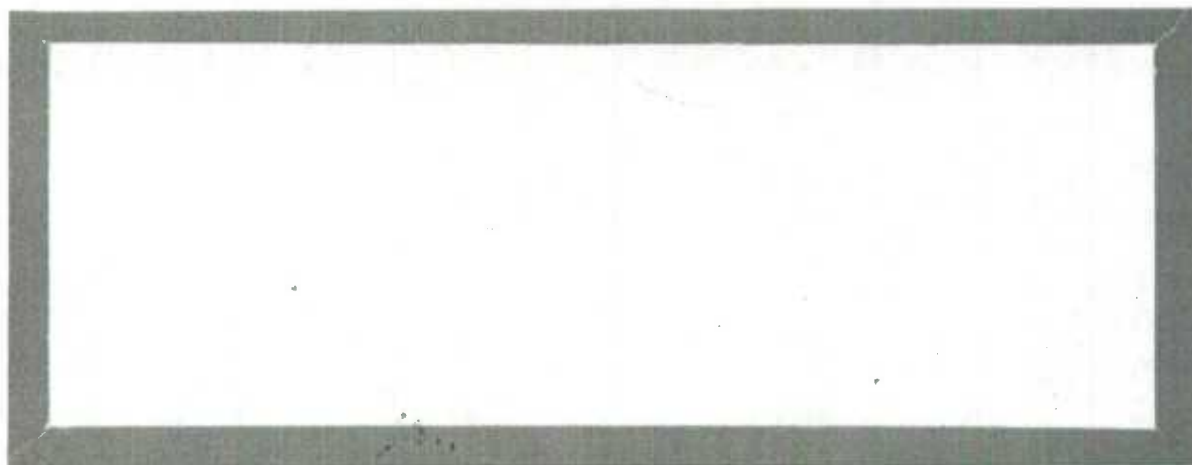Statistics   Statistique
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Methodology Branch

Business Survey Methods Division

Direction de la méthodologie

Division des méthodes d'enquêtes
entreprises

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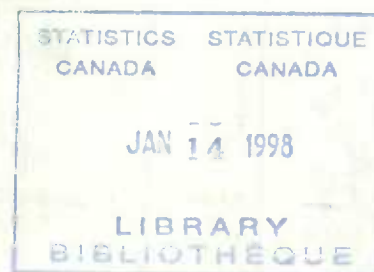
Using The T-4 Disaggregation System to Produce

Small Area Estimates of Wages and Salaries

D - R - A - F - T

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1.0 Background

1.1 Objectives

The objectives of the project are to produce estimates of wages and salaries for 1982 data by the 18 Industry Divisions of the 1980 Standard Industrial Classification (SIC) and the 266 Census Divisions of the Standard Geographic Classification (SGC) and possibly by size.

The T-4 system in the Labour Income Section of Labour Division was studied to get some idea of its method, quality and deficiencies.

This report documents the preliminary investigation done so far and presents background information, a decription of the T-4 disaggregation system and presents some recommendations and conclusions.

1.2 Introduction

The T-4 disaggregation system uses Revenue Canada Taxation (RCT) T-4 earnings files and matches them using the Payroll Deduction Account (PD) number to Business Register's Master File (BRMF) to obtain industrial and geographic codes. Estimates of annual wages and salaries by 3-digit SIC and province are then produced. For multi-establishments with differing SIC's and SGC's, employee reporting units (ERU's) from Labour Division's Annual Survey of Employment are used to allocate earnings.

The system involves the matching of approximately 800,000 RCT records to approximately 1,550,000 BR records in order to allocate about (for 1982) $190 billion by industry and province.

1.3   Scope and Coverage

The T-4 earnings are shown on the T-4 form. This T-4 form is the annual summary of earnings and deductions that every tax filer gets from his employer. T-4 earnings cover income that is paid to employees engaged in the complete range of industrial activity in the private and public sectors. Income that typically is not included is from self-employment (e.g. farming, retail), commission and professional activities. Also to be noted is that low income or casual earnings (e.g. babysitting) typically are not included under T-4 earnings.

The T-4 earnings approximate the concept of labour income required for national accounting purposes (i.e. GNP). One major difference, however, is that the T-4 earnings include military pay and allowances while the labour income concept does not. Additional discussion may be found later in this report under Macro Adjustments to Total T-4 Earnings.

1.4   Milestones

In 1966 the Department of National Revenue (DNR), which is now Revenue Canada Taxation (RCT), undertook the responsibility of the administration of the Canada Pension Plan. The new data sources consisted of tabulations of total earnings from forms submitted by employers with respect to remuneration paid to employees, i.e. T-4 earnings. Two basic files have been

supplied on a regular annual basis. These are the T-4 Summary and T-4 Supplementary files. Both files are described in the next section. The coverage of both files is very comprehensive and approximates the labour income concept of wages and salaries as required for national accounting purposes. Discussion of some conceptual differences is included in the body of this report.

Between 1966 and 1973 attempts were made to obtain distributions of T-4 earnings by industry and provinces from these RCT files but failed due to problems such as the legal restrictions in regard to the accessibility of the data, difficulties in matching the data, excessive costs and the inability of the Central List (as the Business Register was known then) to be versatile with regard to company identifiers.

Initially the T-4 Summary file was the major input file to the T-4 disaggregation system but this was changed to using the T-4 Supplementary. A complete and amended T-4 Supplementary was first used in the T-4 disaggregation system in 1979.

2.0   Revenue Canada Taxation (RCT) Files

Usually in October of year y the preliminary RCT tapes for tax year y-1 become available with the complete and amended versions usually received anywhere from the following January to April of year y+1. The major files are the T-4 Supplementary and T-4 Summary. An error file is also received. This file contains records that have invalid Social Insurance Numbers (S.I.N.) but

have valid PD numbers. This file is called the Invalid file.

While the two major T-4 files carry the same type of information the T-4 Summary file shows the information by employer. The T-4 Supplementary file includes the SIN of the employee, the PD number of the employer, and has one record per employee remittance. The T-4 Summary file aggregates the T-4 earnings data for all employees or a group of employees within a company. Both files show the tax year to which the T-4 earnings relate. This means that the current year file may carry T-4 earnings relating to the current year or to previous years. The payments made in the current year that apply to previous years are from late filers. There is some discussion of this later in this section.

Both files show the PD number. RCT issues this number to requests by employers via their form PD20 (of which a blank is included in Appendix 10.1). The Business Register (BR) in Statistics Canada gets a completed copy. Remittances for levies (Income tax, CPP, UIC) are made to RCT via the PD number. These remittances may be made annually or periodically throughout the year and may apply to the current or previous years. The purpose of the PD number for RCT is to provide a workable accounting framework for controlling and documenting these remittances. No consideration is given by RCT for:

- the number of PD numbers an establishment may hold;

- the number of establishments sharing a PD number;

- the length of time an establishment uses a PD number, i.e. the activity or inactivity of the PD number, although it does attempt to death inactive accounts.

The two files differ with regard to their handling of amendments where the tax-filer may correct his original submission by sending an amended report. While the T-4 Summary file carries amendments the appropriate records cannot be updated because of the lack of appropriate information on the amendment record, i.e. the system cannot distinguish between amended records and amendment records - both of which exist on the T-4 Summary file.

The T-4 Supplementary file is updated twice by RCT applying its amendment logic. The times correspond to the receipt of the preliminary and complete files. The switch from using the T-4 Summary to using the T-4 Supplementary as the major input file came about because the unamended state of the T-4 Summary file rendered it unusable, even though it is complete, for the T-4 disaggregation system. Also, it is to be noted that there are differences in totals when the T-4 earnings are aggregated for the two files (see Table 8.1).

A problem, which may or may not appear in a given year is related to late-filers. The magnitude of the problem depends on the individual employer. Since there will always be late-filers in any given year the T-4 disaggregation system ignores the actual year to which the T-4 earnings apply and treats the T-4 earnings payment in the current year as though it applies to the current year. This is acceptable if the assumption is made that the amount of T-4 earnings due to late-filers remains constant from year to year. If this

assumption were not made and only current year earnings were aggregated then a cut-off (in terms of years) as to the revision of the aggregates would have to be applied. The T-4 disaggregation system does allow however for some analysis to identify large delinquent accounts (i.e. there is the allowance made to produce year-to-year comparisons by employer or Payroll Deduction Account number). However, most of the T-4 earnings are included before the final cut-off date (RCT claims 99% of all T-4 earnings made in the current year apply to the current year or $1.8 billion deficient for 1982) (Ref. 1, page 1.3.2). As an example, a major discrepancy in the 1977 data was uncovered when one major government employer from BC with T-4 earnings of $500 million was a late-filer. (Ref. 1, page 1.3.1).

The above is related to another problem with the RCT files. From time to time during the processing of the T-4 disaggregation system situations may arise that require reconciliation of information at the micro level of the individual PD record. Since RCT priorities have traditionally been to collect their levies there has been little, if no cooperation in the reconciliation of these problems and no formal agreement exists between RCT and STC (Ref. 1, page 1.3.3). An example of this problem includes data shown as T-4 earnings with no related items such as CPP, UIC or Income Tax Deductions. Although the T-4 earnings may be quite negligible for the individual record there may be a substantial total over the universe of employers.

3.0   Business Register Master File (BRMF)

The BRMF is a complex and multi-purpose file and certain basic concepts are

included here that are fundamental to the T-4 disaggregation system.

3.1 Introduction

The primary function of the BR is to provide in a timely fashion the frame data required by any existing or potential business survey. The BRMF strives to be a complete, up-to-date, classified and unduplicated list of businesses which are required to report data through any of STC's business surveys. The universe of the BRMF covers approximately 1.2 million businesses which may be:

- unincorporated (which includes certain governments) or incorporated
- employers or non-employers

3.2 Reference Structures and Description of BRMF

The concept of the establishment (See Ref. 4 and 5 for detailed definitions) as the smallest operating entity having separate selected production account variables is essential to the BR. The establishment is the smallest unit capable of reporting these production account variables. These production account variables are often referred to as operating statistics.

The establishment concept was first introduced as part of the Standard Industrial Classification (SIC) (Ref. 5), where the establishment is referred to

as the statistical unit or basic building block of the economy. The selected production account variables or operating statistics define economic "value added" in terms of inputs and outputs or employment variables. It then is possible to aggregate this "value added" along similar industrial activities to get a broader picture of economic activity. It is necessary to have complete coverage and no duplication during this aggregation process.

The description of reporting structures would be simple if every business entity was an establishment with a single activity and location (SGC). However, in complex organizations separate statistics are available for different industrial activities which may or may not be located in different areas. These are termed multi-establishments. The following table presents the possible situations of interest here. The table also illustrates the various uses of the payroll deduction account number.[*]

It is not intended that this table show that the type of establishment implies the number of P.D.'s, SIC's or locations.

Case	Type of Establishment	PD	Activity SIC	Location SGC
1	Single establishment	single	single	single
2	Single	multi	single	single
3	Single establishment	multi	single	multi
4	Single "	multi	multi	single
5	Single "	multi	multi	multi
6	Multi "	single	multi	single
7	Multi "	multi	multi	multi
8	Single "	shared with another establishment	single	single

However because of SIC guidelines, cases 4 and 5 fall into other cases according to their ability to provide separate operating statistics for the differing activities, i.e.:

- if separate operating statistics were available for the different activities then case 6 or 7 would be represented;

- if separate operating statistics were not available for the different activities then the dominant activity is coded and this would then be case 2 or 3.

It is also interesting to note that most of the BRMF consists of establishments or companies structured as in case 1. These are typically small businesses and do not account for the greatest part of the Gross National Product (GNP). The multi-establishments on the other hand, are the fewest in number (roughly 5% of the records on the BRMF) but account for the greatest part of the GNP. Also, case 8 illustrates that a PD account may be shared among single establishments.

The identifier that the BRMF uses to distinguish among records is the Business Register Identification Number (BRID). This is a 19 digit number. The basic record structure of the BRMF is called a reference structure and represents a company (or establishments), its possible sub-units and their sub-sub-units. The reference structure contains at least one record. The number of records in a reference structure depends on:

- whether the reference structure is a single or multi-establishment;
- the number of PD accounts.

Also records on the BRMF may be classified according to whether they are:

- reference or non-reference structures;
- bureau (SIC) defined or PD defined records.

PD-defined records originate and correspond to each RCT PD record.

Reference structures can represent either single or multi-establishments and can have one or more PD accounts. When there is more than one PD account non-reference sub-unit records carry the PD account information. These are often referred to as mode 3 and authority 03 records.

The 19 digit BRID is used to indicate all related records. For example a multi-establishment reference structure would have a unit record and a sub-unit record for each of the establishments. The unit and sub-unit records would have the same first seven digits of the BRID. The sub-unit records would have different numbers in the next four digits of the BRID. Other parts of the BRID are used to indicate the type of record, i.e. reference or non-reference, bureau or PD-defined.

Examples of the different types of reference structures are shown in Appendix 10.3. The names are not shown due to confidentiality constraints. Various fields are outlined.

The major source of information for these reference structures come from RCT in the form of their monthly PD or PAYDAC file. Other sources of information include the survey taking divisions in STC and, of course, the BR division itself. It is to be noted that discrepancies do exist between survey universes and the corresponding units in the BRMF with respect to classification and coverage.

The record layout of the BRMF is included in Appendix 10.4. Generally, the type of information shown on the records can be described as being identifiers,

classification data, name and address information, status information, user identification and responsibility codes and dates.

3.3   Government Reference Structures

The BRMF contains reference structures not only for privately owned establishments but also for publicly owned ones as well. This is because establishments are classified or coded according to their (principal) activity and not according to their ownership, e.g. government owned retail liquor store are classified with other related stores. There are also establishments whose activities are primarily of a governmental nature and therefore these are also included on the BRMF.

Of the three tiers of government (namely municipal, provincial and federal) only the municipal government records have traditionally had a typical BRMF reference structure. This means that the allocation of T-4 earnings for federal, provincial and some municipal government records has traditionally been done manually in the T-4 disaggregation system.

Attempts are being made to rectify the situation. It is interesting to note that while the number of government records is quite small (in the thousands, or less than 1% of the BRMF) the related proportion of earnings by government is much greater (about 14% of aggregated earnings on average, from Table 8.3, or $25.2 billion for 1982). This is to say that there are a few government establishments which have very large T-4 earnings.

3.4   The BRMF Processing Cycle

The BRMF processing cycle is briefly described[*] so that reference structures having incomplete data and active PD accounts are placed in context for the T-4 disaggregation system.

Maintenance of the BRMF can be divided among three types of transactions. These are births, deaths and updates. The major sources of information for this process is RCT's monthly PAYDAC file and the survey (user) divisions.

For deaths, RCT provides, on an annual basis, a tape of its closed PD accounts. This is then used in the BRMF.

RCT also provides, on a monthly basis, a tape of births and various updates. The PD number is used to match the records to the BRMF. When a match is encountered a transaction is automatically initiated. Only updates to PD-guarded fields are allowed. The PD-guarded fields are name, address, language of contact and registration status code. If no match by PD number is found then a new record with a special flag (SIC 70099, see Appendix 10.5) is created until the copy of PD20 form is received in the BR. These records with 70099 SIC codes are called the "unclassified-uncontacted" records and the PD20 is the form that must be completed and returned to RCT when a new PD account is opened. A blank PD20 is included in Appendix 10.1.

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* The reader is referred to reference (7) for more detail.

Since a number of PD20's are received every month by the BR these are key edited and form the PD20 file. The PD20 file is then processed and put through the BRMF record linkage system. This is an automated process which uses the name and address search keys to extract and print the 10 best links for manual reconciliation. The manual reconciliation process determines whether the account reported by the PD20 form:

- is a new addition to an existing reference structure;
- is a single account for a new establishment;
- impacts on other BR establishments.

If the account relates to a new business entity then appropriate clerical transactions are processed to update the "unclassified-uncontacted" record. These updates include the SIC and SGC codes where, in particular, the SIC '70099' would be updated to a valid SIC that reflects the nature of business reported on the PD20 form.

If the account is an addition to an existing reference structure a mode 3, authority 03 sub-unit record is created through appropriate transactions. The processing of the appropriate transactions also triggers the automatic deletion of the corresponding unclassified record. Information on the PD20 is compared to the information on the unit record. This includes information such as name, address, ownership status and industrial activity.

It is to be noted that all PD20 forms do not arrive at the BR when the PD accounts are opened at RCT and vice versa. At the end of twelve months

about 87% are received. Establishments are contacted if:

- they have more than 20 employees;

- the information on the PD20 is incomplete or unclear;

- they remain unclassified for more than 12 months.

Special SIC's are assigned if various situations occur. A list of these is provided in Appendix 10.5. The situations cover the unclassified and the non-active situations.

Problems are posed for the T-4 disaggregation system only when active accounts have not been classified. This means that there will be unallocated earnings in the T-4 disaggregation system. These unallocated earnings are processed by manual reconciliation. This activity, done by Labour Division personnel, includes the assignment of 3 digit SIC and 2 digit province codes using various reference material. Earnings below a certain amount or cutoff are ignored depending on the quantity of T-4 earnings to be reconciled. For 1982 any T-4 earnings under $50,000 that required coding were ignored. There is additional discussion of the manual reconciliation process in Section 5.3.

4.0 Labour Division's Employment Survey (ES)

The Monthly Employment, Payrolls and Manhours survey in 1982, measured month-to-month trends of employment (as indexes) and paid hours and earnings

(as weekly averages) for commercial industries excluding agriculture, fishing and trapping (Ref. 6, page 120)[*]. A blank questionnaire is included in Appendix 10.6. Annual figures are derived from the monthly survey.

The ES survey had traditionally been subdivided into 2 parts, the ES-1 and ES-2. The ES-1 was a mail census of larger firms with at least 20 employees in any one month of a year. The ES-2 was a sample mail survey of the remaining firms. Detailed description of the survey, its methodology, reliability and statistical presentation can be found in reference 6. Its importance to the T-4 disaggregation system is in the ES annual frame and the structure and earnings data shown for the multi-establishments.

For 1983 data the ES-1 and ES-2 surveys are being replaced by the revised Survey of Employment, Payrolls and Hours (SEPH).

The frame of the survey is derived from the BRMF and its structure is parallel to that of the BRMF. The establishment reference structure differs from that of the BRMF in that the sub-divisions of the multi-establishment are called employee reporting units (ERU's). These units, which while not capable of reporting all basic production account variables needed to calculate "value added" do report employment and payroll data for separate locations. Thus the ERU's may be more detailed sub-units than that on the BRMF. It is the ERU structure that is used to allocate the T-4 earnings for multi-establishments in the T-4 disaggregation system.

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[*] Also excluded by definition are non-commercial sectors such as education, health and welfare, religious services; as well as private households and public administration.

The following hypothetical example (from Ref. 3) is presented to illustrate the difference between the reference structure maintained on the BRMF and on the Labour Division annual ES file that was used in the T-4 disaggregation system. This example shows the ES-1 earnings for each sub-unit as a percentage of the total earnings for the unit. The earnings figures from which the percentages are calculated are annual figures derived from the information on the monthly survey, i.e. the total weekly payroll is converted to a monthly figure by multiplying by 4.333 and then the monthly figures are summed to an annual figure.

Example

ES-1

Company No.	Sub-Unit No.	IND	SIC	PROV	Earnings
1234567	8901	10	515	35	35
	2	10	352	46	15
	3	10	416	46	25
	4	10	216	35	25

BRMF/RCT

Unit No.	Sub-Unit No.	Mode	SIC	PROV	Earnings
1234567	0000	0	625	10	0
	0001	0	750	10	0
	2	0	951	10	0
	5	0	416	10	0
	0101	3	000	10	550
	0206	3	000	10	450

The example shows that the SIC and SGC information may be different for the sub-units and that there may be a different number of sub-units on each file. The last two rows of the BRMF/RCT example are the PD records showing the T-4 earnings; here there are 2 PD numbers. The T-4 disaggregation system would then allocate $1,000 to each of the four ERU'S proportionally, e.g.

For Sub-unit 8901, SIC 515, Prov 35

$$\text{T-4 earnings} = \frac{35}{100} \times 1,000 = \$350$$

5.0   The T-4 Disaggregation System

5.1   Introduction

The T-4 disaggregation system takes the complete and amended T-4 Supplementary and Invalid Files from RCT and matches to the BRMF by PD number to obtain industrial and geographic codes.

Allocations for:

(a)   invalid SIC's and system rejects have to be processed manually;

(b)   multi-establishments are made using the ERU structures and codes on the ES annual file;

(c)   federal and provincial T-4 earnings have to be processed manually.

Aggregations are done by 3 digit SIC and province with the totals being used as benchmarks for Labour Income estimates.

The system has three major stages:

1) preparation,

2) initial distributions and reconciliations,

3) analysis, aggregation and comparisons.

It is important to note that there are two major areas in which T-4 earnings are allocated manually. These are:

1) **invalid SIC's and system rejects.** For 1982 there were about 36,000 records that totalled $823 million that were not allocated by the system. Of this $340 million were allocated manually. The results of this process are included in the T-4 system's final micro-data file.

2) **government records.** For 1982 these records totalled $31 billion. The manual reconciliation of these funds is not straightforward and requires some expertise. The results of this process are not included in the final micro-data file.

Descriptions of these two processes are included in Sections 5.3, Initial Distributions and Reconciliations and 5.4, Analysis, Aggregation and Comparisons, respectively.

5.2   Preparation

The system produces a workfile by merging the sorted and condensed ES-annual file and the previous year's file of manual reconciliations. Structures are selected that contain more than one record. This file is then kept for the next stage.

The other two major input files are each condensed, reformatted and sorted. The BRMF and T-4 Supplementary (which now includes the invalid file) are condensed by removing extraneous information, then sorted by PD number. Since several records may exist for the same PD number on the T-4 Supplementary an initial aggregation by PD number is done. Overflow conditions are checked and messages printed as required.

Tax Record Access (TRA), a subdivision of the BR receives a copy of the condensed and summarized (up to PD number) valid T-4 Supplementary file.

5.3   Initial Distributions and Reconciliations

The condensed T-4 Supplementary file is then matched to the condensed BRMF using the PD number. There are three situations possible here:

-     records are on both the BRMF and T-4 Supplementary.

-     records are on the T-4 Supplementary but not on the BRMF.

-     records are on the BRMF but not on the T-4 Supplementary.

Records on the BRMF which do not match to the T-4 Supplementary are ignored since there are no related T-4 earnings.

The records that are on the T-4 Supplementary but not on the BRMF are sorted and printed in descending order of the T-4 earnings for manual reconciliation. This manual reconciliation process is described later in this section.

The records that are on both the BRMF and T-4 Supplementary files are matched records which we will now call BR/RCT records. It is interesting to note here that since the industrial and geographic codes carried on the BRMF are extracted at the same level of detail for the BR/RCT file, the BR/RCT records at this stage of the T-4 disaggregation system carry the industrial code as a 5 digit SIC and the geographic code as a 9 digits (2 digit Province, 2 digit census district, 3 digit census metropolitan area and 2 digit sub-provincial codes).

The BR/RCT file contains both single and multi-establishment structures. The type of structure on the BR/RCT file is identified and hopefully reconciled with the aid of the workfile (which as previously mentioned is the result of merging the sorted, condensed ES-annual file with the previous years file of manual reconciliations). The allocation of earnings is done systematically for those matching multi-establishments as discussed in the example in Section 4.0. The system reconciled records include both single establishments and reconciled multi-establishments. These records are then sorted by SIC and province (first 2 digits of the SGC) and aggregated to produce the preliminary tabulations.

Unreconciled multi-establishments are included on a reject file. Other types of rejects include special SIC's and problem municipal government records. Most of these rejects are due to invalid or pseudo SIC's (see Appendix 10.5). These records are then sorted and printed in descending order of T-4 earnings for manual reconciliation by Labour Division staff.

This manual reconciliation involves the assignment of the appropriate 3 digit SIC code and the 2 digit province code. While the coding of the province is straightforward the process can be time consuming for the coding of the industry in that various sources are used. These include searching micro-fiche files of updated BRMF as well as other reference material such as Dun and Bradstreet and the yellow pages of the phone book. Not all T-4 rejects can be researched. Since most of the rejects are due to invalid SIC's a cut-off is applied to these records, i.e. if the T-4 earnings for the invalid SIC record is below a certain amount then the record is not researched. For 1982 this cut-off was $50,000. Even if the record is above the cut-off it may not be assigned an industrial code. This is because the research process may not yield the required information necessary to assign appropriate codes. It is these types of records where the T-4 earnings lack the appropriate industrial and geographic codes and remain unallocated. However, the records that are coded or manually reconciled are re-input into the system at the next stage and are included in the final tabulations.

So far two types of T-4 earnings that are produced by the system have been described.

i)   the system (machine) reconciled T-4 earnings.

ii) the invalid or reject T-4 earnings. These are the T-4 non-matches to the BRMF and the unreconciled records described in the previous section.

5.4   Analysis, Aggregations and Comparisons

There remains a third type of T-4 earnings to be described. These are the government records. Procedures for reconciliation of federal and provincial T4 earnings are as follows.

Traditional expertise had been to construct a current year ratio file which showed the percentage distribution across the provinces and territories for each industry division for each of the federal and provincial governments. Special SIC's had been constructed to represent Industry Divisions to the system. The ratio file consisted of one record per special SIC per federal and government record to a maximum of 143 entries (see Appendix 10.7). Various sources (such as the previous year ratio file and other STC divisions) were used to construct this file. The ratio file was then used to allocate the T-4 earnings from federal and provincial accounts.

For 1982 data the process to allocate these earnings was as follows. Records are identified as federal-provincial records by their BRID or by a special flag (Scratch pad 2.9). One of two processes may be applied to allocate the T-4 earnings. The process decided upon depends on whether the individual item is a single PD account or a Central Pay Account (CPA). Single PD accounts are assigned an SIC based on the expertise gained from dealing with this process. CPA type accounts are aggregated by province and prorated among industry

divisions according to information from Public Finance Division. There may be single PD account items that are not assigned an SIC but grouped with the CPA accounts. Another problem that may occur is that all known federal-provincial records may not be identified as such by the system. Further adjustments are then required to rectify the situation.

Municipal government T4 earnings had traditionally been reconciled through a similar, but not as detailed, process as the CPA type accounts previously described. This was changed because previous year detailed reconciliations showed similar industrial allocations. The current process is to allocate to certain industries (utilities, schools and hospitals) percentages of municipal government T4 earnings.

While the final tabulations include the results of the government reconciliation process the results are not included in the micro data file.

The final micro-data file is quite large (702,611 records for 1982) and carries the T-4 earnings as well as the 3 digit SIC and 2 digit SGC or province code. Other information carried included the identifier (11 digits of the BRID-7 digit unit and 4 digit sub-unit), the year and reconciliation flags.

Percentage increases or decreases from the previous year by PD number or establishments can be calculated and evaluated. This may be done by province and by industry as well. Comparisons of the T-4 earnings totals may also be made to other related economic indicators such as the Labour Income estimates.

5.5   Macro Adjustments to Total Earnings

After the federal-provincial reconciliations are applied to the micro-data file
and the results are aggregated, additional comparisons may be made to
estimates from survey taking divisions. Based on these estimates further
adjustments on a macro level may be made to T-4 earnings totals by industry
division and province. Also macro adjustments may be applied because of the
conceptual coverage of T-4 earnings. This is discussed in greater detail later
in this section.

Reference 1 contains some interesting tables which illustrate some problems
and points discussed and described in this report. Some amendments have been
made, however, to place the information contained in the tables within the
context of this report. Table 8.1, Aggregate Comparison of Earnings, presents
and compares various T-4 earnings totals from the two major files, T-4
Summary and T-4 Supplementary. These two differ presumably because of
their difference in handling amendments. The Control total is calculated from
the T-4 Supplementary and Invalid total by applying various macro
adjustments.

Table 8.2, Possible Macro Adjustments to T-4 Total Earnings, defines various
adjustments that could be made to the T-4 earnings total. As discussed under
the scope and coverage of the T-4 earnings concept various types of income
are excluded from T-4 earnings. Other types of income (or benefits) are
included. The calculation of the Control Total is also shown. Also shown in
Table 8.2 is the total which is adjusted by deducting military pay and
allowances and adding commissioned agents in Insurance. This is the total that

is recommended in the report from which this table comes (Ref. 1, page 1.2.14). The figures for the various adjustments came from various sources such as STC and RCT.

Table 8.3, <u>Unallocated T-4 Earnings in Preliminary Totals</u>, illustrates the various reasons that T-4 earnings are unallocated at the preliminary stage. As indicated earlier it may be seen that invalid SIC's are the major problem.

Also shown in Table 8.1 are the Wages and Salaries estimates published by Labour Income and the Final T-4 series that was released. The Final T-4 series includes all macro adjustments made to T-4 totals. If the difference (by year) between the Final T-4 Series and the initial T-4 Supplementary file plus error file (Row 7) were compared to the total unallocated earnings (Row 5e) from Table 8.3 it may be seen that the difference in Table 8.1 is larger than in Table 8.3 for some years (i.e. 1975, 1976). This is presumably because of the various macro adjustments made to the T-4 totals. For the small area estimates of wages and salaries each macro adjustment would have to be examined to determine its impact on the disaggregated estimates.

6.0 Discussion

Various problems have been discussed and are summarized here.

6.1 Late-filers

As discussed in Section 2.0 the present system assumes that the amount of T-4 earnings from late-filers remains constant from year to year. Major

employers who may be possibly late-filers could be identified by year to year comparisons of their T-4 earnings (i.e. by PD number).

If this system were changed and only current year T-4 earnings were aggregated then late-filers would always be a problem. Backward revisions as the up-to-date information is received would have to have some cut-off date.

6.2 Micro Data Quality

Ideally there should be an establishment of some method of checking micro-data information with RCT. Decisions could also be made within the T-4 disaggregation system as to the "in/out of scope" nature of the micro-data records. Also, some global measures of quality could be assigned which were based on the aggregated totals and their comparisons to other economic indicators.

Measures of quality could also be assigned independently and dependently to the three categories of information that are of interest: T-4 earnings, geographic coding and industrial coding. The assignment of these measures of quality would have to be considered carefully and would require some analysis.

6.3 Government Earnings

Some expertise has been gained in dealing with government activities. It is hoped that this, in conjunction with BR initiating a typical reference structure for government records that eventual systematic consistent allocation of government T-4 earnings will be achieved. The traditional expertise has been to allocate these earnings by a manual process that requires some expertise.

6.4   Unallocated T-4 Earnings

Table 8.3 is presented to show the kinds of unallocated T-4 earnings that are part of the T-4 system. These are preliminary in that they represent the types of unallocated earnings after the first set of tabulations. These are the problems that must be resolved manually and re-input into the system or left as unallocated earnings. This manual process can be quite time consuming. A cut-off is usually applied so that all large T-4 earnings above a certain amount ($50,000 for 1982) for records showing an invalid SIC are researched.

7.0   Recommendations and Conclusions

1.   At this stage it seems that for 1982 data the most acceptable approach to produce wages and salaries by census district (4 digits of the SGC) and industry division (1 digit SIC) is to match the final micro data file to the intermediate BR/RCT file to extract the SGC code at the 4 digit level for single establishments. For multi-establishments a new version of the workfile (the condensed, reformatted ES-annual file of multi-establishments) having the census division code as well as the province code will have to be produced and used to match to the micro data file.

The results of the federal-provincial reconciliation process will have to be computerized and the impact of assigning census divisions will have to be assessed.

The resulting file could then be sorted and aggregated by industry division and census district.

Also to be assessed is the impact of using the 1960 version of the SIC on the 1982 micro data file in conjunction with the requirement to produce tabulations at the industry division level according to the 1980 version of the SIC.

The nature of the manual reconciliations will have to be documented. The nature and conditions of the geographic information will have to be checked.

Guidelines will have to be established for the sub-provincial allocation of federal and provincial or Central Pay Account T-4 earnings. Failing this decisions could be made as to the level of detail for representation of this type of T-4 earnings.

This may also be the approach taken for some types of industry that do not allocate their economic activity well on a small area basis, e.g. Airlines and railroads.

2. Since there will be some minor system changes made to the T-4 disaggregation system that originate with the BRMF and the Employment Survey (SEPH) for 1983 data it is suggested that the detailed SGC (at least 4 digits) code be carried on the final T-4 Micro data file.

Considerable benefit could also be gained in participating in the actual T-4 disaggregation process.

It is realized that there would be considerable upon the T-4 system if this recommendation were acted upon since

a)   this change is not a part of the impending system changes.

b)   there would be an increase in the manual processes for the invalid SIC's and the federal-provincial records if the census district code is to be included.

While some consideration should be given to the inclusion of the census district code in the T-4 disaggregation system it may be more practical to keep the small area estimates of wages and salaries separate from the T4 disaggregation system.

3.   There has been no discussion in the body of this report as to the production of the T-4 earnings by census district, industry division and size. With the approach taken for 1982 data this does not seem possible unless a match back to the BRMF were made to extract this information. These tabulations would present the estimates by industry division census district and by size of the business (size code on BRMF) reporting the T-4 earnings.

For 1982 and the approach recommended in (1) it is suggested that estimates of this type be considered at a later date.

4.   Some assessment and measure of quality should be assigned to the

incoming RCT files. Methodology should be established to resolve micro-data problems.

5. These statements having been made after a review of various documentation may be revised after hands-on experience with the T-4 disaggregation system.

8.0   <u>Tables</u>

TABLE 8.1[*]

Comparison of Aggregated Earnings from Various Sources

($ million)

	1973	1974	1975	1976	1977	1978	1979
1. RC-T T-4 Input File	64,186.1	76,158.5	87,930.1	101,383.2	111,197.5	120,672.9	137,416.0
2. T-4 Supplementary file plus error file	64,019.0	76,204.0	88,542.0	102,030.0	111,262.0	120,738.6	137,447.4
3. Control Total (based on calculation in Table 8.2)	62,595.0	74,717.0	86,971.0	100,341	109,492	118,869	135,419.0
4. Wages and Salaries as published by Labour Income	62,595.0	74,719.2	86,981.2	100,347.9	110,373.2	120,031.6	134,435.4
4a. Final T-4 Series Released (Reference 1, page 1.4.8)	63,190.4	75,527.3	87,819.6	101,518.7	111,105.3		
5. (1) - (2)	+167.1	-45.5	-612.1	-666.0	-65.0	-65.8	-31.4
6. (3) - (4)	0.0	-2.2	-10.0	-7.9	-881.2	-1,147.6	+1,083.6
7. Difference between total earnings at end of T-4 system (2 — 4a)	828.5	676.7	722.4	511.3	156.7		
% difference of (2).	1.3	.8	.8	.5	.14		

[*] Reference 1, Table IV, page 1.1.18

Table 8.2[*]

Possible Macro Adjustments to T-4 Total Earnings

($ million)

	1971	1972	1973	1974	1975	1976	1977	1978	1979
1) RC-T T-4 Supplementary + Invalids									
(a) Matched plus Error	49,179	55,333	64,019	76,204	88,542	102,030	111,262	120,738	137,447.4
(b) Year to Year growth (%)	9.7	12.5	15.7	19.0	16.2	15.2	9.1	8.5	13.8
2) Deductions:									
(a) Military pay and allowances	739	793	848	919	1,012	1,120	1,193	1,282	1,361
(b) Allowable Expenses	283	289	294	300	306	312	318	324	331
(c) Taxable allowances & benefits	201	466	542	623	718	911	1,048	1,180	1,289
(d) Effect of Legislation on									
(i) low earners	-	300	385	378	378	378	378	378	378
(ii) taxi cab drivers	-	100	110	127	146	168	184	199	224
TOTAL DEDUCTIONS	1,223	1,948	2,179	2,347	2,560	2,889	3,121	3,363	3,583
3) Additions:									
(a) Low earners	50	50	50	50	59	67	73	80	90
(b) Commissioned Agents in Ins.	76	89	101	116	133	153	167	181	204
(c) Baby-Sitters	55	55	55	56	64	74	81	87	99
(d) Private households	141	149	163	188	216	249	272	295	232
(e) Taxable allowances and benefits	313	342	386	450	518	657	756	851	930
TOTAL ADDITIONS	635	685	755	860	989	1,200	1,349	1,494	1,555
4) T-4 Control Total	48,591	54,070	62,595	74,717	86,971	100,341	109,492	118,869	135,419
5) Year to Year growth (%)	9.9	11.3	15.8	19.4	16.4	15.4	9.1	8.0	12.5
6) (1a) - ((2a) (2b)) (3b) (per recommendations Reference 1, page 1.2.14			62,978	75,101	87,357	100,751	109,910	119,313	135,959.4

Reference 1, Table 1, page 1.2.16

TABLE 8.3[*]

Unallocated T4 earnings in Preliminary Totals

($ million)

		1973	1974	1975	1976	1977	1978	1979
1.	T-4 Supplementary plus Invalids	64,019.0	76,204.0	88,542.2	102,030.0	111,262.7	120,738.7	137,447.4
2.	RC-T T-4 Input File	64,186.1	76,158.5	87,930.1	101,383.2	111,197.5	120,672.9	137,416.0
3.	Unmatched RC-T PDs	11.7	38.7	44.8	36.0	57.7	140.3	300.9
4.	Federal/Provincial Government	8,280.3	10,480.6	11,385.4	13,177.2	16,010.9	19,020.8	21,813.8
5.	Other Problems:							
	a) Special S.I.C.'s	1,624.6	977.1	270.4	140.7	284.5	629.5	1,095.5
	b) Invalid Structures	195.3	254.7	9.3	12.3	24.2	256.7	54.2
	c) Unmatched Multi's	538.3	66.9	96.0	100.7	185.4	132.1	555.6
	d) Opportunities for Youth	25.0	2.7	2.7	1.7	1.9	1.8	1.6
	e) Total	2,383.2	1,301.4	378.4	255.4	496.0	1020.1	1,706.9

[*] Reference 1, Table V, page 1.1.19

9.0 References

1. Bunko, E., Final Report on T-4 Analysis, Labour Division, September 1982.

2. Labour Division, A User's Guide to the T-4 Disaggregation System, August 31, 1977.

3. Labour Division, T-4 Disaggregation System Documentation.

4. Vaillancourt, J., An Introduction to the Business Register, B.S.M.D., November 1981.

5. Statistics Canada, Introduction to the 1970 SIC Manual, 1970 Catalogue CS12-501.

6. Statistics Canada, Employment, Earnings and Hours, April 1980, Catalogue 72-002 Monthly.

7. Estevao, V., Maintenance of the Business Register File, B.S.M.D., April 1983.

10.0   Appendices

- Return copies 1, 2 and 3 to the Taxation Office from which you received this form.
  Retain the 4th copy for your records.
- Retournez les copies 1, 2 et 3 au bureau d'impôt qui vous a remis la présente formule.
  Classez la 4ᵉ copie dans vos dossiers.

10.1   Employer Number Assigned / *Numéro d'employeur attribué*

1. Name under which business operates — *Nom sous lequel l'entreprise est exploitée*

   Area Code — Telephone Number / *Code régional — Nº de téléphone*

   Legal name of business — *Nom légal de l'entreprise*
   Same as above / *Même que ci-dessus* ☐ or / *ou*

   Area Code — Telephone Number / *Code régional — Nº de téléphone*

3. Mailing address — *Adresse postale*

4. Location Address (Include name of Municipality to which taxes are paid)
   Adresse de l'entreprise (Préciser le nom de la municipalité à laquelle les impôts fonciers sont payés)

   Postal Code — *Code postal*

   Postal Code — *Code postal*

5. Address at which books and records will be kept — *Adresse où les livres et les registres seront conservés*
   Same as above / *Même que ci-dessus* ☐ or / *ou*

   Postal Code — *Code postal*

6. Date business began to operate — *Début de l'exploitation de l'entreprise*
   Day / *Jour*   Month / *Mois*   Year / *Année*

7. Duration of business operation — *Durée de l'exploitation de l'entreprise*
   Year round / *Année entière* ☐   Seasonal / *Saisonnière* ☐   from / *de* ▶   to / *à* ▶

8. Date first employees were engaged — *Date d'embauchage des premiers employés*
   Day / *Jour*   Month / *Mois*   Year / *Année*

9. Estimated number of employees when business is in full operation
   Nombre approximatif d'employés lorsque l'entreprise est en pleine activité

10. Computerized Payroll / *Feuilles de paye informatisées*   Yes / *Oui* ☐   No / *Non* ☐

11. (a) Check One Of The Following — *Cochez l'une des cases*

   ☐ Government Sponsored Project / *Projet parrainé par le gouvernement*

   ☐ Non-Business Activity (household, pension account, etc.) State Nature: / *Activité non commerciale (compte domestique, de pensions, etc.). Précisez-en la nature*

   ☐ Fishing and Trapping / *Pêche et piégeage*

   ☐ Transportation, Storage & Communication / *Transport, entreposage et communication*

   ☐ Service / *Services*

   ☐ Mining (include Exploration) / *Opérations minières (y compris l'exploration)*

   ☐ Retail Trade / *Commerce de détail*

   ☐ Repair / *Réparations*

   ☐ Agriculture / *Agriculture*

   ☐ Manufacturing / *Fabrication*

   ☐ Wholesale Trade / *Commerce de gros*

   ☐ Other (Specify) / *Autres (précisez)*

   ☐ Logging / *Opérations forestières*

   ☐ Construction / *Construction*

   ☐ Finance / *Finances*

   (b) State products manufactured, handled or sold or type of services rendered: / *Indiquez les produits fabriqués, tenus ou vendus ou le genre de services offerts:* ▶

   (c) If operation is a franchise, state name and address of franchisor / *Si l'exploitation est une concession, indiquez le nom et l'adresse du concessionnaire* ▶

12. Type of business ownership — *Mode de propriété*
    Incorporated / *Constituée en corporation* ☐   Unincorporated / *Non constituée en corporation* ☐   Other (specify) / *Autre (précisez)* ☐

13. If foreign ownership, state country / *Pour une propriété étrangère, indiquez le pays*

14. If a proprietorship or partnership, state name(s) and Soc. Ins. No(s) of the owner(s)
    Pour une entreprise individuelle ou une société, indiquez le ou les noms et N.A.S. du ou des propriétaires

    Name / *Nom* ▶

    Are there more than 3 partners? / *Y a-t-il plus que 3 associés?*   Yes / *Oui* ☐   No / *Non* ☐
    If there are more than 3 partners attach a list. / *S'il y a plus de 3 associés, joignez-en une liste à la présente.*

15. Name and address of business' bank — *Nom et adresse de la banque de l'entreprise*

16. Language in which correspondence desired / *Langue désirée de la correspondance*
    English / *Anglais* ☐   French / *Français* ☐

17. Revenue Canada Taxation Employer Number(s), if any other than above / *Nº ou nᵒˢ d'employeur attribués par Revenu Canada Impôt, s'ils diffèrent du numéro susmentionné*

    Active / *Actif* ☐   or Date Ceased / *ou date de cessation* _____
    Active / *Actif* ☐   or Date Ceased / *ou date de cessation* _____

    If not known check here / *Cochez, si nᵒ ou nᵒˢ inconnus* ☐

18. I HEREBY CERTIFY that the information provided above is true, correct and complete
    JE CERTIFIE par les présentes que les renseignements fournis ci-dessus sont vrais, exacts et complets

    Date _____ 19 ____
    Signature of Employer or Authorized Officer — *Signature de l'employeur ou d'un agent autorisé*
    Position — *Poste*

1 Taxroll — *Rôle*

RECORO LAYOUT – CLICHE D'ARTICLE

Page 1 of 2 de

Data Set Name – *Nom de l'ensemble de données*

| T | 4 | S | U | P | P | | | | | | | | | | | |

JOB Name – *Nom du travail*

| T | 4 | P | R | O | C | O | 4 |

Field Zone	Size Longueur	Position Poste	Type	Title – Titre	
1	2	1 - 2	BI	Transaction Type 1804	S9(4)
2	2	3 - 4	PD	Number of Supp. in Record	S9(3)
3	4	5 - 8	BI	Prime SIN Number	S9(9)
4	2	9 - 10	PD	Province Code of Supp. with highest earnings	S9(3)
5	2	11 - 12	PD	District office code of Supp with highest earnings	S9(3)
	93	13 - 4662	–	Variable Portion (may occur 50 times)	
6	12	1 - 2	CH	Surname	
7	2	13 - 14	CH	Initials	
8	9	15 - 23	CH	Employer Number	S9(7)
9	4	24 - 27	PD	Sequence Number	S9
10	1	28	PD	T4 – Types	
				0 – Original T4 Supp	
				2 – T4 Amendment CPP Unapplied	
				3 – T4 Amendment QPP Unapplied	
				4 – Additional T4	
				5 – T4U Original	
				6 – Amended T4U	
				7 – Amended T4U Applied to Original or Additional	
				9 – T4 Amendment of Amendment	
11	2	29 - 30	PD	RCT District Office Code values 01 - 28	S9(3)
12	4	31 - 34	PD	T4/T4U Earnings	S9(7)
13	3	35 - 37	PD	T4 UI Insurable Earnings	S9(5)
14	3	38 - 40	PD	T4 CPP Contributory Earnings	
15	5	41 - 45	PD	Tax Deductions	S9(7)v9
16	3	46 - 48	PD	Registered Pension Contributions	S9(5)
17	3	49 - 51	PD	U.I. Premium Deductions	S9(3)v9
18	3	52 - 54	PD	CPP Deductions	S9(3)v9
19	2	55 - 56	PD	QPP Deuctions	S999
20	1	57	PD	CPP/UIC Exemption Code	S9
				Q – N/A	
				1 – CPP Excempt	
				2 – UIC Excempt	
				3 – CPP & UIC Excempt	

RECORO LAYOUT – CLICHE D'ARTICLE

Statistics Canada   Statistique Canada

RECORD LAYOUT – CLICHE D'ARTICLE

Page __2__ of __2__
de

Data Set Name – *Nom de l'ensemble de données*

T	4	S	U	P	P										

JOB Name – *Nom du travail*

T	4	P	R	O	C	O	4

Field Zone	Size Longueur	Position Poste	Type	Title – Titre
21	2	58 – 59	PD	Province Code 5999
22	4	60 – 63	BI	SIN Number
23	30	64 – 93	CH	Employer Name

9–3001–21: 25-3-77

10.3 Examples of different BRMF Reference Structures

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UDATE=7204 T2=15011846
            SSC=1

EMPCLASS=05              SGC=2443540  SCLASS=TR1 LNG=2              SEPH=2 LABOUR=1
SIC80=45600             SIC70=50700               CCC=4811                    BFINANCE=2                TRANS=2

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  =7204
RSC=3

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UDATE=8305
RSC=8(8302)

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BDATE=7204
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                        SIC70=24310

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SIC80=10530             SIC70=10490               CCC=0134                    BFINANCE=2

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BDATE=7204 12=12695680
         SSC=1

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                                                                      TCT=11AQUASCUTUM NORTH(06,8209)
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         SSC=1

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SICBO=24990(53,8401) SIC70=24310
                              RCS=MFG-MENS CLOTHING-MONTREAL

  10090686 0001 303 7 000   ( )   ██████████████████████████████ .MONTREAL,PQ,H1Y2A2(30,0)
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BDATE=8209
RSC=3

  10090686 0002 001 6 000   ( )   █████████████████████████████ .MONTREAL,PQ,H1Y2A2(50,8208)
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BDATE=8208
         SSC=1

EMPCLASS=99(53,8212) SGC=2465260          LNG=2                SEPH=2 LABOUR=1
SICBO=53199(53,8401) SIC70=61799                                    MERCH=2
                              RCS=REPORT FOR WHOLESALE OPERATIONS
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         SSC=1
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         SSC=1

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  =8190(06,8310) SIC70=28600
                              RCS=PRINTING-CALGARY

  10010874 0002 001 6 000   ( )   ████████████████████████ .LETHBRIDGE,AB,T1J0C8(50,8112)
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                              RCS=PRINTING-LETHBRIDGE
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  10010874 0003 001 5 000   ( )   ████████████████████████ .EDMONTON,AB,T5J2M7(06,8107)
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         SSC=1
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RSC=3

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RSC=3
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O	FLD NAME	NO-STOPE VALUE	LEN	SIZE	TYPE	SPOS	PRTSPEC	EDIT	KEY	COM	DESCRIPTION
1	100 BRID		19	19	CH	1	0.000	0	0	0*	BUSINESS REGISTER IDENTIFICATION NUMBER
2	108 RSC	3	1	1	CH	20	0.000	0	0	4*	REGISTRATION STATUS CODE
3	110 LNG	1	1	1	CH	21	0.000	0	0	4*	LANGUAGE CODE
4	111 SIC70		5	5	CH	22	0.000	0	0	4*	1970 SIC CODE
5	112 SGC		4	31	FB	27	0.000	0	0	4*	STANDARD GEOGRAPHICAL CLASSIFICATION
6	113 SCLASS		3	3	CH	31	0.000	0	0	4*	SIZE CLASSIFICATION (DEFINED BY USER)
7	114 EMPCLASS		2	2	CH	34	0.000	0	0	4*	EMPLOYMENT SIZE CLASSIFICATION CODE
8	115 SSC	1	1	1	CH	36	0.000	0	0	4*	SURVEY STATUS CODE
9	116 UDATE		2	15	FB	37	0.000	0	0	4*	RECORD UPDATE DATE (PROCESSING)
10	117 SIC60		5	5	CH	39	0.000	0	0	4*	1960 SIC CODE
11	118 SIC80		5	5	CH	44	0.000	0	0	4*	1980 SIC CODE
12	119 CCC		4	4	CH	49	0.000	0	0	4*	CANADIAN COMPANY CLASSIFICATION CODE
13	120 SHAREDPD		4	31	FB	53	0.000	0	2	4*	SHARED PD ACCOUNT
14	121 ENTRPRIS		8	8	CH	57	0.000	0	2	4*	ENTERPRISE NUMBER
15	128 PSIC70		5	5	CH	65	0.000	0	0	4*	PREVIOUS 1970 SIC CODE
16	129 PSICDT		2	15	FB	70	0.000	0	0	4*	DATE OF SIC CHANGE (PROCESSING)
17	131 NAME		96	96	CH	72	0.000	0	0	4*	NAME OF COMPANY
18	132 OTHRNAME		64	64	CH	168	0.000	0	0	4*	OTHER NAME (E.G. TRADE, OPERATING NAME)
19	133 ATTN		64	64	CH	232	0.000	0	0	4*	ATTENTION LINE
20	141 STADDR		64	64	CH	296	0.000	0	0	4*	STREET NAME AND NUMBER
21	142 CITY	TORONTO	32	32	CH	360	0.000	0	0	4*	NAME OF CITY
22	143 PROV	ON	2	2	CH	392	0.000	0	0	4*	NAME OF PROVINCE
23	144 PCODE		6	6	CH	394	0.000	0	0	4*	POSTAL CODE (OR US ZIP CODE)
24	145 COUNTRY		20	20	CH	400	0.000	0	0	4*	COUNTRY (WHEN NOT CANADA)
25	146 COUNTY		32	32	CH	420	0.000	0	0	4*	COUNTY
26	161 RCS		32	32	CH	452	0.000	0	0	4*	RECORD COVERAGE SPECIFICATION
27	162 DI		40	40	CH	484	0.000	0	0	4*	DESCRIPTIVE INFORMATION

NO FLD	NAME	NO-STORE VALUE	LEN	SIZE	TYPE	SPOS	FRTSPEC	EDIT2	KEY	COM	DESCRIPTION
28 163	TCT		22	22	CH	524	0.000	0	0	4*	TYPE OF CHANGE TRAILER
29 164	PNAME		38	38	CH	546	0.000	0	0	4*	PREVIOUS NAME
30 200	SEPH		1	1	CH	584	0.000	0	0	4*	SEPH USER IDENTIFICATION
31 202	LABOUR		1	1	CH	585	0.000	0	0	4*	LABOUR DIVISION USER IDENTIFICATION
32 204	NRTS		1	1	CH	586	0.000	0	0	4*	NRTS USER IDENTIFICATION
33 205	PFINANCE		1	1	CH	587	0.000	0	0	4*	PUBLIC FINANCE USER IDENTIFICATION (LOCAL GOVT)
34 206	MAPID		1	1	CH	588	0.000	0	0	4*	MANUFACTURING USER IDENTIFICATION
35 208	MERCH		1	1	CH	589	0.000	0	0	4*	MERCHANDISING USER IDENTIFICATION
36 209	CALURA		1	1	CH	590	0.000	0	0	4*	CALURA USER IDENTIFICATION
37 210	BFINANCE		1	1	CH	591	0.000	0	0	4*	BUSINESS FINANCE USER IDENTIFICATION
38 211	CONST		1	1	CH	592	0.000	0	0	4*	CONSTRUCTION USER IDENTIFICATION
39 212	TRANS		1	1	CH	593	0.000	0	0	4*	TRANSPORTATION USER IDENTIFICATION
40 213	CAPEXP		1	1	CH	594	0.000	0	0	4*	CAPITAL EXPENDITURE USER IDENTIFICATION
41 310	SORTID		15	15	CH	595	0.000	0	0	4*	ALPHA SORT IDENT (FIRST NAME IN FIELD 131)
42 313	PD		9	9	CH	610	0.000	0	1	4*	PD ACCOUNT NUMBER
43 314	CCA		6	6	CH	619	0.000	0	0	4*	CORPORATE AND CONSUMER AFFAIRS VERIFICATION
44 322	PHONE	226	6	10	FD	625	0.000	0	0	4*	TELEPHONE NUMBER
45 323	SIN		9	9	CH	631	0.000	0	2	4*	SOCIAL INSURANCE NUMBER
46 327	T2		8	8	CH	640	0.000	0	2	4*	T2 ACCOUNT NUMBER
47 328	CMAER		5	5	CH	648	0.000	0	0	4*	CMA AND ECONOMIC REGION CODE
48 329	GOV		10	10	CH	653	0.000	0	0	4*	GOVERNMENT
49 330	COMP		1	1	CH	663	0.000	0	0	4*	COMPANY INDICATOR
50 331	EST		1	1	CH	664	0.000	0	0	4*	ESTABLISHMENT INDICATOR
51 332	LOC		1	1	CH	665	0.000	0	0	4*	LOCATION INDICATOR
52 333	ANC		1	1	CH	666	0.000	0	0	4*	ANCILLARY UNIT INDICATOR
53 335	RO		1	1	CH	667	0.000	0	0	4*	REGIONAL OFFICE INDICATOR
54 502	ALIASID		15	15	CH	668	0.000	0	0	4*	ALIAS SORT IDENT (SECOND NAME IN FIELD 131)

BUSINESS REGISTER DATABASE - DICTIONARY LOADING PROGRAMME   09 DEC 1982

NO	FLD	NAME	NO-STORE VALUE	LEN	SIZE	TYPE	SPOS	PRTSPEC	EDIT	KEY	COM	DESCRIPTION
55	504	INCCODE	1	1	1	CH	683	0.000	0	0	4*	FLAG- IF INCORPORATED (CODE 1)
56	505	BANKRPT		1	1	CH	684	0.000	0	0	4*	FLAG- IF BANKRUPT (CODE 1)
57	506	ESTATECD		1	1	CH	685	0.000	0	0	4*	FLAG- ESTATE (CODE 1)
58	507	ALIASCD		1	1	CH	686	0.000	0	0	4*	FLAG- ALIAS (CODES 1-6)
59	508	PENSION		1	1	CH	687	0.000	0	0	4*	FLAG- PENSION PLAN (CODE 1)
60	509	PGMCD		1	1	CH	688	0.000	0	0	4*	FLAG- SPECIAL PROGRAMS (CODE 1)
61	510	PATCD	1	1	1	CH	689	0.000	0	0	4*	FLAG- PATTERN FOUND (CODE 1)
62	511	SICRC		2	2	CH	690	0.000	0	0	4*	SIC RESPONSIBILITY CODE
63	512	SICDATE		2	15	FB	692	0.000	0	0	4*	SIC RESPONSIBILITY DATE (PROCESSING)
64	513	EMPLRC		2	2	CH	694	0.000	0	0	4*	EMPLOYMENT RESPONSIBILITY CODE
65	514	EMPLDATE		2	15	FB	696	0.000	0	0	4*	EMPLOYMENT RESPONSIBILITY DATE (PROCESSING)
66	515	SSCRC		2	2	CH	698	0.000	0	0	4*	SURVEY STATUS CODE RESPONSIBILITY CODE
67	516	SSCDATE		2	15	FB	700	0.000	0	0	4*	SURVEY STATUS CODE RESPONSIBILITY DATE (PROCESSING)
68	517	NAMERC	30	2	2	CH	702	0.000	0	0	4*	NAME OF BUSINESS RESPONSIBILITY CODE
69	518	NAMEDATE		2	15	FB	704	0.000	0	0	4*	NAME OF BUSINESS RESPONSIBILITY DATE (PROCESSING)
70	519	ATTNRC		2	2	CH	706	0.000	0	0	4*	ATTENTION LINE RESPONSIBILITY CODE
71	520	ATTNDATE		2	15	FB	708	0.000	0	0	4*	ATTENTION LINE RESPONSIBILITY DATE (PROCESSING)
72	521	ADDRC	30	2	2	CH	710	0.000	0	0	4*	ADDRESS RESPONSIBILITY CODE
73	522	ADDDATE		2	15	FB	712	0.000	0	0	4*	ADDRESS RESPONSIBILITY DATE (PROCESSING)
74	523	TCTRC		2	2	CH	714	0.000	0	0	4*	TYPE CHANGE TRAILER RESPONSIBILITY CODE
75	524	TCTDATE		2	15	FB	716	0.000	0	0	4*	TYPE CHANGE TRAILER RESPONSIBILITY DATE (PROCESSING)
76	525	RSCDATE		2	15	FB	718	0.000	0	0	4*	REGISTRATION STATUS CODE DATE (PROCESSING)
77	526	PDDATE		2	15	FB	720	0.000	0	0	4*	PD ACCOUNT BIRTH DATE (PROCESSING)
78	527	BDATE		2	15	FB	722	0.000	0	0	4*	RECORD BIRTH DATE (PROCESSING)
79	528	T2RC		2	2	CH	724	0.000	0	0	4*	T2 RESPONSIBILITY CODE
80	529	T2DATE		2	15	FB	726	0.000	0	0	4*	T2 RESPONSIBILITY DATE (PROCESSING)
81	530	RSN		7	7	CH	728	0.000	0	2	4*	MAPID-IDENTIFICATION NUMBER

NO	FLD	NAME	NO-STORE	VALUE	LEN	SIZE	TYPE	SFDS	FRTSPEC	EDIT2	KEY	COM	DESCRIPTION
82	533	OTHPID			15	15	CH	735	0.000	0	0	4*	SORTID FROM FIELD 132
83	534	OTHRRPC			2	2	CH	750	0.000	0	0	4*	OTHRNAME RESPONSIBILITY CODE
84	535	OTHRDATE			2	15	FB	752	0.000	0	0	4*	OTHRNAME RESPONSIBILITY DATE (PROCESSING)
85	901	KNSKR12			10	10	CH	754	0.000	0	2	4*	RECORD LINKAGE KEY (NSK WORDS 1 AND 2)
86	902	KNSKR13			10	10	CH	764	0.000	0	2	4*	RECORD LINKAGE KEY (NSK WORDS 1 AND 3)
87	903	KNSKA12			10	10	CH	774	0.000	0	2	4*	RECORD LINKAGE KEY (ALIAS OR OTHER NSK, WORDS 1 AND 2)
88	904	KNSKA13			10	10	CH	784	0.000	0	2	4*	RECORD LINKAGE KEY (ALIAS OR OTHER NSK, WORDS 1 AND 3)
89	905	KASKREG			10	10	CH	794	0.000	0	2	4*	RECORD LINKAGE KEY (ADDRESS SEARCH KEY)
90	906	KFSANSK1			10	10	CH	804	0.000	0	2	4*	RECORD LINKAGE KEY (FSA+NSK1+NSK2)
91	907	KFSANSK2			10	10	CH	814	0.000	0	2	4*	RECORD LINKAGE KEY (FSA+NSK1+NSK3)
92	908	KNSKPN12			10	10	CH	824	0.000	0	2	4*	RECORD LINKAGE KEY (PNAME NSK1+PNAME NSK2)
93	909	KNSKPN13			10	10	CH	834	0.000	0	2	4*	RECORD LINKAGE KEY (PNAME NSK1+PNAME NSK3)
94	910	KNSKDMK1			10	10	CH	844	0.000	0	2	4*	RECORD LINKAGE KEY (DIRECT MATCH KEY FROM NAME)
95	914	STTYPE	0		1	1	CH	854	0.000	0	0	4*	STRUCTURE TYPE CODE
96	916	CPROV	35		2	2	CH	855	0.000	0	0	4*	COPY OF PROVINCE FROM ASK
97	917	VALID			1	1	CH	857	0.000	0	0	4*	ADDRESS REFORMATTING PROBLEM

10.5   Description and List of Pseudo SIC's

1960 SIC	1970 SIC	
70000	–	No contact could be made with that business to obtain the information for SIC classification.
70099	70099	The code assigned to new records which have not yet been classified.
80000	80000	The code used to identify records derived from PD accounts which do not represent any activity to which an SIC code can be assigned (i.e. pension accounts, profit sharing plan, contracts, etc.).
90000	–	The code used to identify businesses which have ceased all operations because of bankruptcy, death of sole proprietor. The code is also used when the precise activity of the business is not known.
90087	00001	The code used for a business and which has no remaining activities to which a valid SIC can be assigned but for which the company charter has not yet been surrendered. For 1982 this was '00000'.

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Statistics Canada   Statistique Canada
Monthly Employment and Payroll Section
Section des statistiques mensuelles sur l'emploi et la rémunération

Monthly ES 1A Report
Déclaration mensuelle ES-1A

EMPLOYMENT, PAYROLLS AND MANHOURS
EMPLOI, RÉMUNÉRATION ET HEURES-HOMMES

INSTRUCTIONS ON REVERSE   INSTRUCTIONS AU VERSO

PLEASE MAKE ANY NECESSARY CHANGES IN ABOVE NAME OR MAILING ADDRESS
CORRIGEZ S'IL Y A LIEU LE NOM ET L'ADRESSE CI-DESSUS

3 TOTAL PAYROLLS - RÉMUNÉRATIONS TOTALES

PAYROLL DETAIL DÉTAIL DE LA RÉMUNÉRATION	NUMBER OF OPERATING DAYS NOMBRE DE JOURS D'EXPLOITATION	WAGE EARNERS - OUVRIERS		SALARIED EMPLOYEES EMPLOYÉS

5 TOTALS FROM QUESTION 4
TOTAUX DES CHIFFRES INSCRITS EN 4

6 INCREASE AUGMENTATION
DECREASE DIMINUTION

10.7   Special SIC's and BRIDS created for Federal/Provincial Records

010 -   Agriculture

030 -   Forestry

040 -   Fishing and Trapping

050 -   Mines, Quarries and Oil Wells

100 -   Manufacturing Industries

400 -   Construction Industry

500 -   Transportation and Communication

600 -   Trade

700 -   Finance, Insurance and Real Estate

800 -   Commercial Services

900 -   Public Administration and Defence

Federal	-	2600000
Newfoundland	-	2600001
P.E.I.	-	2600002
Nova Scotia	-	2600003
New Brunswick	-	2600004
Quebec	-	2600005
Ontario	-	2600006
Manitoba	-	2600007
Saskatchewan	-	2600008
Alberta	-	2600009
British Columbia	-	2600010
Yukon	-	2600011
N.W.T.	-	2600012