowledge 3 / 166

The work requires a practical knowledge of the history of Canada, and archival research procedures as well as of land title and land registry methods of land registration. Knowledge **is** also required in law matters to select evidence for Court proceedings and to study legal opinions.

Skill is required in interpreting documents and legal survey plans, in drafting legal documents, writing reports and preparing correspondence related to land title matters.

Skill is also required in maintaining good relations with all who are contacted because of the sensitive nature of land title problems.

This skill and knowledge is normally acquired by post-secondary school study in History or Law combined with experience in processing land transactions.

Problem Solving B2 / 187

Initiative and Judgement are required to identify and resolve land title problems and land survey irregularities and when researching and evaluating archival and current records to ensure that all documents affecting assigned project within a specific category of land are obtained.

<u>Degree/</u> Points

The nature of the work requires extensive and thorough searches of archives, registry records, land surveyor records, etc., in order to ensure all available information has been obtained. It involves reviewing legislation, documents and survey plans to determine the similarity between cases and the need to modify approaches to suit the specific requirements of individual cases. Direction is available from a Senior Land Titles Reseacher when making recommendations on the solution of difficult or irregular cases.

The subject area is sub-divided because of the different categories of land and the widespread interest in its ownership and use. Information is not always readily available or is frequently incomplete or inaccurate, requiring researching and evaluating archival and current records to ensure that all documents affecting the work are obtained.

Responsibility for Contacts

B2 / 71

Contacts are made with Park Planners, Historians and Senior Administrators regarding defining park boundaries, the history of certain parks and in resolving a variety of other issues. The work also requires contacts with solicitors and land surveyors representing all levels of government or clients in the private sector; with Land Titles Registrars in all of the provinces; and with the general public in resolving land title problems, land survey matters and the drafting of legal documents.

Supervi si on

The work requires occasional supervision of temporary staff or summer students when they are employed for special short term projects.

REALTY OPERATIONS

Manager,	Realty Operations	AS-6
-Sr.	Land Acquisitions & Disposals Officer	AS-4
	-Land Acquisitions & Disposals Officer	AS-2
-Sr.	Documentation Officer	AS-4
	-Documentation, Audit & Appeals Officers (2)	AS-2
	-Registry & Microfilm Clerk	CR-4
-Sr.	Land Titles & Research Officer	SI -4
	-Land Titles & Research Officers(2)	SI -3

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 11 Level: 3

Descriptive Title: Para-Legal Specialist Point Rating: 424

Position Profile

The work is research and analytical in nature. It consists of providing a wide range of para-legal services to legal officers attending to the litigation of cases and in the handling of cases in Small Claims Court as assigned by the lawyer. Cases would concern claims by or against the Crown such as collection, default, contracts, or property damage, personal injury, etc.

Duties
8 of Time

Researches and prepares evidentiary material to assist Counsel in the preparation of cases for trial by:

 analyzing and assessing nature and extent of cases submitted to determine issues of litigation;

- meeting with client departments to review and discuss specific aspects of the case;
- reviewing relevant issues of law and recommending action, i.e. degree of liability Crown should accept or the quantum of damages that should be recovered or paid,
- carrying out on-site investigations (e.g. motor vehicle accidents), selecting evidence and producing affidavits to obtain such evidence from government departments, agencies, private organizations and/or individuals;
- drafting documents such as pleadings, interlocutory proceedings, arguments, etc.;
- analyzing documents relied upon by the other parties involved to determine items relevant to issues and incorporating those documents within Crown documents system;
- negotiating with representatives of other party to determine if compromise on a claim is feasible;
- assisting in planning strategy by submitting recommendations to Counsel as to suitability of witnesses/documents and in ensuring that transcripts/witnesses documents are available as required;
- organizing documents through various phases of litigation action.

Handles claims from the initial investigations through negotiations to the actual collection, including preparation and presentation of cases in Small Claims Court by:

- writing various legal documents, i.e. statement of claims and defence, motions, writs, etc.;
- searching land title registry to determine ownership of property and assets and establishing a debtor's worth;
- negotiating pre-trial settlement in lieu of proceeding to trial;
- interviewing witnesses, writing witnesses' statements and preparing witnesses for trial;
- conducting trial at Small Claims Court, cross examining witnesses presenting argument
- on behalf of the Attorney General and negotiating repayment plans as required;
- preparing for and conducting Show Cause Summons if debtor defaults on payment.

45

% of Time

Develops and maintains records and administrative systems to ensure the efficient control of the legal operations by:

5

- designing and controlling systems with respect to limitation dates and deadlines imposed in accordance with The Limitations Act and the rules of the various Courts;
- maintaining records of all documents produced and served and all records of judgments obtained;
- reviewing trial dates with the Courts to ensure parties involved are notified and available and legal file is complete;
- preparing and initiating collection action on judgments, having bills of costs taxed by the Court and ensuring the judgments and executions have been filed in the appropriate counties;
- instructing bailiffs and sheriff's officers to commence collection action and approving for payments, charges on behalf of client departments;
- writing and signing demand letters explaining obligations to debtors and providing calculations of amounts outstanding prior to and subsequent to judgment's proceedings.

Performs other duties such as acting as Commissioner of Oaths, taking affidavits, and sharing supervision of the work of one secretary.

5

Specifications

Degree/ Points

Skill and Knowledge

3 / 166

The work requires a good knowledge of federal/provincial legislation (i.e. Motor Vehicles Act, Insurance Act, Bankruptcy Act, Contract Act, etc.) and the ability to interpret this legislation and apply it in claims by or against the Crown arising out of property damage, personal injury, motor vehicle accidents, etc. It also requires a knowledge of courtroom procedures, rules of evidence and the ability to plead a case before the Small Claims Court as well as knowledge of legal principles and an understanding of how the judgments rendered in certain court cases are to be applied to specific legal situations. Skill is required in researching and analyzing information to determine nature and extent of cases. Skill is also required in negotiating settlements favourable to the Crown and the ability to write reports, memoranda and other legal documents.

Problem Solving B2 / 187

The work requires initiative and judgement in analyzing and assessing the nature and extent of cases submitted, in selecting relevant case material and in determining issues of litigation. Judgement is also required in negotiating the degree of liability Crown should accept or the quantum of damages that should be paid or recovered. In cases where Crown seeks to recover a debt, negotiations are delicate in nature and discretion must be exercised; whenever possible, unnecessary litigation should be avoided. Precedents are not available in every instance; unusual problems may be referred to legal counsel. The work involves a variety of litigation issues which requires the analysis and assessment of a number of provincial/federal legislation. It requires interpretation of legislation and its application in various courts (federal, provincial, municipal).

Degree/ Points

Responsibility for Contacts

B2 / 71

Contacts are made with lawyers in private firms to negotiate compromise on claims, discuss certain legal issues and negotiate payment plans, etc. These contacts require discussion, explanation and elaboration. Contacts are also made with departmental professional staff as well as with the general public (witnesses) regarding cases/interviews and cross-examinations.

Supervision

There is no continuing requirement for supervision.

PARA-LEGAL SPECIALIST

Senior Counsel, Civil Litigation	LA-2
-Senior Para-Legal Specialist	SI-4
-Para-Legal Specialist	SI-3

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 12

Descriptive Title: Head, Operations
Education Finance

Point Rating: 493

Position Profile

The work is operational in nature; it consists in handling the collection, processing and presentation of statistical information on the expenditure of elementary, secondary and post-secondary educational authorities across Canada. Data is collected annually from administrative records provided by provincial departments and agencies and through survey documents, with some changes in content from year to year. There is compreconnsibility for the technical certification of data prior to release.

Duties
8 of Time

Controls the collection and processing of statistical information for established surveys of the three levels of government (federal, provincial and municipal) as well as public and private institutions, on the financing of all levels of education by:

4 0

- devising and maintaining procedures for the collection, editing, compilation and tabulation of information;
- reviewing and revising survey questionnaires, guides and related forms;
- liaising with service divisions to schedule such activities as data conversion, tabulating, forms design and printing, and translation;
- contacting representatives of respondent organizations to obtain additional statistics or explanations regarding changes in data content;
- evaluating the reasonableness and validity of reported data against standards and assessing the effectiveness of processing operations;
- writing reports explaining the survey processing systems and suggesting alternatives and improvements; and
- supervising and assigning work to a group of junior technical support staff engaged in the initial assessment and manipulation of data.

Initiates the development and maintenance of data bases for all levels of education financial statistics including a system on Education Price Indices and another covering federal expenditures in support of education and training by:

- setting up and acting as head of departmental project teams to undertake development of new or modified data systems;
- writing "Detailed Statements of Requirement" for use by computer analysts and programmers in revising processing of existing surveys or in automating new surveys;
- specifying, in consultation with the Chief of the Section, the type of data and their levels of aggregation to comprise the data base as well as the statistical and analytical tables to be generated;
- assessing the impact of additional data processing requests on schedules and suggesting alternative outputs;
- liaising with Prices Division (in the case of the Education Price Index) to amend the methodology when necessary; and
- up-dating the data bases to reflect historical trends in light of changes in data presentation.

Manages the acquisition and processing of data for a financial information system, operated on a cost recoverable basis, for the Association of Atlantic Universities by:

- coordinating the production of input documents, the collection of data, the computerized processing of data and the production of the related reports and
- acting as the liaison between the Association of Atlantic Universities and the department concerning the operation of the system;
- representing the department at meetings of the Association of Atlantic Universities Business Officers (AAUBO); and
- participating at meetings of the AAUBO Accounting Research Committee to provide advice on the impact of proposed changes to the information system.

Provides assistance and advice to data respondents and users on the use and application of education finance data by:

- responding to telephone or written requests for data;
- suggesting modifications or alternatives to requests for data to save costs;
- discussing problems with respondents and recommending changes in reporting procedures;
 and
- explaining future survey developments.

Performs other duties such as studying literature related to the area, attending seminars, preparing special tabulations, etc.

% of Time

15

15

5

Degree/ Points

Specifications

Skill and Knowledge 4 / 205

The work requires knowledge of the organization and structure of the Canadian educational system, and the role of federal, provincial, municipal and private authorities and organizations. It requires a knowledge of the accounting principles and practices in use in the various levels of government and both public and private educational institutions and of the methods used to record and report revenue, expenditure, enrollment and other financial and administrative information. The work requires knowledge of the statistical objectives and requirements of the education finance program and of the methods and techniques used to collect, process and evaluate data within the subject-area.

Skill is required in identifying developments and changes that affect the validity of data-gathering and processing procedures, and in devising and maintaining computerized operational systems. Skill is required in defining specifications and test data to be applied when revising processing of existing surveys or automating new surveys, and in ensuring that results are consistent with program needs. The work requires skill in maintaining work relations with survey respondents and data users, and in organizing and controlling the work of computer and subject-area specialists, either directly or through project teams.

This skill and knowledge is normally acquired by post-secondary school study in accounting, data processing or business administration, and practical experience in statistical operations.

<u>Degree/</u> <u>Points</u>

Problem Sol ving B2 / 187

The work requires planning and controlling the collection and processing of data for established programs, as defined by the Chief and management of the Division. It includes assessing the processes, content and quality of reported financial and other data on education according to reporting guidelines, classification of accounts and accounting principles; controlling data quality through the specification of edit criteria and procedures for manual and automated processing systems, and resolving problem cases when data quality is questionable and normal correction and imputation procedures do not apply. Such cases are discussed with senior finance officers of educational institutions and agencies and require immediate decision with respect to acceptance or rejection of respondent explanations.

The work includes the provision of technical specifications to systems analysts for the design and development of new or revised automated systems and responsibility for testing and accepting the final system and its related documentation. It also includes identifying operational problems, determining if they are data, software or computer environment (hardware and support systems) related and determining the appropriate course of remedial action. Advice and guidance are provided to officials of own and other organizations on the generation and compilation of educational finance statistics - subject concepts and definitions, operation of systems, assessment of quality, availability of data, etc.

Responsibility for Contacts

B2 / 71

The work requires contact with officials of federal, provincial, municipal and private organizations to obtain additional information or explanations regarding data presentation, and with data users in the public and private sectors to discuss and clarify survey results. There is a requirement to work with internal service areas to arrange the development of new or modified computer systems and to schedule processing services.

Supervision B / 30

The work requires planning and controlling the work of five junior technical officers. This includes maintaining work standards, evaluating performance and recommending solutions to disciplinary problems. There is also a requirement to head inter-divisional project teams comprising members from different occupational groups (CS, MA, AS) undertaking the long-term development of new processing systems.

50 / 10

EDUCATION, CULTURE & TOURISM DIVISION

Assistant Director, Education	ES-7
-Chief, Post-secondary Section	ES-6
-14 positions (CR-3 to ES-4)	
-Chief, Elementary-Secondary Section	ES-6
-10 positions (CR-3 to ES-4)	
-Chief, Projection Section	ES-6
-8 positions (CR-4 to ES-4)	
-Chief, Finance Section	ES-6
-Projection Officer	ES-3
-Statistical Analyst	ES-2
-Statistical Analyst	ES-2
-Head, Operations	SI -4
-4 Statistical Officer	SI -2
-1 Statistical Assistant	SI -1

B. M. P. D. No. 13

Point Rating: 567

65.1

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 13 Level: 5

Descriptive Title: Head, Statistical

Support Services

Position Profile

The work is operational in nature, providing services including the collection and assessment of all statistical data, the survey of federal and provincial legislation and regulations and the development of systems to support the analysis of production, consumption, trade and marketing of forest based products, the management and use of the forest resource for recreational purposes, and the long and short term trends in capital investments, profitability and productivity in the forest industries.

<u>Duties</u> % of Time

Directs the activities of the Statistical Support Services Unit which provides statistical services including the collection, compilation, maintenance and assessment of all statistical data used in studies by:

- statistical data used in studies by:

 developing and maintaining a data bank system corresponding to long and short-term statistical data requirements for the department including the fulfillment of
- Canada's international commitments for forest economic data; - consulting the director or other senior officers to determine the priorities and scheduling the work accordingly;
- instructing staff in the use of statistical data and establishing performance standards; and
- participating in the selection, assessment and discipline of staff and initiating on-the-job staff development programs.

Provides advice and information to the professional economists of the branch, regional research centres and institutes, departmental administrators, information officers and others on matters dealing with forestry statistics including the correct use, accuracy and reliability of the information by:

- surveying for accuracy and reliability data sources for new statistical series;
- examining and evaluating the methods and procedures used in statistical reporting;
- answering enquiries for forest information from the forest based industry, resource researchers, information agencies, and the general public;
- developing methods for the preparation, update and revision of basic statistical tables taking into consideration applicability of sources and accuracy of data; and
- studying discontinuous statistical series for ways and means of rendering these data comparable.

Conducts the consolidation of federal and provincial statutes and regulations which bear on the use and management of the forest resources in order to provide information on Canadian forest legislation for the federal and provincial governments, industry, universities by:

- preparing procedures describing steps involved, from the purchase of documents to the extraction of information and the distribution of the consolidation; and
- reviewing legislation consolidations or digests for accuracy, completeness and subjectiveness.

20

40

% of Time

Advises and assists the economists and forestry officers on the statistical requirements and inputs to their research projects and studies by:

35

- recommending suitable methods of data collection including survey design from content of questionnaire, to conduct of special surveys either by correspondence, telephone or personal contact for data not available through normal channels;
- consulting with statistical collection agencies to obtain information on conversion factors and for special compilations to improve the statistical tools used in forest economics research;
- locating and evaluating unpublished data maintained by industry, governments and associations for use in projects and studies; and
- recommending the most efficient method of providing data taking into consideration the cost, the tabular or graphic presentation, as well as the reliability and accuracy of the statistical information.

Specifications Points

Skill and Knowledge 5 / 244

The work requires knowledge of forest statistics, their sources, methods of collection and compilation and their applicability to the various economic studies. A knowledge is also required of the subject area such as silviculture, forest inventory, forest products and financial reports when extracting relevant statistics from data provided by forest industries or other levels of government. Knowledge is also required of federal and provincial statutes respecting management of forest resources and trends in the productivity of forest industries. There <code>is</code> also a requirement for knowledge of the concepts and application of computer systems design in order to develop and maintain a data bank system for the collection, storage, retrieval and dissemination of forest economic data.

Skill is required in identifying sources of accurate, reliable data and developing a data bank system. Skill is required when examining, evaluating and modifying methods, and procedures used in statistical reporting.

Skill is also required in establishing and maintaining contacts and good relations with officials of government and industry and in directing the work of the Statistical Support Unit.

This skill is normally acquired through post-secondary education in economics, statistics, and computer science, together with extensive experience in forestry statistical operations.

Problem Solving B3 / 241

The work involves planning, developing and directing the collection and processing of forest statistical data for a variety of forest economic studies. These studies vary widely as to data source, complexity, method of compilation or manipulation and presentation. Different data sources must be researched for applicability, availability, and reliability. There <code>is</code> also a continuous search for new statistical sources, methods and procedures. The result of this work is the development of a reliable databank system in order to meet Canada's international commitment for forest economic data.

Degree/ Poi nts

There is a need to give advice, provide recommendations and decide on particular courses of action when planning, organizing and co-ordinating the work of the Statistical Support Unit in order to meet the economists' statistical needs.

Responsibility for Contacts

B1 / 52

Contacts are primarily confined to staff within the department. The work involves elaboration and clarification of information, mainly with economists from the branch and regional research centres.

Occasional contacts are made with officials in industry, other levels of government and associations to locate and evaluate unpublished data for use in projects and studies.

B / 30 Supervi si on

The work requires the supervision of a programmer and two junior statistical officers. This involves the allocation of work, the maintenance of operations standards, the development of staff requirements and participation in training, discipline, appraisal and other personnel matters.

FORESTRY SERVICE

-Chief, Forest Resources	ES-6
-Forest Resource Economist	ES-3
-Economist	ES-3
-Economist	ES-2
-Head, Statistical Support Services	SI-5
-Technician	51-2
-Forest Survey Technician	SI-2
-Economic Data Base Programmer	CS-2

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 14 Level: 5

Descriptive Title: Head, Systems and Data Retrieval Point Rating: 567

Centre for Justice Statistics

Position Profile

The Canadian Centre for Justice Statistics is a joint federal-provincial initiative to produce information on the extent and nature of crime and the administration of criminal, civil and administrative justice in Canada. The work requires the development and operation of processing systems that capture, store and retrieve data covering the major dimensions of the judicial system. The result is the establishment of data bases used to provide time-series information, as well as data for special studies and individual requests. The work also involves providing expertise to officials supporting the development of information collection systems in individual jurisdictions.

Duties % of Time

Directs the operations and maintenance of manual and automated processing systems to produce data bases and data retrieval packages, used for the production of integrated statistical information on the programs of the Centre by:

 conferring with subject matter analysts on issues of policy, concepts, report content, terminologies, and the objectives and priorities of surveys and programs;

- consulting with specialists in the Technical Assistance Directorate to determine the capabilities of federal, provincial and municipal jurisdictions to collect and process data:
- devising and recommending criteria and methods to rectify inadequate data and correct inconsistencies:
- assessing current and proposed user requirements to advise on the practicality of implementation in the light of existing resources and surveys;
- co-ordinating and analyzing the results of modular tests, procedural investigations and feasibility studies;
- directing the study of system concepts, equipment, methods and statistical processes;
- designing procedure manuals and standards to be used in the editing, coding and processing of data.

Collaborates with officials in the Technical Assistance Directorate of the Centre in the design and development of new and revised computer and processing systems and procedures, to ensure the compatibility between systems in use in the Centre and the respective jurisdictions by:

- analyzing both the Centre's and jurisdiction's systems, to identify common characteristics and differences in the processing of statistics;
- identifying areas for improvement in the Centre's systems, and recommending modifications to ensure the continuity and compatibility of data;
- planning, assessing and developing present and future objectives, procedures, alternatives and resource allocation;
- reviewing and approving detailed processing parameters, classification, coding systems and report formats;

40

% of Time

- collaborating in the development of computer specifications for new and existing data compilation programs; and
- evaluating the effect of technological developments on respondent operation and production procedures.

Reviews the impact of changes in legislation, policies, administrative regulations, new and proposed systems, on survey objectives, requirements and the production of data by:

10

- studying trends and developments in the structure of the judicial/correctional process to identify changes;
- discussing alterations in legislation, administration and technology, to assess their impact on the statistical reports and studies conducted by the Centre;
- identifying developments in the law enforcement, judiciary or correctional agencies affecting report production; and
- reviewing proposals to assess the effect of changes on survey concepts and aims, as well as on computer and manual processing systems and procedures.

Co-ordinates and controls the activities of the technical staff in the areas of systems analysis, data capture and retrieval by:

25

- reviewing project plans, priorities, responsibilities and recommending the reallocation of resources, the timing and techniques for program development;
- explaining the objectives, procedures and techniques to be employed in the various surveys;
- establishing quality guidelines and general target dates for activity completion, ensuring resource allocation and disposition;
- planning and co-ordinating the design, evaluation and testing of survey data collection forms, and forms used in the jurisdictions processing system;
- developing test material and testing systems for acceptability and cost benefit; and
- preparing reports recommending the nature, scope and content of statistical analysis to be undertaken.

Performs other duties such as keeping abreast of developments in the computer field through journals, publications, literature and the attendance of conferences and seminars and directing the work of a team of specialists in the conduct of special studies, surveys and projects.

5

Speci fi cations

Degree/ Points

Skill and Knowledge

5 / 244

The work requires knowledge of the federal, provincial and municipal legislation, regulations, organization and administration of the law enforcement, court and correctional fields in Canada. It requires knowledge of the statistical objectives and requirements of the Centre's programs and the techniques used in collecting, processing and disseminating data. The work requires knowledge of the concepts and application of computer systems design in order to design, update and maintain systems for the collection, storage, retrieval and dissemination of data.

Skill is required in anticipating developments in the subject area that will affect the effectiveness of processing systems and in formulating computer systems specifications, and in designing and creating test procedures and acceptance criteria, to ensure that processing systems yield the desired outputs. Skill is also required in preparing mass

<u>Degree/</u> Poi nts

edit and quality control procedures and in identifying and resolving operational difficulties. The work requires skill in liaising with a variety of subject-matter and technical officers, and in directing the work of systems specialists.

This skill and knowledge is normally acquired by post-secondary study in computer science and statistics and practical experience in the field of law enforcement and in statistical operations and project management.

Problem Solving B3 / 241

Initiative and judgement are required in planning, developing and directing the collection and processing of data for established or new and revised statistical programs as defined by Program Chiefs and senior officers. It involves working closely with the senior professionals and officers of responding jurisdictions to assess both the impact of changing data collection techniques on survey methods and the corresponding changes required to accommodate processing requirements. The work involves advising Program Chiefs and the Manager, Statistics and Information on such matters as the development, re-assessment and modification of survey methods and the reasonableness and validity of proposed collection, presentation and timeliness standards. There is a requirement to participate in negotiating information reporting arrangements with various agencies and assess the performance of these respondents as they pertain to statistical reporting.

There is a need to give advice, provide recommendations and decide on particular courses of action in planning, organizing and co-ordinating the work of the Systems and Data Retrieval Croup. This includes determining and developing both technical and administrative policies, guidelines and definitions relating to the collection, processing and retrieval of data, to resolve problems associated with known and anticipated changes in the law and administration of justice affecting operating practices.

Responsibility for Contacts

B1 / 52

Contacts are made with Program Chiefs, subject-matter specialists and the appropriate senior officer of a respondent agency or institution, to discuss survey requirements and progress and to ensure the effectiveness of existing and proposed collection and production systems.

Frequent contacts are made with Systems Specialists in the Technical Assistance Directorate for the assessment, design and development of new and revised computer and processing systems and procedures and to ensure the compatibility between systems in use in the Centre and the jurisdictions.

Supervision B / 30

The incumbent is responsible for organizing and directing the work of two Systems Development Officers and two Data Retrieval Officers, as well as specialists in the conduct of special studies, surveys and projects. This involves the provision of tech nical advice on work problems, the allocation of work, the maintenance of operations standards, the development of staff requirements and participation in training, discipline, appraisal and other personnel matters.

CANADIAN CENTRE FOR JUSTICE STATISTICS

Assistant Director, Statistics & Informatics Programs	ES-7
-Chi ef, Integration & Analysis -4 positions (ES-3, ES-4)	ES-6
-Program Chief, Law Enforcement -10 positions (CR-3, ES-3)	ES-6
-Program Chief, Non-Criminal Courts -7 positions (CR-3 to ES-3)	ES-6
-Program Chief, Adult Courts -9 positions (CR-3 to ES-3)	ES-6
-Program Chief, Juvenile Justice -12 positions (CR-3 to ES-3)	ES-6
-Program Chief, Corrections -7 positions (CR-3 to ES-3)	ES-6
-Senior Analyst, Legal Aid -3 positions (ES-3)	ES-3
-Head, Systems and Data Retrieval	SI -5
-3 Systems Development Officers	SI -2
-2 Data Retrieval Officers	CS-1

Level: 5

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 15

Descriptive Title: Chief, Documentation Control Section Point Rating: 616

Position Profile

This position is responsible for providing access to and physical control of a large photographic archive. It decides on the general approach to cataloguing and finding aid production. It is responsible for the organization and conservation of the photographs.

Duties % of Time

Plans and directs the activities of seven employees engaged in the custody and cataloguing of photographic records by:

25

- setting priorities, developing methods and procedures of operation, adjusting work loads, developing staff training programs, resolving problems, maintaining administrative procedures and monitoring statistics;
- reviewing and implementing the various programs of the Section in order to ensure the quality, continuity and development of the various services provided;
- supervising and assessing the work and performance of the staff;
- controlling financial and personnel allotments;
- preparing reports and correspondence as required on programs, activities and projects developed by the Section, their results, and resource requirements and utilization; and
- representing the Section on the divisional management committee.

Controls the physical preservation of photographic records held by the Division in order to make them available to researchers by:

35

- planning, developing and reviewing accession registration procedures; storage systems, material and facilities; the internal photo circulation system; and external transfer systems;
- establishing the appropriate environmental conditions for storing a wide variety of photographic types and setting priorities for the conservation of deteriorating photographs;
- interpreting divisional and branch policies, in order to establish broad limits of custodial procedures;
 setting Division custodial priorities and work loads on the basis of available
- setting Division custodial priorities and work loads on the basis of available resources and the physical state of collections;
- ensuring the organization and arrangement of collections and the preparation of detailed indexes and finding aids; and
- reviewing custodial statistics to be used in the performance measurement system.

Develops and implements standards of archival documentation to be applied in the cataloguing of archival photographic records by:

- studying trends and developments in methodology of archival description of photographic records;
- developing, testing, and implementing new methods, techniques, and systems for describing photographic records to improve reference service and information retrieval:

% of Time

- establishing and revising professional guidelines for the main catalogue and for the preparation of computerized divisional finding aids, including documentation manuals;
- reviewing and proposing changes for existing computer documentation/cataloguing installations; and
- representing the Division on national and international committees for cataloguing and information control, and on the Branch EDP Committee.

Performs other duties such as:

5

- attending meetings at the local, national, or international level on matters relating to the more general aspects of archival principles and practices and the role and functions of the Department; and
- participating in various interdivisional or inter-Branch activities such as joint committee work.

Degree/ Points

Specifications

Skill and Knowledge

5 / 244

The work requires a knowledge of the historical development of photography in Canada and a basic knowledge of Canadian history since 1840; the nature, technology, applications and interpretation of still photographs; the rules established by the Anglo-American Cataloguing Committee as they apply to still photographs; environmental factors and controls, packaging and containerization, shipping and transportation methods and systems, and of exhibition standards and techniques as they relate to photographic materials; and archival principles and procedures relating to accessioning, custody, arrangement.

The work also requires a knowledge of the relationship between acquisitions, cataloguing and public service, and a knowledge of departmental policies, practices and procedures, the area of EDP and publications.

The work requires skill in coordinating, directing, evaluating and participating in the work of specialists and support staff in the areas of conservation and cataloguing and in assessing the physical state of photographic records and in determining the treatment required to preserve them.

This skill and knowledge is normally acquired by postsecondary education in such fields as photography, conservation or archival science, together with extensive experience in an archival environment.

<u>Problem Solving</u>
B3 / 241

The work consists of planning, developing, promoting and reviewing activities for the custody, arrangement and preservation of photographic records. Considerable judgement must be exercised when identifying resource requirements, establishing priorities and deciding which collections are to be processed, conserved, restored or made available to researchers.

<u>Degree/</u> <u>Poi nts</u>

The subject area covers the care of all types of photograph records which requires reading in the fields of photo technology application and archival handling, and requires developing working relationships with conservators, photographers, chemists and other professionals doing similar work. Judgement and initiative are required in the planning and developing of internal custodial activities and in identifying the need for new or revised activities. Courses of action in custodial activities are established by interpreting present and future needs and determining the validity of operational guidelines and the adequacy of resources allocated to meet these needs.

Responsibility for Contacts

B2 / 71

The work requires establishing and maintaining contacts with various officials of government departments and agencies, including various divisions of the department, as well as with individuals, organizations, and universities, in order to enlist their cooperation and ensure their contribution in developing controls and standards for photographic records. Contacts are made with archivists in Canadian and foreign repositories to discuss problems, procedures, and policies, and to provide guidance, advice, and information, and with scholars and researchers utilizing divisional resources.

Supervision C / 60

The work requires the supervision of seven support staff. This involves planning the operation of the Section, the setting of priorities, the determining and administering of resources, and ensuring compliance with divisional and departmental policies.

DOCUMENTATION CONTROL SECTION

Division Director	SM
-Chief, Documentation Control Section	SI-5
-Head, Custodial Unit	SI-3
-Custodial Officer	SI-1
-Custodial Officer	SI-1
-Custodial Clerk	CR-4
-Head, Cataloguing Unit	LS-2
-Cataloguer	SI-1
-Cataloguer	SI-1

Point Rating: 718

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 16 Level: 6

Descriptive Title: Chief, Systems and Operations

Industrial Prices

Position Profile

The Industrial Prices Subdivision conducts a number of price surveys, production price indexes covering agriculture, manufacturing and construction industries, and capital expenditures by all industries. The work requires the planning, development and ongoing management of the subdivision's operations. In addition to the application of a variety of subject matter concepts for regular production of statistics, it involves defining the manner in which new projects are to be undertaken, and the planning, development and use of computer systems. This work contributes substantially to the overall definition and conduct of the subdivision's statistical programme. subdivision's statistical programme.

Duties % of Time

Prepares long term plans for the subdivision's systems development and processing operations, adapting to changes in technology and in the statistical programme, to meet the programme objectives of the subdivision by. 30

- directing the review of systems concepts, equipment and methods, of statistical processes, and of processing trends and past performance; defining and developing alternate processing and statistical strategies; advising on the definition and content of statistical projects and their objectives;
- interpreting and reformulating statistical plans and underlying concepts to develop and specify the framework for operational development and implementation of projects; and defining the overall nature and operational priority of developmental production
- projects.

Manages the development and operation of systems to collect, compile and publish industrial price statistics by:

- defining and controlling the preparation of detailed plans, resource forecasts and
- preparing summary forecasts and budgets and negotiating with senior managers of other divisions to resolve resource problems; establishing time, cost and quality constraints or standards and ensuring adherence
- establishing time, sost and project teams composed of professionals and specialists establishing and managing project teams composed of professionals and specialists from various sections in the division and other divisions; reviewing, evaluating and accepting the work delivered by project teams, and respective actions when necessary;
- requesting corrective actions when necessary; directing the preparation of cost benefit analyses, technical papers or reports on future systems development;
- providing technical and consultant services to Economists and Statisticians within the department with respect to the interpretation and application of price index theory and systems to compute statistics;
- contacting other divisions to negotiate the supply of data, provisions of support services and acquisition of equipment; and supervising and coordinating through intermediate managers a staff of up to 28 employees, engaged in development, processing and data dissemination.

%of Time

Plans and directs the development of information systems for common use within the division to achieve the programme objectives of the division by:

- evaluating requirements in view of the division's overall objectives and those of
- formulating and evaluating the general options and recommending the most appropriate approach;
- negotiating with other specialists to arrive at an agreed approach for the division;
 and
- assigning subdivisional resources to such projects and reviewing their work.

Degree/ Points

6 / 283

Specifications

Skill and Knowledge

The work requires knowledge of the statistical concepts of price index numbers, of the concepts and procedures associated with the collection and processing of a variety of price data from other divisions, and of price survey methodology. It requires knowledge of system analysis and design, and of computer processing. Knowledge of the statistical objectives of the organization and of the various development projects is also required. The work requires knowledge of the principles of project management, budgeting and financial management and forecasting, planning techniques and resource management.

Skill is required in planning, organizing and controlling the implementation of new statistical projects and the development of new computer systems, together with the ongoing production and publication of existing statistical projects. This includes the development and adaptation of an operational framework for the subdivision's programme, together with the specification and development of computer systems which support the various projects and incorporate changes in technology. The computer environment includes the use of large-scale mainframe and of microcomputer systems. Skill is required in negotiating with senior officials in specialist areas for the provision of resources for projects. Skill is also required in planning and coordinating a variety of production and developmental projects undertaken concurrently, including the set-up and direction of multi-disciplinary project teams.

This skill and knowledge is normally acquired by post-secondary education in economics, statistics and computer science, together with extensive experience in project management and statistical operations.

<u>Problem Solving</u> C3/ 294

Initiative and judgement are required in devising and maintaining a practical framework for development and conduct of statistical operations. The work spans the full range of survey development and production activities, from initiation, specification and development of projects through to the collection, editing, compilation and publication of data. Initiative is required in determining the capacity of the organization to undertake work, in determining approaches to be taken, and in determining the constraints on the program for operational or system reasons. Judgement is required in establishing the manner in which the operations will adapt to changing statistical requirements, and to changing technology available for program support.

The work involves the establishment and management of an operational and administrative framework for both development and production activities, including negotiation for resources, project planning, the management of multi-disciplinary teams of professional and technical staff, and of the technical and clerical staff engaged in systems support and in production. The complexity of the work reflects the problem solving associated with the application of prices methodology to a variety of survey data encompassing all industries included in the measurement of the Gross Domestic Product of Canada and the intensive development and application of computer systems to capture, verify, compile and present such data. Characteristically, the situation is fluid because of general economic developments, changing definitions and specifications of commodities and the influence of one survey group upon another.

Responsibility for Contacts

CI / 81

Contacts are primarily confined to areas within the department. The work requires contacts with senior subject matter officers in the division and in other divisions which supply data, to negotiate the framework within which statistical projects will be conducted, and to resolve significant differences which can affect the quality or efficiency of the work. Contacts with senior officers in specialist support areas are required to negotiate and manage resources for projects, and to ensure work is performed in a manner satisfactory to the subdivision. The work also requires regular contact with the other senior managers in the division to define and monitor the work of the subdivision. There is occasional contact with users in other divisions, other government departments, and in the

private sector to exchange information and obtain advice.

<u>Supervision</u> C / 60

The work includes supervision, through three subordinate supervisors, of a staff of twenty-eight in the intermediate and junior levels in the Technical Category and in the Administrative Support Category. It also includes managing project teams comprising computer systems, methodology and technical staff.

The work involves planning and directing the development and operation of statistical processing systems, including establishing objectives and priorities, determining resources, monitoring performance and assessing overall achievement of objectives.

PRICES DIVISION

Assistant Director, Industrial Prices	ES-7
-Chief, Capital Expenditures	ES-6
-21 positions (CR-3 to ES-5)	
-Chief, Goods and Services	ES-6
-19 positions (CR-3 to ES-5)	
-Chief, Systems and Operations	SI-6
-Head, Systems Research	SI-5
-10 positions (CR-3 to SI-3)	
-Head, Operations	SI-4
-12 positions (CR-3 to SI-3)	
-Head, Information Services	SI-2
-3 positions (CR-3)	

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 17 Level: 7

Descriptive Title: Chief, Data Capture Point Rating: 850

Position Profile

The Census of Canada is a cyclical project occurring every five years. The work comprises three main phases. The development of operational systems to code, prepare, capture and analyze census information; the implementation and monitoring of such systems during the operational phase of the census, and the subsequent evaluation of results. The quality of data produced during the various processing stages is an important consideration because of the widespread use made of Census data.

<u>Duties</u> <u>% of Time</u>

Initiates and coordinates research and development for the capture and processing of questionnaire data to meet the requirements of the quinquennial Census of Canada program by:

Census of Canada

 examining other countries and other departments/agencies processing systems to assess their suitability;

 evaluating processing trends and past performance, interpreting them, and developing alternate processing strategies;

- researching and analyzing operational alternatives for data conversion and capture;
- defining system concepts and specifications;
- directing the study of systems concepts, equipment and methods and statistical
- processes for subsequent application; and
 planning, coordinating and analyzing the results of tests, procedural investigations
 and feasibilities studies.

Coordinates the development of Census data capture processing systems (manual and automated) including coding, editing, document preparation and conversion in order to produce a statistically comprehensive and clean data base by:

- defining the objectives of the task and subdividing them into manageable sub-objectives:
- detailing a plan of action and a list of activities that will lead to the accomplishment of the objectives;
- preparing the necessary forecasts and budgets to carry out the identified activities;
- setting out contracts with the private sector and other federal departments to carry
- out part of the development;establishing development teams composed of professionals and specialists from various divisions;
- organizing and controlling the performance of the various teams through meetings and reports and/or by monitoring the performance of individuals;
- reviewing, evaluating and accepting the work delivered by the various teams and requesting corrective actions when necessary; and
- negotiating arrangements with other departments/agencies for the use of their facilities and/or services in support of the development and/or the implementation phase.

30

% of Time 30 Manages the implementation and evaluation of Census data capture systems i.e., the manual processing system, the automated conversion system and the subsequent control and edit systems to ensure the delivery of complete data by: identifying the availability of equipment facilities and personnel, assessing their suitability and recommending a course of action to Senior Management; securing the necessary equipment, facilities and personnel to carry out the implementation phase and/or by contracting out to outside firms and federal departments part of the operations; reviewing project plans, priorities, responsibilities, schedules and budget submi ssi ons; establishing time, cost and quality constraints and standards and ensuring adherence to these objectives; ensuring availability of back-up resources and maintenance of a framework for the achi evement of objectives; supervising, through intermediate managers, a staff of up to 2000 employees hired to process Census data; and preparing cost benefit analysis, technical papers or reports on results and future systems development. Coordinates the implementation of policies and procedures related to document reproduction, 10 storage, retrieval and disposal by: reviewing policies and guidelines for the provision of microphotographic, retrieval and storage services recommending changes; undertaking studies of areas for system improvement and recommending changes in present methods and level of service; examining demands for various micro-recording and retrieval services and balancing these against the unit capacity to establish the level of services required; and controlling the custody of, and access to, all previous Census documents from 1871 Performs other duties such as discussing Census methods and mutual problems with 5 representatives from other statistical agencies; preparing documentation for presentation to service bureaus and government officials; presenting lectures, presentations or technical papers on Canadian Census processing methods. Degree/ Speci fi cati ons Poi nts Skill and Knowledge 7 / 322 The work requires knowledge of the statistical and economic objectives and concepts of

the Census of Population and Housing and of the techniques used to collect, classify, process and evaluate statistical data. It requires an appreciation of the priorities, organization and project phases of the Census, together with a knowledge of the principles of project management, budgeting and financial management, planning techniques, operations

research and process measurement.

Skill is required in planning, organizing and controlling a quinquennial census project during development, implementation and evaluation, including the devising of definitional technical or classification systems, the specifying of manual or automated data capture constraints in systems design and programming, and the adaptation and application of the

<u>Degree/</u> Points

latest innovations in computer technology to mass applications of data capture and data conversion. Skill is required in negotiating with senior representatives of federal government agencies for the provision of support services and facilities and in coordina ting the work of multi-disciplinary project teams. Skill is also required in planning and organizing a statistical project employing a large staff of temporary workers during the census period.

This skill and knowledge is normally acquired by post-secondary education in economics, statistics and computer sciences, together with extensive experience in project management and statistical operations.

Problem Solving D3 / 347

The work involves both the interpretation of the subject matter specifications and the development of constraints to be applied in the subsequent design and operation of manual and automated processing systems used to capture and compile information from the Census of Population and Housing. Since the census takes place only at five-year intervals it is necessary to research and evaluate alternatives and forecast requirements on the basis of previous information and decisions which may not be applicable in the current context. Judgement is required in the establishment of an operational and administrative framework for production, including planning, organizing and controlling the activities of the multi-disciplinary team of professional, technical and clerical staff working in a project environment. Negotiating arrangements for facilities and services with other departments and agencies is also an important consideration.

The work involves the decentralized processing of ten million questionnaires within rigid timeframes with a staff of 2,000. The coordination of both technical and administrative arrangements span, in addition to regional and interdepartmental boundaries, several segments of the Census process, such as questionnaire design and production, data collection and data coding. Technical and operational decisions directly affect the quality and timeliness of data, which serves as inputs into a wide variety of economic and social policies and programs developed by government and industry.

Responsibility for Contacts

C1 / 81

D / 100

The work requires contacts with various officials of other federal agencies in order to negotiate and arrange for the provision of staff and support services during the Census and to resolve development and operational problems. Contacts are also made with senior officers of statistical agencies in other countries and other professional associations interested in the census in order to obtain and discuss information on mass data proces sing systems and applications. Other contacts are with private organizations to arrange contracts for systems development and with senior officers within the department to negotiate the provision of technical and support staff and services.

<u>Supervi si on</u>

The work includes supervision of a permanent staff of thirty five in the intermediate and junior levels in the Technical Category, Administrative and Foreign Service Category and Administrative Support Category. It also includes managing project teams comprising professional, technical and contract staff, as well supervising up to 2,000 clerical staff engaged for periods of up to one year during the census period.

The work involves planning and directing the design and operation of large scale statistical processing systems over the five year cycle of the Census. This includes establishing objectives and priorities, determining and administering resources, monitoring performances and assessing overall attainment of goals.

CENSUS OPERATIONS DIVISION

Director, Census Operations	EX-1
-Chief, Subject Matter Specifications Development	ES-5
-2 positions (CR-4, ES-3)	
-Chief, Policy Formulation and Program Development	ES-4
-4 positions (CR-2 to ES-2)	
-Chief, Customer Services	ES-6
-25 positions (CR-3 to ES-5)	
-Chief, Data Base Applications and Development	ES-5
-17 positions (CR-3 to SI-5)	
-Chi ef, Data Capture	SI -7
-Head, Data Conversion	SI -4
-14 positions (CR-3 to SI-2)	
-Head, Pre-Capture Systems	SI -4
-9 positions (SI-2, SI-3) -(up to 1,800 clerical positions during Census period)	
-Head, Post Capture Systems	SI -4
-9 positions (CR-2 to SI-3) -(up to 200 clerical positions during Census period)	
-Head, Operational Training	AS-3
-3 positions	

Point Rating: 1000

BENCH-MARK POSITION DESCRIPTION

Bench-mark Position Number: 18 Level: 8

Descriptive Title: Assistant Director, Census

of Merchandi si ng

Position Profile

The Census of Merchandising is a periodic project to collect, analyze and publish information on the size and nature of merchandising activities in Canada. The work involves defining the area to be covered, development of subject-matter specifications, census procedures, processing and the analysis and distribution of results.

<u>Duties</u> % of Time

Directs and participates in the development of the subject-area specifications for the Census of Retail and Services Trades Program to ensure coverage of a universe of 240,000 businesses classified in approximately 232 groups appropriate to the requirements of users and the reporting capabilities of respondents by:

- identifying the requirements of the Department for data that are consistent with those from other sectors of the economy (such as manufacturing) and with the overall concepts and objectives of economic statistics, and that provide a sound framework of intercensal sampling and non-census but related surveys;
- identifying the data requirements of other federal, provincial and municipal government agencies and private users such as manufacturers, market research firms, and business and financial publications;
- identifying the capabilities of respondents to provide information;
- reconciling the various requirements and capabilities through detailed examination and discussion with interested parties;
- reviewing developments and changes, identifying trends and anticipating further developments in the subject area that could become significant by the date of the census-taking:
- supervising subordinate professional and technical staff participating in the work;
 and
- determining the coverage requirements by region, type and organization of business or trade, commodity line, and the limitations imposed by staff, facilities available, time and money.

Plans and conducts the census-taking operations, postcensal processing and publication of data, and intercensal sample surveys of commodity detail by:

- estimating and detailing requirements for staff, budget and supporting facilities;
- establishing priorities and work schedules to meet predetermined completion dates;
- directing and participating in the development of survey questionnaires and methodology for the collection, coding, editing, tabulating and publishing of data;
 and
- reviewing and approving lists of respondents to meet the requirements of established universes.

25

in response to requests.

% of Time Initiates and maintains effective working relations with officials of the Department, 10 other government agencies and business, as the officer responsible for the development and conduct of the census and as the principal subject-area specialist on the retail and service trades, to promote understanding of the subject area and of the objectives, uses and limitations of the census by: conducting meetings and corresponding with federal, provincial and municipal government agency officials and private users such as officials of manufacturers' associations, market research groups, and business and financial publications to identify and discuss their data requirements, explain practical limitations to these, and negotiate specific agreements on census content; conducting meetings and corresponding with respondents through officials of retail and service trade associations to explain requirements, identify and discuss their capabilities in supplying information, and negotiate specific agreements on the content and procedures of the census; participating in departmental committees as the adviser in this subject area, to assist in the formulation of integrated economic statistical objectives, concepts and methodology; and advising departmental and outside officials on the significance, uses and limitations of statistics in the retail and service trades. Plans, directs and participates in the analysis of data obtained through the census and 20 the intercensal sample surveys to identify and reconcile discontinuities and to identify and assess the significance of trends and changes in the trades industries surveyed by: directing a small professional and technical staff; assisting university specialists employed under contract to write monographs analysing portions of census data; and analysing more significant or complex portions of the data. Correlates and reconciles census results with those projected from current sample surveys 10 in conjunction with statisticians responsible for current trade statistics, by analyses and di scussi on. Directs a permanent staff of 12 employees at the intermediate and junior levels in the 10 Scientific and Professional Category, Administrative Support Category, and the Social Science Support Group, and an additional casual work force of 75 person-years during the census year and 30 person-years in both the preceding and following years by: providing and maintaining complete instructions for the training of staff; instructing subordinate supervisors in the organization and supervision of staff; reviewing and making recommendations on staff matters such as promotion, discipline, separation and training.

5

Performs other duties such as studying publications and journals describing developments

within the subject area and planning the preparation of special tabulations and analyses

Speci fi cati ons

Skill and Knowledge 9 / 400

The work requires a knowledge of the structure, organization and development of the retail and service industries in Canada, together with the differences in administrative, marketing and other business practices between specific trades and regions under various economic conditions. It also requires knowledge of the statistical and economic objectives and concepts of the Economic Statistics Branch and of the techniques used to collect, classify and evaluate statistical information. Also required is an appreciation of the statistical needs and economic objectives of other public and private organizations and associations.

Skill is required in developing and conducting a census of retail and service trades in Canada, including the specification of the subject-area content and the devising of definitional and classification systems, and census-taking and data evaluation procedures and techniques. Skill is also required in anticipating developments in the subject area and requirements of users, specifying the detailed plans for the census in advance of its implementation, and ensuring that plans reflect actual conditions and requirements and provide data adequate for postcensal estimates. Skill is required in making arrangements with senior representatives of manufacturing and merchandising businesses and associations and other federal and provincial government agencies, to collect and provide data appropriate to their capabilities and requirements. Skill is also required in planning and organizing a statistical project employing a large staff of temporary workers during the census years.

This skill and knowledge is normally acquired by post-secondary school education in economics and business administration, together with extensive experience both in the subject area and in statistical operations.

Problem Solving D4 / 400

The work requires identifying and reconciling user requirements for statistics pertaining to the retail and service industries in Canada. Since the census takes place only at periodic intervals it is necessary to forecast developments in the industries themselves to specify the subject-area content of the census. Judgement is required in devising the definitional and classification structure of the census consistent with the conceptual framework of the other business and trade surveys and appropriate to the nature of this specific subject area. The work also requires the development and implementation of the statistical collection, processing and administrative procedures and methods appropriate both to departmental requirements and respondents' capabilities. It also involves the planning and conduct of special intercensal sample surveys in the same subject area. Advice is given to other departmental and non-departmental officials on the nature and development of the industries.

The work comprises a subject area including some 240,000 businesses classified to 232 trades, and further subdivided by regional and economic differences. These industries are characterized by rapid change and development resulting in the introduction and expansion of new trades, the decline of others, and continuing specialization and diversification in commodities sold or services rendered. They are subject to numerous economic, organizational and social developments.

Responsibility for Contacts

C2 / 100

The work requires contacts with various officials of Canadian business and of federal and provincial government agencies who use the statistics, to identify, discuss and reconcile their statistical needs and to advise them of the uses and limitations of the statistics. It also requires contacts with representatives of retail and service trade associations to explain census requirements, identify and discuss conditions in the industry, discuss their capabilities to provide data, and negotiate satisfactory reporting arrangements. Other contacts are with officers of the Department and other departments and agencies engaged in related statistical programs to resolve problems of comparability, and with market and other researchers interested in the statistics.

Supervision D / 100

The work includes supervision of a permanent staff of 12 employees at the intermediate and junior levels in the Scientific and Professional Category, Administrative Support Category, and the Social Science Support Group. It also includes planning for and super vision of a staff of 75 casual person-years during the census year and 30 casual person-years in both the preceding and following years. The number of person-years supervised averages 37 over a five-year period.

MERCHANDISING AND SERVICES

Di red	ctor, Merchandising and Services	EX-2
-	Chief, Retail Trades	ES-6
-	Chi ef, Whol esal e Trades	ES-6
-	Chi ef, Servi ces	ES-6
-	Assistant Director, Census of Merchandising	SI -8
	- Head, Development	SI -5
	- (3 positions CR-3 to SI-2)	
	- Head, Operations	SI -4
	- (5 positions CR-3 to CR-5)	
	- Head, Anal ysi s	ES-4
	 Analyst (up to 75 clerical positions during census period) 	