Occasional Papers

Single-Sector Communities

Revised 1979

Former title: Single-Industry Communities

Government of Canada
Gouvernement du Canada

Regional Economic Expansion
Expansion Économique Régionale

Occasional Papers

Single-Sector Communities

Cat. No. RE25-1/1-1979
ISBN 0-662-10730-6

OCCASIONAL PAPERS

From time to time, the Department of Regional Economic Expansion (DREE) publishes analytical research reports which have been undertaken in the course of the department's ongoing examination of socio-economic circumstances across the country.

These occasional papers will be of general interest to anyone concerned with the regional development process in general.

In presenting these research papers, it must be noted that, while prepared on behalf of the department, either through independent research or by staff resources, the reports are not intended to constitute or reflect the policies, objectives or opinions of the Government of Canada. Rather, they are meant to contribute to the level of general knowledge and discussion of the particular subject area which they undertake to examine.

FOREWORD

In 1977 the Department of Regional Economic Expansion published the first edition of *Single-Industry Communities*. Based primarily on data from the 1971 census, the extensive cross-sectional analysis proved to be a useful addition to this area of research. Since the document is now out of print, this second edition has been produced in order to respond to requests for the study.

This second edition incorporates further research on the nature of single-industry communities. This research, coupled with intervening changes in economic circumstances, has necessitated some revisions and updates to the original list of communities. Based on the 1976 census and 1978 private company data, addenda have been included in this slightly revised version of the original publication. The addenda include a description of revised criteria for selection of communities, and a list of Canadian communities dependent upon a single industrial sector. The map contained in the pocket at the back of the book reflects changes occasioned by the use of the more recent data and of revised selection critera.

This report does not in any way constitute a statement of federal policy. Rather, it identifies and describes those communities in Canada that are economically dependent on a single activity. It is hoped that this study will result in a greater appreciation of the phenomenon of single-industry communities, and will provide the necessary information framework within which the dynamics of single-industry communities can be accounted for in government decision-making.

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* Can be found in a pocket at the back of the book.

INTRODUCTION

Single-industry communities are a prominent feature of the economic fabric of Canada. Millions of Canadians — approximately 25 per cent of those outside metropolitan areas — live in such localities. While examination of the characteristics and evolution of single-industry communities has been a legitimate academic pursuit, virtually no studies have organized the information on their economic and social structure in a way which would be useful to governments when they are called upon to make decisions which may affect the future of such communities. This study describes the various dimensions of the phenomenon of single-industry communities and outlines ways of structuring discussion of these issues.

The foundation of the single-industry-community phenomenon, quite obviously, lies in the singular nature of the community's economic base. Most such communities depend upon the economic viability of the dominant industry, whose future fortune is often determined by forces beyond the control of the community. However, in formulating policies to tackle the difficulties faced by single-industry communities, decision-makers must focus on the social problems associated with the rapid decline of the local industry.

The prospects for most single-industry communities are contingent on the economic viability of the dominant employer(s). This is equally true of a very large community (e.g. Oshawa, Ontario) or of a small and geographically-isolated company town. The very fact that a significant proportion of a community's income and employment comes from a single employer (or group of employers within a single industry) indicates immediate and serious problems within the community should that source disappear.

The narrow economic base and the consequent predominance of the industry in community life magnify difficulties experienced by the industry as a whole. In many cases, the local employer's viability is determined by forces beyond the control of the local plant of the parent enterprise, where one exists, and of the community. Rapid shifts in market structure or trading patterns can make local operations unprofitable; technological change may eliminate the competitive position of the industry internationally. Changes in Canadian government policies or those of foreign governments may lead to shutdowns, despite the continued marketability of local products. Extraction and resource-based industries operate under even more basic constraints imposed by the steady depletion of resources. Other volatile factors include the ability to substitute other goods, markets facing firms which use local products, the market share held by each producer, and the degree of inter-firm competition.

While the economic problems appear most obvious, it is the social problems associated with the rapid decline or demise of the local industry as the major economic base of the community which make single-industry communities in Canada a salient area for policy planning.

Previous studies of the phenomenon of single-industry communities have pointed to stages in the development of such communities. For example, Lucas distinguishes four stages: construction, recruitment of citizens, transition and maturity.[1] Wichern et al. identify three stages and two intermediate phases: undeveloped stage, emergent phase; transitional stage, maturing phase; and developed stage.[2]

Overall, the various aproaches are similar, in that they postulate a series of discrete steps in a community's evolution, marked by increasing social differentiation and expansion of community infrastructure. This latter aspect of development refers to the often tenuous process of establishing and maintaining schools, churches, commercial establishments, and community services and amenities.

Lucas, in particular, discusses two important correlates of a community's stage of development that are likely indicators of future viability should a community's economic base be threatened.[3] First, he argues that single-industry communities experience an age cycle — distinct periods in which the age distribution of community residents is skewed. These occur

[1] Rex Lucas, *Minetown, Milltown, Railtown. Life in Canadian Communities of Single Industry* (Toronto: University of Toronto Press, 1971) chap. 2-5.

[2] P. H. Wichern, G. Kunka and D. Waddell, "The Production and Testing of a Model of Political Development in Resource Frontier Communities" (Centre for Settlement Studies, University of Manitoba, 1971), pp. 14-20.

[3] Lucas, *Minetown, Milltown, Railtown*, pp. 66-7.

during the recruitment and transition stages. In the recruitment stage the community usually has a young and homogeneous work force (mainly males under 35). Many of these workers have families and, for some time, there are few old people and a disproportionate number of children in relation to the overall community population. During the transition stage, the original residents reach retirement age, their children mature and the elderly are over-represented in the community. In particular, if a community in this transition stage is entering a period of decline, perhaps due to the steady depletion of a natural resource, the skewedness of the age distribution will be even more pronounced, as adolescents leave for jobs or education elsewhere.

The second phenomenon discussed by Lucas is a characteristic shift in homeownership, from the company (which is usually the developer-builder) to the residents.[4] This is especially significant because homeownership represents a substantial accumulation of private wealth, which stands to be lost in a declining single-industry community.

Despite the marked variation in size, location, and function of single-industry communities, their characteristics are frequently consequences of the decision to locate a given industry in a specific place. Many of these communities are resource based and are located close to their resource, e.g. forests, mineral deposits and fishing grounds. Some communities are based on manufacturing and are close to sources of inexpensive natural energy, e.g. furniture factories in Ontario and Quebec, and textile mills in Quebec. Some communities service client industries and their locations are chosen with this in mind, e.g. railroad towns strung along a right-of-way, and commercial and market centres in the midst of agricultural hinterlands and at transshipment points.

Canadian single-industry communities usually fall into one of two broad classes: communities established during the early settlement of Canada; and newer, planned towns created by the requirements of the industry.

Communities of the first type are most common in the Atlantic provinces and tend to be based on the fishing industry. Elsewhere in the country, such communities have become diversified, urban centres, or have disappeared altogether. Most single-industry communities are of the second type. The newer towns are the outposts of the heavy-industrial, rather than of the settlement frontier.[5]

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[4]Lucas, *Minetown, Milltown, Railtown*, pp. 74-7.

[5]*Ibid.*, p. 20.

These towns are still developing. Many have few of the amenities of urban life; others lack what are, for a city dweller, the necessities. In almost all cases, and in contrast to the first broad class of single-industry towns, the industry pre-dates the community. However, this difference is frequently one of degree rather than of kind. These two types of single-industry communities exhibit strong similarities, and their differences tend to reflect the degree and character of the urbanization they have experienced. Thus, the differences one observes are those associated with rural-urban divisions: community size, size and type of housing stock, municipal services, and migration patterns, particularly of adolescents and young members of the labour force.

In addition, newer, urban-oriented towns show limited social interaction and clear stratification by occupational status.[6] Indeed, in some communities these factors may be reinforced by ethnic divisions (often reflecting the composition of the town's original labour force); and by divisions between imported and native inhabitants, particularly in the case of northern settlements.[7]

The central problem facing a single-industry community is the insecurity associated with its dependence on a single economic base. Connected with this basic condition are two sets of situational factors: those that are common to most single-industry communities in good times and bad, and those that become problematic only when the community's economy is threatened.

Many such communities are geographically isolated and must consequently be self-dependent. In addition, the predominance of the local industry means that the company's problems are the town's problems. Often combined with a homogeneous population, these factors frequently result in a fish-bowl feeling deriving from a near claustrophobic reduction of alternatives; and a perceived lack of activity and vitality. Lack of access to a broad variety of commercial and recreational facilities, and a sense of being "away" are two of the most frequent complaints voiced by residents.

Within the community, this can produce special problems. Shift work can strain family cohesion, and social life can be difficult to maintain, particularly if friends and neighbours are on different shifts. In addition, the particular camaraderie that develops from shared work language and experience can

[6]Lucas, *Minetown, Milltown, Railtown*, chap. 6 and 7.

[7]Alick Andrews, "Social Crisis and Labour Mobility. A Study of Economic and Social Change in a New Brunswick Railway Community," MA thesis (University of New Brunswick, 1967) pp. 72-73. Quoted in *Lucas*, esp. pp. 127-140.

further complicate family relationships in which wives and children feel cut off from the work that takes up so much of the wage-earner's time.

Geographic isolation has a particularly heavy impact on adolescents. Usually, there are few opportunities for employment outside the dominant industry and the situation is particularly bleak for women. Sons and daughters are often forced to go elsewhere for jobs or for further education.

The occupational organization of the company can create problems as well. Vertical mobility is often limited by union segmentation and strict seniority practices, and by the preference of many companies for imported senior management personnel. These factors complicate a situation of already limited mobility for local labour. As we have seen, employment alternatives are generally limited for local women and adolescents. However, the problem is often a general one, and is especially significant when a shutdown is threatened. Often, an employee has seniority rights only in his firm, or, in the case of the non-management personnel, in his plant. Finally, few companies or unions provide for portable retirement pensions and, thus, the mobility that does exist for most residents occurs, for most workers, only with a loss in pension funds.

Community infrastructure and, in particular, the three areas of housing, education, and health care are problems for single-industry communities. The company generally initiates the construction of houses and sells them to residents at prices well below external market values. In many cases, however, residents feel themselves to be transient and choose not to invest in a house. The housing stock tends to become run down; and there are few entrepreneurs engaged in renovation, redevelopment and construction. Consequently, there is often a lack of variety in new housing.

Combined with the particular age distribution existing among residents, home ownership can be a powerful indicator of local expectations. Few people are likely to buy houses if they expect to stay only for a short time. Declining property values may reflect a loss of confidence in the town's future, as may fall-offs in mortgage and home-improvement loan activity.

Education is a limiting factor for many children in single-industry communities. Although local facilities and instruction may be adequate, they can rarely compete with urban areas. Young people are forced to go elsewhere for post-secondary education or technical training not offered by the industry's apprenticeship programs, and the financial burdens can be substantial. Furthermore, the individual's chances competing for jobs outside the community are substantially reduced by lack

of training. In addition, the usual lack of local employment opportunities for university graduates results in a steady out-migration of the best-educated and best-trained, that may pose problems later.

Medical and dental services are often inadequate. Many professionals are simply unwilling to trade an urban practice and its accompanying income and lifestyle for life in a single-industry town. Equipment and facilities involving high capital expenditures are rare, especially if the town is small; and specialist care, hospital services and surgery often require long and costly trips to a major centre. Maintaining the continuity of medical and dental care is also difficult, as the turnover is high among professionals and para-professionals in these fields.

All of these factors become acute in the case when a local industry shuts down its operations. The first and most important effects are substantial unemployment and loss of income among employees of the dominant industry and of the dependent service, manufacturing and primary-production establishments.

The effects of a local shutdown are strongly manifested in both economic and social conditions, the fundamental problems being produced by the relative lack of mobility of local labour. Beyond the perimeters of the local plant, particular skills or trades may not be in demand. If the worker can find alternative employment, it is likely to be at low wages, or to necessitate a move to another community. Employment skills — one's market value when looking for work — depreciate without use. Retraining and educational opportunities may pose special problems; older workers, in particular, may find transition to a new trade or occupation extremely difficult.

The social and psychological costs of involuntary unemployment are well known. But when it is combined with a basic inability to control the situation — as occurs in the decline of single-industry communities — pressures may become crushing. These difficulties can be magnified by factors of age, sex, and skill level and, with the almost inevitable loss of private wealth, can pose severe strains on individual and family equilibrium.

These costs are not borne by individuals alone. A rapidly-declining community represents a massive waste of social capital, some of which will have to be reproduced in communities to which the population migrates: unoccupied buildings and homes, unused public utilities, developed but deserted properties, transportation facilities — in short, all the elements of community infrastructure.

Adjustment is a major problem for those who remain. The maintenance of municipal services and various social conveniences is characterized by substantial economies of scale. In the case of declining communities, many amenities of town life disappear as "break-even" rates of return cannot be secured on local investments, and as the local tax base contracts. Elaborate educational and medical facilities and specialized personnel become luxuries; and the community's isolation becomes more pronounced. Those residents who remain often have special needs. Many are older people, whose financial circumstances and/or other ties to the community caused them to stay. They may require now-unavailable medical or nursing care, or assistance in getting about.

SELECTION CRITERIA AND THE DATA BASE

Despite widespread agreement on what is intuitively meant by a single-industry community, no rigorous conceptual or operational definition had been evolved by which such Canadian communities could be systematically identified and analyzed. The initial conceptual definition was relatively straightforward although broader than the "company-town" concept sometimes associated with the term single-industry community.

A single-industry community is defined as one in which there exists a single dominant economic activity (a single employer or group of employers in a single activity/industry) and which is not within commuting distance of another area or areas offering alternative employment opportunities.

The evolution of an operative definition or, as it subsequently turned out, definitions, was considerably more complex. It was necessary to assemble a data base that would facilitate the rigorous identification of single-industry communities and the specification of the magnitude and dimensions of the problems of single-industry communities. The resultant data base was designed not only to identify such communities but also to become an up-to-date inventory that could be used in conjunction with a system of leading indicators.

In view of the complexity of the research effort, what follows is a description of the research methodology developed to identify single-industry communities and investigate their dimensions.

SELECTION CRITERIA

An attempt has been made to identify all single-industry communities regardless of the present or future viability of the community's economic base.

For the purposes of this study, communities were operationally defined according to the standard geo-coding system of the Canadian census. Thus, a community is identified as either a) a census agglomeration (CA), where such exists; b) an incorporated municipality, that is not a part of a census agglomeration; or c) a census subdivision where no incorporated town or municipality exists. Later, unincorporated settlements within a given census subdivision not having the same economic base as the overall subdivision were identified on the basis of additional information sources, such as field offices of governmental departments.

From the outset, certain types of communities were excluded from the study because their unique nature required unique policies to handle their problems. These were as follows:

a) CMAs or communities within commuting distance of them;[8]
b) agriculture-based communities except for agricultural service centres that have neither distinct industrial activities nor the broader role of a regional service centre;
c) communities north of the 60th parallel; and
d) Indian Reserves.

Furthermore, a minimum size cut-off in terms of population and/or labour force was to be adopted, although groups of small communities relatively close together and possessing the same dominant activity were to be included. This has not yet been done, in order to facilitate a complete assessment of the magnitude of the problem. Should a cut-off size be established, exclusions should be checked against the master list of communities so that identified settlements serving as dormitories for activities in other locations, or situated outside municipal boundaries, are not excluded. Moreover, very small single-industry communities (e.g. population under 100 or 200) are seldom isolated. Generally, several such communities spring up in a region and share a common industrial base. (See Tables 1 and 2.)

[8]Except where the CMA shares the same single economic base, e.g. Sudbury, Ontario, and neighbouring communities. In fact, Sudbury has been included in the Ontario listing of single-industry communities due to the overriding importance of its mining activities for the CMA and its surrounding districts. It has not, however, been included in any calculations or analyses conducted for the study.

TABLE 1

NUMBER OF SINGLE-INDUSTRY COMMUNITIES IN PROVINCES AND REGIONS, BY POPULATION SIZE, 1971

Province/Region	Single-Industry Communities[1]								
	Number							Population[2]	
	With Pop. < 1 000	With Pop. 1 000-4 999	With Pop. 5 000-29 999	With Pop. 30 000 +	Total	As a % of Non-CMAs	With Isolation Index ≤ 2[3]	Total[1]	As a % of Total Non-CMA Pop.
Newfoundland									
Census S-I. Comm.	52	25	7	0	84	28.3			
Sub-area S-I. Comm.	22	15	0	0	37				
Total	74	40	7	0	121		74	205 544	52.7
New Brunswick									
Census S-I. Comm.	19	14	5	0	38	16.0			
Sub-area S-I. Comm.	20	9	0	0	29				
Total	39	23	5	0	67		48	144 334	27.3
Prince Edward Island									
Census S-I. Comm.	9	1	1	0	11	11.5			
Sub-area S-I. Comm.	13	1	0	0	14				
Total	22	2	1	0	25		25	24 870	22.3
Nova Scotia									
Census S-I. Comm.	0	8	1	2	11	14.3			
Sub-area S-I. Comm.	18	10	3	0	31				
Total	18	18	4	2	42		8	199 318	35.2
Atlantic Provinces									
Census S-I. Comm.	80	48	14	2	144	20.3			
Sub-area S-I. Comm.	73	35	3	0	111				
Total	153	83	17	2	255		155	574 066	36.0
Quebec									
Census S-I. Comm.	71	54	19	0	144	10.4			
Sub-area S-I. Comm.	64	11	1	0	76				
Total	135	65	20	0	220		48	488 845	19.4

TABLE 1

Ontario									
Census S-I. Comm.	19	41	16	5	81	10.8			
Sub-area S-I. Comm.	22	11	1	0	34				
Total	41	52	17	5	115		29	772 464	27.8
Manitoba									
Census S-I. Comm.	6	15	6	0	27	12.4	9		
Sub-area S-I. Comm.	4	1	0	0	5				
Total	10	16	6	0	32			98 414	22.0
Saskatchewan									
Census S-I. Comm.	16	18	2	0	36	4.5			
Sub-area S-I. Comm.	2	1	0	0	3				
Total	18	19	2	0	39		22	68 308	10.4
Manitoba-Saskatchewan									
Census S-I. Comm.	22	33	8	0	63	6.2			
Sub-area S-I. Comm.	6	2	0	0	8				
Total	28	35	8	0	71		31	166 722	15.1
Alberta									
Census S-I. Comm.	18	24	3	0	45	13.2			
Sub-area S-I. Comm.	5	1	0	0	6				
Total	23	25	3	0	51		18	101 665	13.9
British Columbia									
Census S-I. Comm.	25	39	11	2	77	50.3			
Sub-area S-I. Comm.	19	3	0	0	22				
Total	44	42	11	2	99		34	340 381	37.5
Alberta-British Columbia									
Census S-I. Comm.	43	63	14	2	122	24.7			
Sub-area S-I. Comm.	24	4	0	0	28				
Total	67	67	14	2	150		52	442 046	27.0
Total									
Census S-I. Comm.	235	239	71	9	554	12.7			
Sub-area S-I. Comm.	189	63	5	0	257				
Total	424	302	76	9	811		315	2 444 143	25.3

[1]Communities constitute those enumerated using the standard census definition of an incorporated municipality or a census subdivision. When a single settlement in a census subdivision was identified as a single-industry community but the rest of the subdivision failed to share that unique economic base, the census subdivision was not counted as a single-industry community.

[2]Calculations include the population of a census agglomeration, incorporated municipality or census subdivision identified as a single-industry community. When only one or two of the communities within a census subdivision were identified as a single-industry community, the population of the listed communities only, rather than that of the entire census subdivision, was included.

[3]An isolation index of 1 or 2 indicates that the community is situated 100 miles or more from a community of 25 000+ but is possibly within 30 miles of a major highway or railway.

TABLE 2

NUMBER OF SINGLE-INDUSTRY COMMUNITIES IN PROVINCES AND REGIONS, BY INDUSTRIAL BASE, 1971

Province Region	No. of Single-Industry Communities, by Industrial Base										
	Manuf.	Metal Mines & Refine.	Public Admin.	Non-Metal Mines & Refine.	Wood-based	Food Proc.	Fish. & Fish Proc.	Util. & Transp.	Agric. Serv. Centres	Const., Tourism, Misc.	Total
Newfoundland	2	6	5	5	19	0	78	2	0	4	121
New Brunswick	1	2	8	1	33	4	17	1	0	0	67
Prince Edward Island	0	0	1	0	0	14	8	1	0	1	25
Nova Scotia	5	1	3	5	10	0	18	0	0	0	42
Atlantic Provinces	8	9	17	11	62	18	121	4	0	5	255
Quebec	30	20	18	8	114	1	10	7	0	12	220
Ontario	10	28	7	3	42	8	0	8	0	9	115
Manitoba	1	8	7	1	4	1	0	3	0	7	32
Saskatchewan	0	4	6	14	2	1	0	2	0	10	39
Manitoba-Saskatchewan	1	12	13	15	6	2	0	5	0	17	71
Alberta	4	0	11	14	8	1	0	1	9	3	51
British Columbia	0	19	2	3	70	1	0	2	0	2	99
Alberta-British Columbia	4	19	13	17	78	2	0	3	9	5	150
Total	53	88	68	54	302	31	131	27	9	48	811

Due to the nature of the available data, more sophisticated identification methods (e.g. the minimum requirements approach)[9] were eschewed.

THE DATA BASE AND IDENTIFICATION PROCEDURE

Three nation-wide data bases were assembled: the 1971 census, disaggregated to municipality level; the 1971 census of manufacturing; and a private source (which for confidentiality reasons must remain unnamed). In addition, many partial data bases were used to obtain supplemental information (e.g. provincial community profiles and the Department of Manpower and Immigration area profiles). This computer-based data bank containing employment information by industry or activity was used to test various operational definitions. This process, depending on the form of the particular data, was in reality, a simple filtering of the communities. Those meeting the operational criteria were identified as candidate single-industry communities.

[9] Actually the minimum-requirements approach has two possible uses:

a) to identify those communities that are single-industry communities through recognition of each community's dominant economic function or activity; and
b) to determine the degree of specialization of the dominant activity in each community and subsequently order all communities according to the dominance of the prevalent economic activity.

The hypothesis is that all communities have common or basic economic activities. These activities are a norm for all communities so that a dominant or principal activitity within a community is a deviation from the norm. This approach falls apart both conceptually and mathematically when the basic economic activities cannot be defined or are not present in one or several communities under study. This problem arises in studies such as this where the communities being studied are much smaller than those previously reported in the literature.

The degree-of-specialization concept is simply the indexing and ordering of communities by the dominance of their respective principal activity. It imparts little interpretation when subjectively comparing communities and imparts no interpretation for identifying characteristics that may define a grouping of single-industry communities. Furthermore, the specialization index is mathematically weak when extreme cases are admitted to the analysis. The specialization index is mathematically undefined when a community is absolutely specialized and has no basic activities whatsoever. As a result, the minimum-requirements approach was rejected as a method both for identifying and for classifying or grouping single-industry communities. Instead, the relatively straightforward Herfindahl index was used to identify specialized communities, and multivariate factor analysis techniques were used for ordering communities.

1971 Census

The first major source was the 1971 census, at the municipality or census subdivision level, with employment coded to the three-digit standard industrial classification (SIC) of the census respondent's employer.[10]

The census employment-coding identifies dominant standard-industrial-classification activities including fishing, transportation, merchandising and services and the public administration sector. It cannot, however, identify dominant employers.

a) The first operational definition specified that employment in the community in a given standard industrial classification was greater than or equal to 30 per cent of total community employment as reported in the 1971 census.

b) In the second operational definition, an index of community economic specialization (S_i), which corrected for the dispersion of other economic activity within the community, was used.[11] Initial data passes were made using a minimum S_i index value of 0.3. However, it was recognized that the complex of services normally generated by larger communities would require adjustment of the specialization index for population size. Accordingly, additional runs were conducted, using the following cut-off value for the specialization index.[12]

[10] This data, is of course, available for any municipality or census subdivision in Canada. Hence it is available for a range of analytical purposes not related to single-industry issues.

[11] The specialization index which approximates the Herfindahl index is a measure of concentration, originally developed for measuring market shares of sales volume. The specialization index is employed to measure the degree of economic specialization in a community. It is defined as follows:

$$S_i = \sqrt{\sum_{j=1}^{n} \left[\frac{E_{ij}}{E_i}\right]^2}$$

where E_{ij} = employment in community i, in activity j ($j = 1, 2, 3, \ldots . n$)

E_i is total employment in community i

and $S_i \leq 1$

[12] Later, when single-industry communities within a non-single-industry census subdivision were identified, S_i values below those set out above were admitted for the overall subdivision.

Population Range	Specialization Index Value (Max. = 1)
1 — 999	≥ .3
1 000 — 2 499	≥ .3
2 500 — 4 999	≥ .3
5 000 — 9 999	≥ .2
10 000 — 29 999	≥ .2
30 000+ (non-CMA)	≥ .15

The variation in index values, according to community size, was made to allow for the complex of services normally generated by any larger community regardless of the nature of its economic base. 1971 census data were again used. The process permitted the identification of communities with primary, secondary (manufacturing), and tertiary (e.g. services and public administration) economic bases, but did not permit the identification of the actual employer(s).

Finally, to capture communities dependent on related economic activities (e.g. fishing and fish processing, sawmills and logging), we identified communities in which the percentage of total employment in the major related standard industrial classifications exceeded a stated value, according to population, as follows.

Population Range	Sum of the Percentage of Employment of Major Related Standard Industrial Classifications
1 — 999	60
1 000 — 2 499	60
2 500 — 4 999	40
5 000 — 9 999	30
10 000 — 29 999	25
30 000+	20

The final list of communities so identified became the initial list of single-industry communities against which other lists were cross-tabulated.

1971 Census of Manufacturing

The 1971 census of manufacturing provides information regarding only manufacturing and primary production activities. Hence, it does not include transportation, service, merchandising, and public administration activities. It does provide the standard geo-code of the area of the reporting establishment,[13] the name of the establishment and firm, the standard industrial classification code, and the employment size range.[14]

To capture towns dependent on a number of employers in a single activity, all employers in a given standard industrial classification were aggregated and potential single-industry communities identified according to the following definition.[15] The industry had to be the largest in the community, with at least 50 employees, and at least one employment size range larger than the next-largest industry in the community. Here, the 1971 census of manufacturing data, which gave an employment size range rather than a single employment value, was used, and the type of employer(s) in the manufacturing-based communities was established.

The resultant list of communities was cross-tabulated with the list produced from the 1971 census. These communities were then mapped and those within obvious commuting distance of a CMA or obvious alternative sources of employment were, as conceptualized at the outset, excluded from consideration. As previously noted, none were at this stage excluded on the basis of size, except those implicitly eliminated by the initial minimum requirement of 50 employees in a single standard industrial classification as specified in the operational definition.

[13]This standard geo-code area corresponds directly to the standard geo-code area used by the 1971 census.

[14]The employment size ranges are as follows:

a) 0-4
b) 5-9
c) 10-19
d) 20-49
e) 50-99
f) 100-199
g) 200-499
h) 500-999
i) 1 000 +

[15]Actually several operational definitions were employed to make passes at the data. This definition emerged as the best operational definition that could be produced, given the form of the census-of-manufacturing data.

Private Data Sources

The third principal source was a private system carrying 1974 data. This source provides machine-readable information on a per-establishment or per-branch basis.[16]

The following procedures were carried out using the data source:

a) for each community, employment was summed; then, communities were identified in which the major employer provided at least 20 per cent of total community employment.
b) In each community, employment by all employers in a given standard industrial classification was summed, and communities were identified in which a major standard industrial classification activity[17] comprised at least 20 per cent of total employment.

This list was then cross-tabulated with the list produced on the basis of 1971 data sources. Errors, omissions and changes in economic activity since 1971 were noted and further checked against other sources. In fact, various other data sources were also used. These include trade indices, pulp and paper indices, mining listings, and the community or area profiles assembled by some provinces and by the Department of Manpower and Immigration. These were used as a cross-check, and to identify non-manufacturing and primary industries, especially public administration activities. The lists were then sent to various government departments and departmental field offices for further verification.

The final list constitutes a master list of Canadian single-industry communities and their major economic activity, by province. Periodic updating, on the basis of the final operational definition and current data, can enable the inclusion of new single-industry communities and exclusion of those whose economic base has since become diversified.[18]

[16] This source is a vast data system, including more than 400 000 Canadian establishments. Among other information, the data for each branch of a particular firm include the name and location; employment at that location; and the (U.S.) standard industrial classification designation of the establishment's six major standard industrial classification activities in declining order of sales importance (these activity specifications are essentially proxies for commodities or services produced at the establishment).

[17] For a community to qualify as a single-industry community, the actual concentration of employment had to be considerably more than 20 per cent of total employment, but the 20 per cent level facilitated cross-referencing with the 1971 listings in the event of a structural change in a community's economic base.

[18] Several communities (such as Chapleau, Ontario) included on the list are becoming increasingly diversified and are strong candidates for exclusion in future.

CREATION OF THE MULTIVARIATE DATA BASE

Once the master list was drawn up, extensive data on each community was collected — primarily from the 1971 census — and fed into the computer for analysis.[19] The Social Science Research Library (SSRL) system, developed by the Department of National Health and Welfare, has been the principal data repository and vehicle for analysis used in this study.

The existing data base may be easily extended to other communities or to other data or update (time series) tables for currently-identified communities. In addition, a second single-industry community data base giving employers and employer-specific information has been created at the Department of Regional Economic Expansion.[20] A similar data base could be developed using the area profiles of the Department of Manpower and Immigration, once they become available in machine-readable form.[21]

The data base is designed as a time series and will identify changes in the economic activity of each community. That is, the data base will identify possible additions to or deletions from the master list. It will also identify changes in employment and a number of other employer-specific economic variables for use in conjunction with an early warning system and could aid in considerations of alternative development strategies for communities identified by a warning system.

Finally, to facilitate the comparison of single-industry communities with the norm for all communities of similar size in the same province or region, a data base on non-metropolitan communities was created. This data base contains 1971 census data on some 95 variables, and is directly comparable with the community definition as used in the construction of the single-industry community data base.

[19] Data for single-industry communities identified later in the task force's work has not yet been mounted on the SSRL system. However, to the extent that a community is not an unincorporated subdivision not sharing its dominant economic base, data for additions in the final list of communities may be readily added to the existing data base.

[20] At present, this data base is available only to the Department of Regional Economic Expansion due to confidentiality requirements.

[21] The area profiles contain information in addition to that on employment by establishment. For example, data are available on the starting date, identity of corporate headquarters and parent corporation, corporate sales.

SELECTION OF FACTOR ANALYSIS

An essential element of research on single-industry communities is the identification of community types sharing a common set of attributes and problems and possibly influenced by similar policies. To date, research of the type reviewed in the section "Selection Criteria and the Data Base" has been qualitative and hence single-industry communities have not been conclusively described and classified. On the one hand, these studies have fostered the belief that such communities share a common set of attributes and problems that differentiate them from other, more diversified, urban settlements. On the other hand, the communities are classified into types based, for example, on developmental stage or economic base. While such classifications are useful, the groups they define are not necessarily similar in any way but in their history or economic activity.

Quantitative procedures were used to provide a multivariate description and classification of single-industry communities, to identify the primary characteristics in which they differ, and to establish whether the communities fall into meaningful and well-defined groups. In choosing factor analytic procedures, we have followed a well-established method for classifying urban settlements.[22]

Our intent was, first, to distill from a wide range of variables the major characteristic that distinguishes one single-industry community from another; and second, to classify the communities themselves on the basis of their similarity on these variables. Because of technical difficulties and lack of time, we have not completed the classification of communities, but we have established the procedure and analysed the initial results.

[22]Brian J. L. Berry, ed., *City Classification Handbook: Methods and Applications* (New York: John Wiley & Sons Inc., 1972)

At the outset, 80 variables representing a wide range of factors likely to differentiate between single-industry communities were selected from the available data for use in the analysis. Most are derived from the 1971 census and include descriptions of the demographic profile, employment and occupational structure, education, income, housing, and community infrastructure. Economic dependence and isolation — two of the best known features of single-industry communities — are respectively represented by the standard industrial classification of the predominant activity, and a distance and isolation measure. Limitations of the computer program prevented the classification of all identified communities in a single run. Thus, the analysis is based on several runs involving single-industry communities from one province or, at most, two adjacent provinces, and a cross-national stratified random sample of 10 per cent or 82 communities.

This part of the research was completed within a very short time and produced considerable information. In addition, we encountered a number of technical problems that led us to reduce the number of variables to 64 for later parts of the analyses. The results are preliminary and selective, but nonetheless provide useful insight into the nature of single-industry communities in Canada.

NATURE OF VARIATION

A factor analysis of 80 variables for the cross-national sample of 82 communities indicates the main ways in which these communities vary. Of 16 factors or dimensions of variation derived,[23] 10 factors — explaining 86 per cent of the variation — were interpreted in terms of the variables which mathematically define them (Table 3). The results suggest several main conclusions:

1. The unusually large number of factors indicates that single-industry communities have many different characteristics. The derivation of so many factors may be partly explained by the large number of variables used in the analysis. However, as many factors clearly resemble aspects of single-industry communities described in the qualitative studies, there is good reason to believe that the communities do actually vary noticeably in a large number of characteristics. An obvious

[23] The 16 factors are those with eigenvalues greater than unity. The 10 interpreted factors have values equal to or greater than 3.0.

implication is that it may be difficult to classify single-industry communities into neat, homogeneous groups on a multivariate basis.

2. Interpretation of the individual factors listed in Table 3 supports some of the existing beliefs about single-industry communities while negating others. One assumption which is not supported is the belief that communities engaged in the same economic activity are necessarily alike. If this were so, such economic indicators as the standard industrial classification, income and occupational categories, would be highly correlated with other variables and would define one of the first factors. Instead, the standard industrial classification has a correlation greater than 0.5 with only one other variable (an occupational category) and it partly defines only a very minor factor (factor 10 explaining three per cent of the variation).

The major sources of variation between single-industry communities are given in factors one and two. These relate to the dominant age and family structure in the community and, to a lesser extent, to the age of the community (Table 3, Fig. 1). Factor one, explaining 24 per cent of the variation, contrasts two extreme types of communities. The first type has a relatively high proportion of old people (men and women over 55 years), families with no children, and old dwellings. The second type of community is dominated by family-type households, by children and by one-income families. Neither type fits the description usually given to single-industry communities.

However, between these two extremes is the relatively new community dominated by persons in the working-age group (25 to 34 years) and lacking both the very young and the old. This type of community is well-defined by factor two and is quite obviously that described in the literature. Variables defining this factor are men and women 25 to 34 years old, high mobility, migrants, ethnic differences, mobile homes, and dwellings built in the last decade. While considerable attention has been given to the characteristics and problems of this type of community, much less is known about single-industry communities characterized by young families, or, conversely, by old people and hence greater attention could be given to these in future research or policy formulation.

Factor three confirms a source of variation already well recognized. Communities in which there is a commitment to home ownership contrast with those having a high proportion of rented dwellings and apartments. Understandably, the latter is also characterized by higher proportions of men in the working-age group (25 to 34 years) and by a higher male participation rate.

TABLE 3

DIMENSIONS OF VARIATION BETWEEN 62 SINGLE-INDUSTRY COMMUNITIES INCLUDED IN THE NATIONAL SAMPLE

	Groupings of Variables				
Dimension	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Positive Correlation[1]	Families with 0 children as ratio of all families	Mobile homes as ratio of all dwellings	Rented dwellings as ratio of all dwellings	Males in teaching and related occupations as ratio of all males in labour force	Single females age 15+ as ratio of all females
	Males age 65+ as ratio of all males	Pop. with Indian or Inuit mother tongue as ratio of all pop.	Apartments as ratio of all dwellings	Pop. with Ukranian mother tongue as ratio of all pop.	Pop. with French mother tongue as ratio of all pop.
	Females aged 55-64 as ratio of all females	Dwellings built 1966-71 as ratio of all dwellings	Average rent	Males in managerial administration and related occupations as ratio of all males in labour force	Single males age 15+ as ratio of all males

Females aged 65+ as ratio of all females	Males in technology, social, art & religious occupations as ratio of all males in labour force	Male participation rate	Females age 15-24 as ratio of all females
Males age 55-64 as ratio of all males	Migrants from outside Canada, age 5+ as ratio of all pop. age 5+	Males age 35-44 as ratio of all males	Males age 15-24 as ratio of all males
	Pop. age 5+ with 3+ inter-municipal moves as ratio of all pop. age 5+		
	Migrants from different province, age 5+ as ratio of pop. age 5+		
	Pop. with Italian mother tongue as ratio of all pop.		

TABLE 3

TABLE 3

	Groupings of Variables				
Dimension	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Negative Correlation[1]	Females age 4-15 as ratio of all females	Single females age 15+ as ratio of all females	Owned dwellings as ratio of all dwellings	Family households as ratio of all households	Pop. with English mother tongue as ratio of all pop.
	Males age 5-14 as ratio of all males		Males in other primary occupations as ratio of all males in labour force		
	Average no. persons per room				
	Average persons per household				
	Family households as ratio of all households				
	One-income families as ratio of all families				
	Pop. dependency ratio				
	Males age <5 as ratio of all males				

Groupings of Variables					
Dimension	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
Positive Correlation[1]	Pop. 1961	Owner-occupied, single family, non-farm dwellings as ratio of all dwellings	Males in machining, fabricating assembly, repair occupations as ratio of all males in labour force	Pop. with a university degree as ratio of all pop.	Males in service occupations as ratio of all males in labour force
	Pop. 1951	Dwellings with no automobile as ratio of all dwellings		Pop. age 5 with 3 inter-municipal moves as ratio of all pop. age 5	Standard industrial code of industrial base
	Pop. 1971	Pop. with less than grade 5 as ratio of all pop.		Female participation rate	
				Migrants from same province age 5 as ratio of all pop. age 5	
				Average household income	
Negative Correlation[1]		Isolation index			Males in sales occupations as ratio of all males in labour force

[1]Variables loaded on factors have a correlation equal to or greater than 0.5 and are listed in descending order of magnitude.

TABLE 3

FIGURE 1

VARIATION ON FACTORS ONE AND TWO BETWEEN 62 SINGLE-INDUSTRY COMMUNITIES INCLUDED IN THE NATIONAL SAMPLE

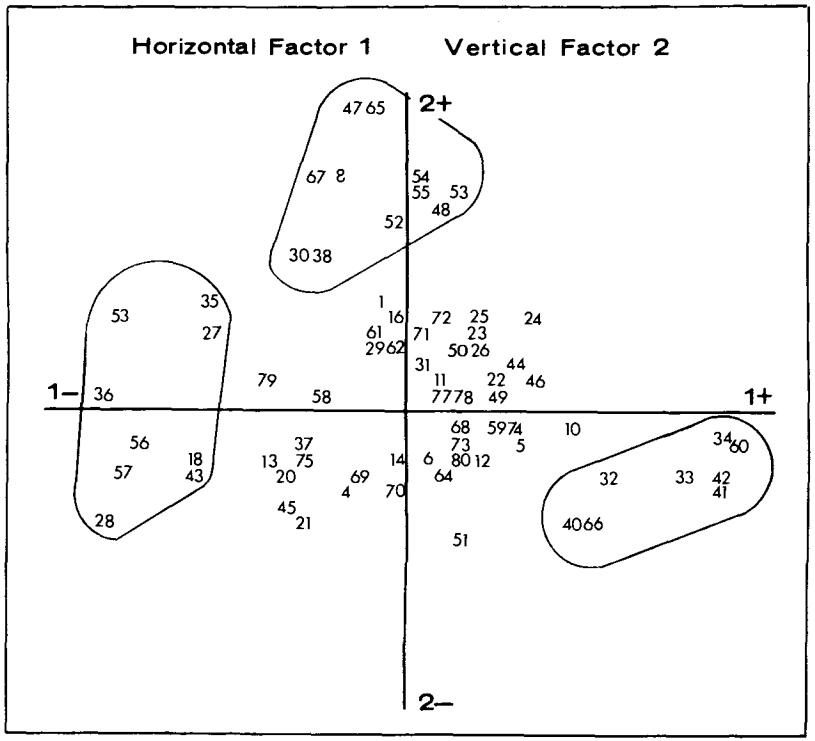


FIGURE 1

Main Loadings

Factor 1

High Positive

60 Families with 0 children
34 Males age 65+
41 Females age 55-64
42 Females age 65+
33 Males age 45-54
66 Dwellings built before 1946
40 Females age 45-54

High Negative

28 Males age 5-14
36 Females age 5-14
63 Average persons per room
57 Average persons per household
56 Family households
43 Pop. dependency ratio
18 One-income families
27 Males under 5
35 Females under 5

Factor 2

High Positive

65 Mobile homes
47 Pop. with Indian/Inuit mother tongue
67 Dwellings built in 1966-71
8 Males in technology, social-related occupations
54 Migrants from outside Canada
55 Pop. with 3+ inter-municipal moves
53 Migrants from a different province
48 Pop. with Italian mother tongue
52 Migrants from the same province
30 Males age 25-34
38 Females age 25-34

Negative

51 Single females

Factor five[24] distinguishes between predominantly French- and English-speaking single-industry towns. In French-speaking communities there is a higher proportion of young single men and women of 15 to 24 years. In another study, a similar difference was found between French- and English-speaking resource communities of more than 30 000 persons.[25]

Factor six distinguishes between communities on the basis of population size but since no other variables load highly on this factor, there is no indication that size is related to other types of differences.

Differences related to degrees of urban influence are more clearly indicated by factor seven, which distinguishes between communities which are isolated or relatively far from a metropolitan area and those that are not. The greater distance is associated with lower education levels, fewer automobiles, water and household facilities, and dwellings without a mortgage. As is described in the literature, one of the most obvious differences between isolated and non-isolated single-industry communities is the availability of urban services. Hence, it is worth noting that while factor seven appears in this quantitative analysis, it is a minor one accounting for only five per cent of the variation, as compared to over 40 per cent ascribed to factors one and two.

Factor nine, like factor two, appears to denote communities with a high proportion of mobile and migrant population. But such communities are associated with a population whose members are relatively well educated and in managerial positions. Family incomes are high as the family unit has access to more than one income; and the female participation rate is high. A mobile managerial class in single-industry communities has been noted in previous studies,[26] but differences in female participation rates and family incomes have not been given much attention.

A main conclusion emerging from this analysis pertains to the relative value of social and economic indicators to research into single-industry communities. Undoubtedly, economic variables — such as those related to the type of activity, income, employment and occupation — are crucial when distinguishing between these communities and more diversified urban centres. Hence, the identification of single-industry communities in the section "A Framework for Analysis" is based on such variables.

[24]Two factors are not interpreted. Factors four and eight are both defined by specific occupational groups. Unfortunately there are weaknesses in the census data which produced zero values for many communities on these variables. Hence, no credence is given to the interpretation of these factors.

[25]H. J. King, "Cross-Sectional Analysis of Canadian Urban Dimensions: 1951 and 1961", *Canadian Geographer*, x:4, December 1966, 205-224.

[26]Lucas, *Minetown, Milltown, Railtown.*

However, in an analysis of the differences between single-industry communities, economic variables are much less important[27] than are differences related to social structure, age and sex distributions, household and family composition, mobility, migration, ethnic origin, housing, and urban services. It is therefore reasonable to expect that the social problems faced by single-industry communities are specific to the type of community. Consequently, social indicators should be given a major role when identifying problems and developing policies for dealing with troubled communities.

CLASSIFICATION

The communities in each province were classified in a factor analysis which groups the communities according to their similarity or correlation over the 64 variables.[28] The classifications are general purpose and are quite distinct from univariate classifications developed for a specific objective, such as to order the places according to their use of mobile homes or their provision of public sewers.

For each province, the analysis produced three or four major groupings of communities and several minor ones according to the factor or factors they loaded on with a value of at least 0.5. A number of places do not clearly fall into any one group as they have high loadings on two different factors and hence lie between two groups.[29] We anticipated that it would be easy to establish the differences between the groups by

[27] This conclusion should be tempered by recognition that the economic data in the analysis are not strong elements in the factors. Moreover, such environmental problems as air and water pollution, which would likely correlate with the type of economic activity, were not represented at all.

[28] The analysis described in the subsection "Nature of Variation" does the reverse; it groups variables according to their correlations over the communities.

[29] Communities that fall between two groups suggest that an oblique factor solution would provide a more satisfactory classification than that developed using the varimax rotation. An oblique solution allows the groups to be related rather than forcing them to be completely independent of each other, as they are in this analysis. The discovery that single-industry communities vary over many different characteristics, but fall into only three or four main groups, also suggests the groups may share some features and hence an oblique solution may be more appropriate.

ascertaining which of the 64 variables scored highly on the factors defined by each group of communities.

In fact, technical difficulties in computing the scores prevented this. However, the variables likely to be important can be predicted from those that emerged as important indicators of the variation between single-industry communities. A comparison of the ordering of communities on a given variable with the groupings of communities is an easy check on whether the variable does in fact appear to define any grouping.

It is possible to compare the three or four main groups of communities in each province only in a very limited sense. For example, all provinces have one group that contains all or many of the much larger places, particularly census agglomerations. Only one province (apart from Saskatchewan with its agricultural centres) has a group of communities based on the same economic activity. Apart from these similarities, the nature and relative importance of the groupings vary from province to province. For example, in British Columbia larger places make up the second major group and explain 21 per cent of the variation in the factor analysis classification. In most provinces, the larger places appear in only the third or fourth grouping; in Newfoundland they form the seventh, a very minor group explaining only 2.7 per cent of the variation. Interprovincial variation is also seen in the group differences associated with demographic and family characteristics. The latter were earlier identified as major determinants of differences between single-industry communities, one of the variations being places with a relatively high proportion of old people and families with no children.[30] This description clearly fits one of the major groups of communities in Nova Scotia, New Brunswick, Alberta, and British Columbia, but does not define a group in the remaining provinces.

[30]Refer to the variables with high positive loadings in factor one, Fig. 1 and Table 4.

TABLE 4

COMPARISON BETWEEN SINGLE-INDUSTRY COMMUNITIES AND NON-METROPOLITAN URBAN PLACES (BRITISH COLUMBIA AND CANADA), BY SELECTED VARIABLES (MEAN), 1971

Variables[1]	B.C. Single-Ind. Comm.[2]	B.C. Non-Metro[3]	National Sample[4]	Canadian Non-Metro
Male participation rate	.82	.89	.70	.82
Male unemployment rate	.06	.07	.08	.08
Average household income	$9 282	$9 081	$7 000	$6 912
Pop. with less than grade 5 as ratio of all pop.	.04	.03	.12	.07
Pop. with a university degree	.03	.02	.02	.02
Males age <5 years as ratio of all males	.09	.09	.10	.09
Males age 5-14	.21	.22	.24	.23
Males age 25-34	.15	.13	.11	.11
Males age 35-44	.12	.12	.10	.10
Males age 55-64	.08	.08	.08	.09
Males age 65+	.06	.08	.08	.10
Single females age 15+ as ratio of total females	.11	.13	.16	.17
Migrants from a different province age 5+ as ratio of pop. age 5+	.09	.10	.04	.03
Migrants from outside Canada age 5+ as ratio of pop. age 5+	.05	.04	.01	.01
Pop. age 5+ with 3+ inter-municipal moves as ratio of all pop. age 5+	.15	.12	.06	.05

Variables[1]	B.C. Single-Ind. Comm.[2]	B.C. Non-Metro[3]	National Sample[4]	Canadian Non-Metro
Family households as ratio of all households	.84	.81	.86	.85
Families with 0 children as ratio of all families	.29	.31	.26	.30
Dwellings with no piped water as ratio of all dwellings	.04	.02	.16	.10
Dwellings with no toilet as ratio of all dwellings	.05	.02	.21	.14
Average number of persons per room	.70	.66	.76	.68
Apartments as ratio of all dwellings	.09	.13	.08	.10
Mobile homes as ratio of all dwellings	.10	.06	.03	.02
Dwellings built before 1946 as ratio of all dwellings	.27	.28	.46	.53
Owned dwellings as ratio of all dwellings	.65	.66	.78	.78
Rented dwellings as ratio of all dwellings	.34	.33	.22	.22
Dwellings linked to public sewers as ratio of all dwellings	.41	.66	.25	.38
Dwellings with no automobile as ratio of all dwellings	.17	.17	.28	.23
Distance in miles to nearest metropolitan area	208	n.a.	127	n.a.
Population	5 611	6 522	3 927	2 992

[1]The variables represent a range of those used in the factor analysis and of those for which comparative data are available.

[2]These values are based on 59 single-industry communities in British Columbia.

[3]The means are based on the 79 non-metropolitan urban places with a population over 500. Many are single-industry communities.

[4]Includes 82 communities representing a 10 per cent stratified random sample of all single-industry communities for which data are available in machine-readable form.

TABLE 4

A FRAMEWORK FOR ANALYSIS

A significant portion of those who live outside the major urban areas of Canada are located in single-industry communities. A total of 811 single-industry communities were identified and their inhabitants make up 25.3 per cent of the non-metropolitan population.

Many of these communities are, as is normally envisioned, small, remote towns: 424 have populations under 1 000, and 302 have populations in the 1 000 – 4 999 range. Three hundred and fifteen communities are a considerable distance from major population centres and transportation routes. On the other hand, nine communities have populations of more than 30 000 and amenities similar to those in urban areas of the same size. (See Table 1.)

Regional differences are apparent. In the Atlantic provinces some 36 per cent of non-metropolitan population lives in single-industry communities while the comparable figure for Alberta and British Columbia is 27 per cent. At the other end of the scale, only about six per cent of non-metropolitan towns in Manitoba and Saskatchewan are classified as single-industry based, but these comprise 15 per cent of the population outside the major urban areas.

The regional figures obscure, to a certain extent, the provincial values. For example, British Columbia, with 99 single-industry communities representing about 50 per cent of its non-metropolitan communities, has the highest ratio of single-industry communities to total communities. Newfoundland, however, has the largest proportion of its non-metropolitan population (over

25 per cent) living in single-industry communities. At the lower end of the range, Saskatchewan has about 10 per cent of its non-metropolitan population in such communities.

The spatial dispersion of single-industry communities is striking. In many provinces, and especially in the Atlantic provinces, single-industry communities tend to occur in clusters (e.g. in Prince Edward Island) or in strip patterns (e.g. along Newfoundland's north and east coasts). When these communities are mapped according to their economic base (see the maps in the pocket at the back of the book) and size, the spatial dimensions of the phenomenon become all the more striking. One notices immediately the regional dominance of smaller communities and the provincial dominance of certain economic activities (e.g. wood-based industry in British Columbia and fishing and fish processing in Newfoundland). This pattern is hardly surprising as ready access to natural resources and/or cheap sources of natural energy often dictated the location of a community.

These communities are not, by definition, in economic distress, although they are more vulnerable than those with a well-established and varied economic base. Many single-industry communities are, at present, extremely viable. Nonetheless, at least the smaller and more remote of these communities display certain social manifestations which become magnified in periods of economic difficulties. The predominance of the local industry or activity means that the company's or industry's problems become the community's problem. These factors often produce a fish-bowl feeling among residents. A lack of access to a broad variety of commercial and recreational facilities and a sense of isolation are two of the residents' most frequent complaints.

Geographic isolation has a particularly heavy impact upon adolescents. There are few opportunities for employment outside the dominant industry. Education is often limited to secondary education, as post-secondary institutions are not within commuting distance. Similarly, the occupational organization of the company can create problems. Vertical mobility is often limited by union segmentation and strict seniority practices. Additionally, medical and dental services are often inadequate if they exist at all.

These factors become exaggerated in the event that the local industry ceases operations. The immediate effect of such a closure is, of course, substantial unemployment and a loss of income in the dominant industry and in the local businesses dependent upon it. Moreover, while the effects of a local shutdown are manifested most strongly in economic and social conditions, the most fundamental community problems are related to a lack of labour mobility among community residents. Existing labour skills are often not required elsewhere or, if so, are often required only at lower wage rates.

The social and psychological costs of involuntary unemployment are severe. Some residents leave the community, often at social and economic loss to the individual and to society. Those who remain in the community are faced with major problems of adjustment, not only to lowered incomes but also to lower levels of health, educational and other services and amenities.

When a single-industry community faces an economic crisis, governments and industry are faced with difficult decisions about whether to take special measures. This section is an attempt to provide a conceptual framework to help make an assessment of the costs and benefits associated with alternative courses of action. Alternatives for government action range from explicit non-intervention (where total reliance is placed on automatic, statutory programs such as unemployment insurance) to direct investment in the industrial plant. This paper does not examine the merits of such alternatives since the most appropriate policy response will depend on the specific circumstances.

The general framework described in this section provides broad guidelines for a reasonably comprehensive and consistent examination and quantification of the effects of each alternative. The analytic framework has three components (Fig. 2). The first, private accounts, describes a system for measuring the costs or benefits of each alternative to an individual (or family). In other words, this component records all anticipated dollar flows to and from each affected individual in the community. The purpose is to devise indicators of personal well-being, from a purely financial perspective, under each of the proposed alternatives.

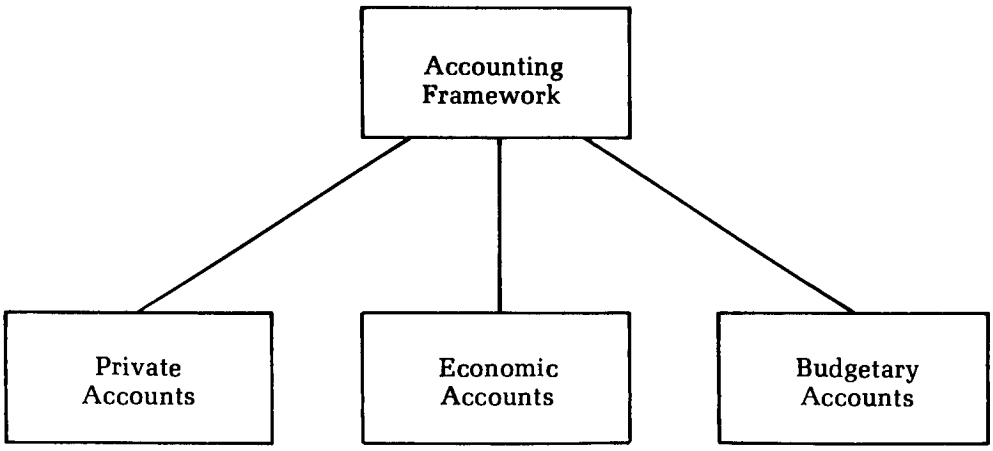
The second component, economic accounts, outlines a method for assessing the purely economic costs and benefits associated with each policy alternative discounted to a common period and summed to provide an estimate of the net present value of that alternative.

The third component, budgetary accounts, provides a system for quantifying the demands of each alternative on a government's budget, the federal budget being used for illustrative purposes.

The identified variables of each set of accounts can be quantified in dollar and aggregative terms, and the output from each component will therefore be a small number of numerical indicators. It should be noted that the process of quantifying many variables will greatly depend on a community's unique characteristics. A multitude of social concerns (e.g. the effect of each alternative on education and on the availability and quality of health services) are excluded from this section as many

FIGURE 2

THE ACCOUNTING FRAMEWORK



of them are not readily quantifiable and most are not aggregative. But the fact that many social aspects are neither measurable nor commensurable does not diminish their importance in the decision-making process and they could be included in the total assessment package.

The output from the analytic framework and the assessment of social aspects can be visualized as a matrix of indicators set in four concern categories (Table 5). Three of these (personal financial indicators, economic indicators and social indicators) measure the effectiveness of each policy alternative, the fourth (budget indicators) provides information on a major government constraint. It is likely that data limitations will rarely permit the matrix to be completely filled in. However, arraying obtainable information in this way will help define the trade-offs made in attaining governmental objectives.

PRIVATE ACCOUNTS

The private accounts measure the distributional effects of proposed alternatives. Ideally, private costs and benefits should be recorded for every individual directly or indirectly affected by a shutdown and, consequently, by implementation of a proposed alternative. In some instances, however, data limitations may restrict analysis to those directly affected by the plant or industry shutdown.

A schematic representation of the private accounts is given in Figure 3. The private costs and benefits are classified as the income loss from unemployment (PC 1), income loss from alternative employment (PC 2), and the loss of wealth (PC 3).

TABLE 5

MATRIX OF INDICATORS SET IN FOUR "CONCERN" CATEGORIES

Policy Alternative	Personal Financial Indicators	Economic Indicators	Social Indicators	Budget Indicators
	. . .	. . .	. . .	
Non-Intervention				
Alternative A				
Alternative B				
Alternative C				
⋮				

In the following descriptive outline, it is assumed, for simplicity, that the plant shutdown and all employment losses occurred simultaneously and present values are calculated as of a single date. The actual date chosen does not alter the results, and can be selected to maximize computational simplicity. However, a consistent approach is necessary to ensure that the variables are comparable.

Income Loss from Unemployment

Loss of income from unemployment is calculated as the value of the loss in earned disposable income, less the value of offsetting transfer payments to the individual by virtue of unemployment. Transfer payments include unemployment insurance benefits and welfare (or social assistance) payments.

Should unemployment persist, over a two-year period for instance, it would be necessary to discount these values to estimate, in constant dollar terms, the individual cost of unemployment.

Income Loss from Alternative Employment

An individual's earnings from a new job may be lower than earnings from a previous job. Some of the reasons are:

a) loss of seniority;
b) decay of general skills during the period of unemployment, or loss of specific job skills;
c) change to an occupation in which the individual's skills are no longer needed; and
d) change in attitude leading to decreased productivity.

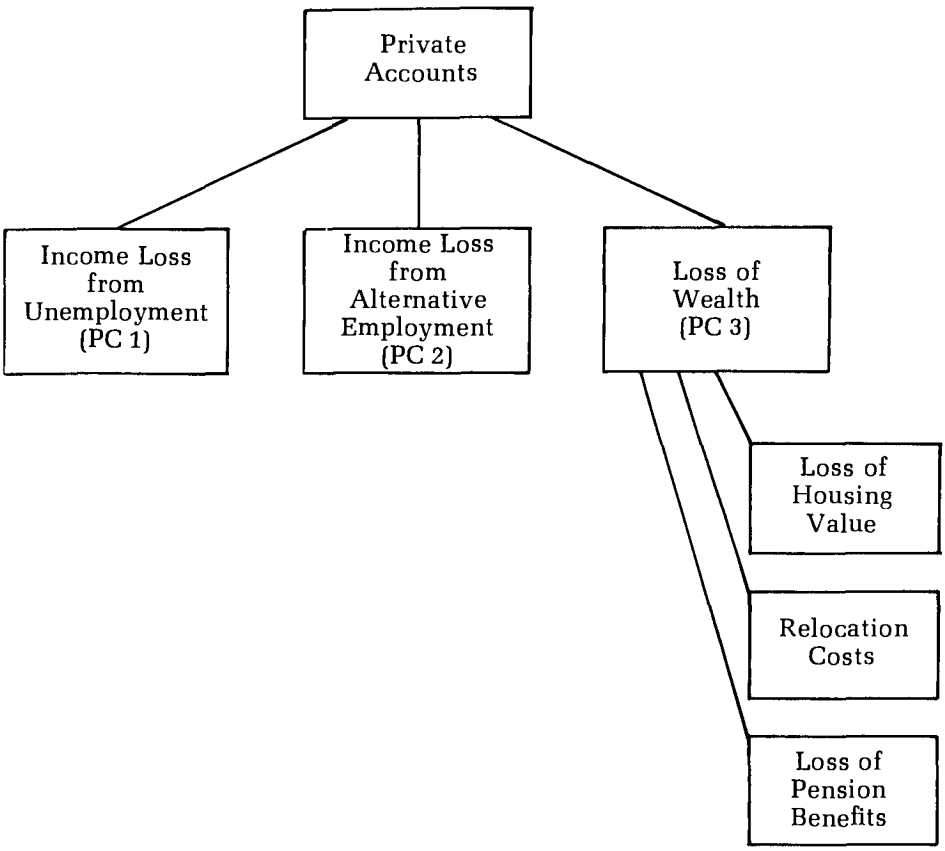
For each individual, the magnitude of financial loss is determined by the relative levels of disposable wage income in the two employment positions, and the period in which he would have remained in the former job had it been available.

Finally, it should be recognized that the new job might result in earnings higher than previously possible. This could be due, for instance, to an increase in the number of hours worked each week, or weeks worked each year; or to a higher wage rate in a new occupation. In this event, the PC 2 value would be negative. That is, the individual would experience a financial gain in his new job.

Loss of Wealth

A number of factors may enter into the calculation of wealth loss, but three of the more important are loss of housing value, relocation costs, and loss of pension benefits. For this framework, the total loss is simply the sum of these components.

FIGURE 3
THE PRIVATE ACCOUNTS



Loss of Housing Value

The shutdown of the major firm or industry almost always results in a decline in value of fixed physical assets. This devaluation can present exceptional difficulties to individuals whose only major form of savings has been home ownership and may determine whether many individuals decide to relocate.

The loss to each home-owner can be determined by estimating the market value of the home that would have prevailed had there been no disruption, and deducting from that figure the post-disruption market value.

Relocation Costs

For those individuals forced to relocate, there are obvious relocation costs, for example for travel, moving personal belongings and temporary accommodation. These costs, however, may not be borne entirely by the individual. Government transfer programs, such as the Canada Manpower Mobility Program, help individuals defray their expenses; or a firm may subsidize relocation costs if the employees are to be re-employed at another branch plant.

Therefore, the cost to each individual will be the total cost of relocation less transfer subsidies.

Loss of Pension Benefits

The calculation of an individual's loss of pension benefits is likely different for every community, because the private pension schemes vary from one firm to another, and even from one branch plant to another.

In general, two types of loss may be incurred. Past contributions may be lost if the pension fund is controlled and administered by the firm rather than by a trust company or chartered bank. Loss may also be incurred if the pension plan is not entirely portable from one employer to another. Whether this is so will depend on the nature of the two companies involved.

Summary

For each individual (p) the total private cost is the sum of the values for the three major configurations that make up the private accounts. That is, $PC^p = PC1^p + PC2^p + PC3^p$. When policy alternatives are being assessed, the total private cost can indicate the financial impact of each alternative. Decision-makers can also use the individual values to help them choose an alternative best suited to the specific needs of a community.

ECONOMIC ACCOUNTS

Policy alternatives must be assessed from a purely economic standpoint and each must be weighed against the governmental objective of promoting economic efficiency and growth. The economic framework is outlined in Figure 4. The output from this set of accounts is a single estimate of the net present value (or the cost/benefit ratio) for each alternative considered.[31]

In an economic assessment, it is necessary to measure costs and benefits of proposed policy against some norm or baseline situation. In most cost/benefit analyses, it can usually be assumed that if a policy was not implemented, events would continue in the future as they had in the past. In other words, the norm is assumed to be an extension of the status quo.

However, for a single-industry community facing the threat of a plant closure, the baseline case of non-intervention will not lead to a simple extension of the status quo. There will be considerable out-migration and relocation. Consequently, the first step is to map out, in as much detail as possible, the impact of the baseline case (plant closure with no government intervention) on out-migration and relocation. This pattern can then be translated into social infrastructure, private capital and manpower requirements at the relocation point or points and the value of labour production estimated. Once these steps are completed, the costs and benefits of each proposed alternative are measured against those of the non-intervention alternative.

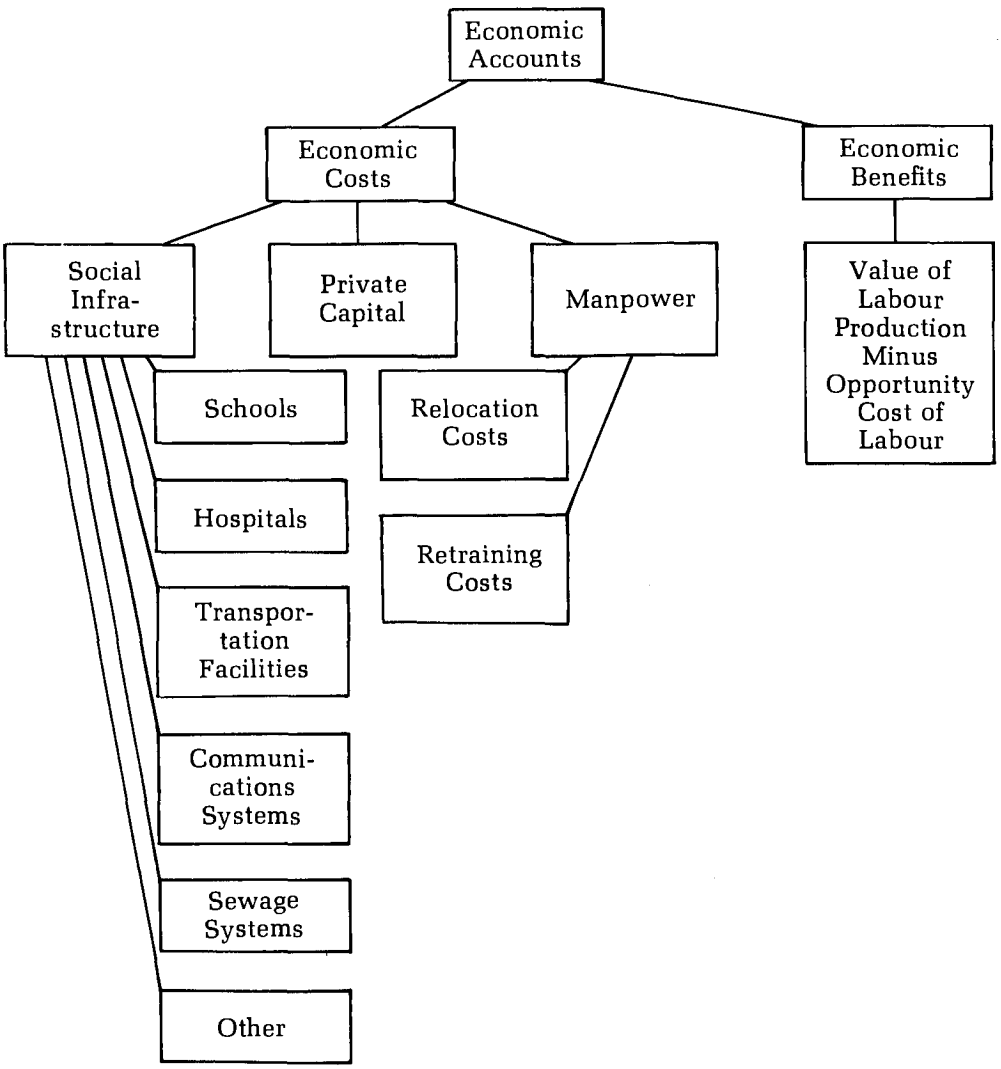
Within the analytical framework, any alternative resulting in a negative estimate of net present value (or a cost/benefit ratio greater than unity) would be considered inferior to the baseline solution. Conversely, any alternative resulting in a positive estimate of net present value (or a cost/benefit ratio less than unity) would be considered superior to the baseline alternative.

Economic Costs

The total estimated economic cost of each policy alternative is the sum of the values for three major cost groups: social infrastructure, private capital, and manpower.

[31] In fact, the output could be a series of estimates of net present value or cost/benefit ratio for each alternative. There would be more than one estimate for each alternative if a sensitivity analysis were conducted.

FIGURE 4
THE ECONOMIC ACCOUNTS



Social Infrastructure

In the absence of intervention by governments and the private sector, the demise of a community's major economic activity would likely result in some definable pattern of relocation of all or some of the residents. The numbers of families

relocated, and the distribution of the relocations are the major factors determining how much new social overhead capital will be needed at the relocation point or points. The main problem in assigning cost estimates to these factors is that most social infrastructure is, in part at least, public goods. In the case of a pure public good there exists, by definition, unlimited excess capacity for consumption.[32] That is, additional quantities of the public good may be consumed at no additional cost.

In this analysis, the categories of social infrastructure are schools, hospitals, transportation facilities, communications systems, sewage systems, and an unspecified category (which might include, for instance, recreational facilities).[33] These goods and services are, obviously, not pure public goods. But neither are they pure private goods, for example schools and transportation facilities can and do have excess capacity.

A rule of thumb when evaluating these costs is as follows. If the relocating families are evenly distributed to a large number of communities, then the best approximation of the cost of providing facilities is zero. If, on the other hand, the relocating families are concentrated in a small number of communities, then the best approximation of the cost of providing facilities is the average cost per family in the province of relocation as a whole.[34] The logic here is simply that marginal increases in demand for social infrastructure can be absorbed in excess capacity, whereas larger increases in demand necessitate additional facilities.[35]

[32] A pure public good is one for which additional consumption by one or more individuals has no effect on the consumption levels of all other individuals.

[33] The analysis intentionally avoids consideration of whether or not the community is a regional service centre for smaller neighbouring communities. In all policy alternatives resulting in massive out-migration, smaller communities may be deprived of the services and infrastructure formerly available in the endangered community. In such an event, governments may wish to consider providing these from another centre in the same region. This would have to be included in the economic cost calculations, and in the budget calculations.

[34] Average cost refers to the average capital cost, but does not include operating costs, which would have been incurred in any event. For example, the average cost of providing hospital facilities should not include the cost of a nurse's services.

[35] The adoption of an operational criterion would require further research, but might be along the following lines. If the number of relocating families increases the number of families in the relocation community by less than 1.0 per cent, use zero cost; if it exceeds 1.0 per cent, use the average provincial cost. This critical value could also be scaled (for example, zero cost for population changes of 0.0 to 4.0 per cent, half cost for population changes of 4.1 to 6.0 per cent, and so on). Finally, the critical values may be different for each type of social infrastructure, and for different size ranges of relocation communities. There is no a priori reason to believe that schools will have the same excess capacity as hospitals, or that Arnprior will have the same proportion of excess capacity as Ottawa.

To arrive at the total economic cost of social infrastructure for each policy alternative, estimate the total costs that would be incurred and deduct the costs that would have been incurred in the baseline situation.

It should be noted that the timing of the relocations might considerably affect cost estimates. For example, governments might consider a policy alternative that actively encourages, through relocation subsidies, a rapid out-migration of the population. Even if this alternative resulted in the same number and distribution of relocations as the baseline solution, the economic costs of social infrastructure would be higher because they would be realized sooner than would otherwise have been the case. The magnitude of this difference would depend upon the discount rate used. A sensitivity analysis (that is, varying the discount rate) might radically change the results.

Private Capital

Unlike social overhead capital, private capital is rarely characterized by excess capacity. With vacancy rates at extremely low levels across Canada, it can be assumed that the transfer of demand for housing from the single-industry to the relocation community will generate pressures on the latter's housing stock, which can be relieved only by the construction of additonal houses.

To the extent that each policy alternative has different effects on family relocations, it will also have different effects on the required generation of new housing supplies. For each relocating family, the economic cost is the market value of a house comparable in quality (e.g. size of house, age, and lot size) with that previously occupied. These housing values should be assessed at the time of relocation, then discounted to present dollar terms and summed to provide an estimate of the total economic cost of housing supplies in the relocation communities.[36]

To arrive at the total private capital costs of each policy alternative, estimate the costs that would be incurred in each, and deduct the costs that would have arisen in the baseline situation.

[36] Note that in this estimate the appropriate variable is the value of housing in the relocation community similar in quality to the housing abandoned in the single-industry community, not the value of housing actually occupied in the relocation community. This latter variable would include a measure of change in the individual's consumption pattern. That is, choice of a "better" or a "worse" house than the one previously occupied would result in more or fewer consumption benefits from the new dwelling. What is relevant to this analysis is the economic cost to society of having to duplicate non-portable capital (i.e. housing).

This procedure can be used for all relocating individuals whether they owned or rented their dwellings. Private ownership affects the calculation of private financial cost, but does not enter into the calculation of social economic costs.

Manpower

The two main considerations in assessing the economic costs associated with manpower are relocation costs and retraining costs. The individual costs of each are summed to arrive at an estimate of total manpower costs. (The opportunity cost of labour is included in the calculation of benefits.)

Relocation Costs. The economic cost of family relocations is defined as the actual cost of transporting the families and their personal possessions. Hence the total costs will vary directly with the number of families relocated, and the distance to be travelled.

The elements included in this calculation are the same as those included in the private accounts. However, the economic cost is the sum of individual financial costs, government costs, and the firm's costs. And finally, the relocation costs attributable to the alternative are those incurred over and above the costs in the baseline alternative.

Retraining Costs. When a policy alternative includes the provision of a manpower training program, the costs and benefits over and above those that would have occurred in the baseline solution, can also be included. The method of calculating the benefit of training (an increase in the individual's expected earnings) and the opportunity cost of labour during the training period, is shown in the subsection "Economic Benefits". However, training programs also have such costs as teachers' salaries, classroom space and materials. If the program is provided by a government department or agency, it can provide cost estimates. If the program is provided by a private agency, the cost can be estimated by summing tuition fees and cost of materials.

Economic Benefits

The economic benefit of each policy alternative is the value of labour's production less the opportunity cost of labour. The latter is defined as the value of labour's production in its most likely alternative use.

In this analysis, the opportunity cost of labour has been identified as the value of labour output in the baseline alternative. That is, if governments institute a policy other than that of non-intervention, the pattern of relocations and re-

employment would presumably be different from the pattern that would otherwise have prevailed. One of the costs to society of implementing this policy is the value of labour production which would have accrued to society in the non-intervention alternative.

The simplest and most widely-used proxy for the economic value of labour production is labour's market wage. Hence, for each individual, it is necessary to construct a profile of expected earnings, in the baseline situation, from the date of plant closure to anticipated date of retirement. For each individual, the gross earned income in each period is then discounted to the present, and summed to provide an estimate of the opportunity cost of the individual's labour. An estimate of the total opportunity cost of labour is obtained simply by summing the opportunity costs of all the individuals.

The estimate of the gross economic benefit of each policy alternative is calculated in a similar fashion. For each individual it is necessary to construct a new profile of expected earnings, based on the relocation and re-employment pattern of the policy being considered, from the date of plant closure to the anticipated date of retirement. Again, the expected gross earned income in each period is discounted to the present and summed. And finally, an estimate of the total gross economic benefit could be obtained by summing the present value of each individual's gross earned income stream.

In summary, the economic benefit of each policy alternative is equal to the value of labour production (the gross economic benefit) less the value of labour production in the baseline solution (the opportunity cost). This approach could serve as a satisfactory measure of benefits, with one notable exception.

When the policy alternative concerns subsidy of a major firm or industry, the cost of production is likely to exceed the value of production. Indeed, this fact probably led to the plant (or industry) shutdown. In this instance, labour's gross wage income would not be a satisfactory proxy of the social benefit of labour production. The gross benefit estimate could be revised to reflect this difference.

The simplest way to account for this discrepancy is first to calculate the present value of the future earnings stream of all individuals, on the assumption that they will remain in their usual occupations in the single-industry community, then to subtract from this figure the present value of all future subsidies to the firm. This calculation will accurately reflect the difference between the value and the cost of production as long as the subsidy level was the lowest possible at which the firm could

maintain normal operations. In the short run (that is, before the firm invests in new capital equipment), this subsidy would be set to cover the deficit between the costs and the value of production. However, as the firm invests in new capital to replace depreciating capital, it must be guaranteed the same average rate of return on this investment as it might expect to receive elsewhere in the industry. In the long run, then, the value of the subsidy should equal the operating deficit plus the opportunity cost of capital.

Net Present Value

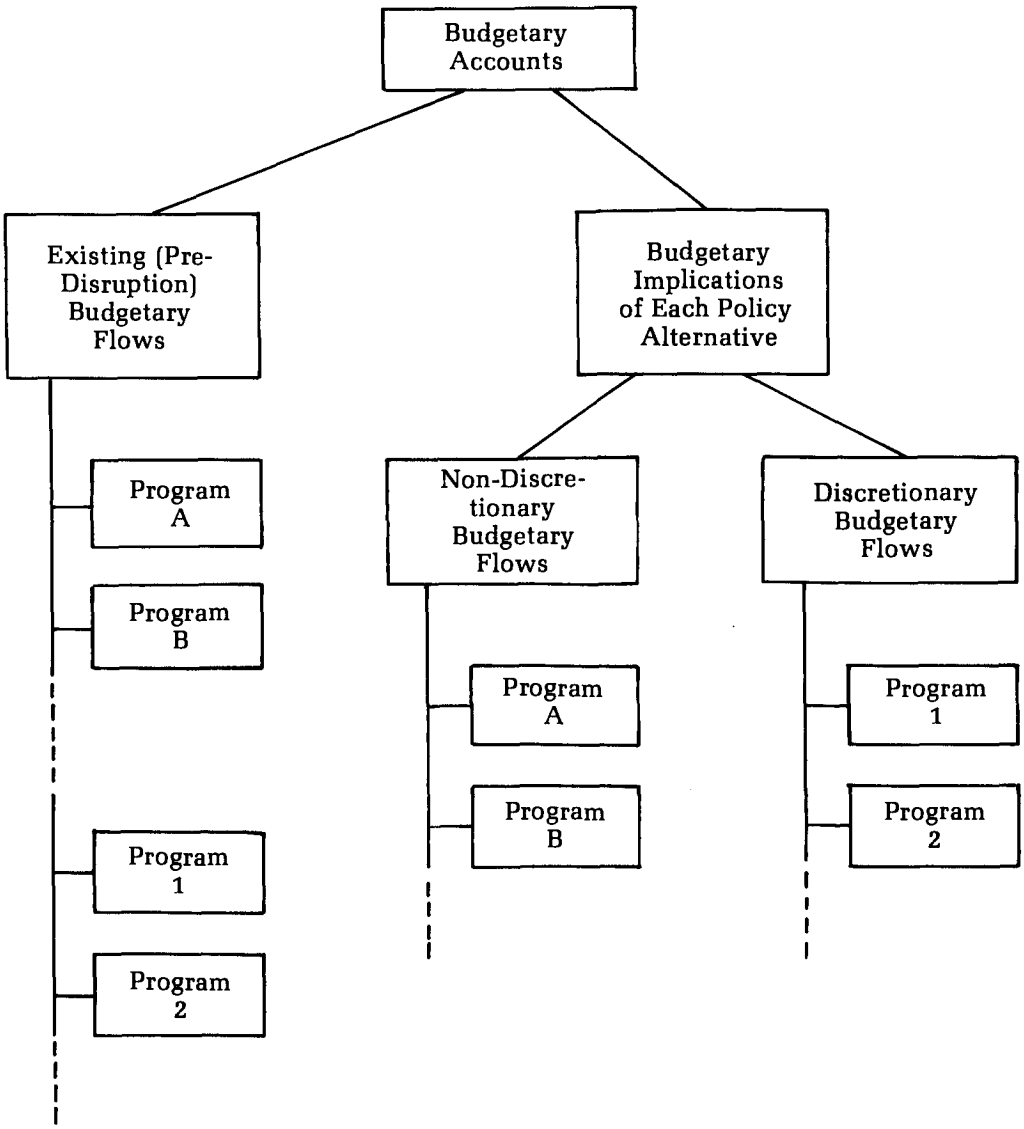
The net present value of the policy alternative is simply the present value of benefits less the present value of costs. However, for each alternative it is desirable to conduct a sensitivity analysis. The sensitivity analysis can encompass both variations in the discount rate and in some of the key parameters (e.g. the cost of providing additional social infrastructure in the relocation community). Therefore, the final output from the economic accounts will be a range of estimates of net present value, rather than a single estimate.

THE BUDGETARY ACCOUNTS

An exemplary accounting of budget costs for each policy alternative is outlined in Figure 5. The first column, existing budgetary flows, measures the level of government expenditure, on discretionary and non-discretionary programs, in the single-industry community before its disruption. This figure is a necessary element in calculating additional funds required, in the next and successive years, to implement the selected policy alternative.

The second column measures the budgetary cost of implementing a proposed policy alternative. The first part of the column, non-discretionary budgetary flows, measures the cost to governments of automatic stabilization and adjustment mechanisms that might be activated if policy alternatives (including the baseline solution) were implemented. Most of these mechanisms are income-support and employment-assistance programs.

FIGURE 5
THE BUDGETARY ACCOUNTS



The second part, discretionary budgetary flows, measures the budget needed to invoke non-automatic programs under each policy alternative. Such programs include employee-employer counselling services, industrial incentive grants and subsidies to industries. Each alternative will require a different configuration of programs and policies, except for the non-intervention alternative which will, of course, have no entries in this area.

A Greater Sensitivity

The framework for analysis presented in this section is hypothetical. From the analysis of the phenomena associated with single-industry communities, it is clear that the basic question concerns the appropriate use of this analytic framework. Does one await signs that the community is encountering difficulty? Should analysis await a final distress call from a floundering town? Or should the analysis be used on a continuing basis to monitor the likely effects of any change in the economy, international trading conditions, or government actions?

There is no single answer to these questions. Obviously, a greater understanding of the nature of single-industry communities by industry, by governments, and by the general public can lead to greater anticipation of potential trouble spots. But, otherwise proud and robust communities may not appreciate being tagged as "trouble spots" with every flutter of world prices. This indeed poses a dilemma for decision-makers and is not the subject of analysis in this study.

The descriptive analysis and the framework have been presented to foster the greater sensitivity to and understanding of single-industry communities. The health and future viability of these places will help determine the health and future course of the entire Canadian economy.

ADDENDA

ADDENDUM

REVISED CRITERIA FOR SELECTING COMMUNITIES

Applied research concerning single-activity communities has shown that it is useful to distinguish among three different concepts – single-industry communities, single-sector communities and single-company communities.

SINGLE-INDUSTRY COMMUNITY (SIComm.)

In the addenda a single-industry community is defined as a centre with 30 per cent or more of its employment listed as being in a single standard industrial classification (SIC). This definition is the same as that described on page 15 of the original study.

SINGLE-SECTOR COMMUNITY (SSC)

A single-sector community is defined as a centre which depends upon one resource or one type of activity and may combine a number of different but related SIC groups into one sector. For ex-

ample, this frequently occurs where the forestry sector simultaneously supports logging (SIC 031), sawmills (SIC 251) and paper mills (SIC 271). In this sense, the single-sector concept is much broader and more encompassing than the single-industry concept. For purposes of these addenda a single-sector community is defined as having at least 30 per cent of its employment in one sector*. (The maps produced for the original publication were also based on the single-sector concept).

SINGLE-COMPANY COMMUNITY (SCC)

A single-company community is defined as a centre having 25 per cent or more of its employment in one firm. It was felt that if one firm represented at least one-quarter of all job opportunities in a centre, then the economic well-being of the community was directly linked to the fiscal health and stability of that single firm.

DATA

The addenda** utilize the following major data sources:

1. Census of Population and Housing (1976);
2. Census of Manufacturing (1975);
3. Canada Manpower Centre data (1974); and
4. Private Data Source (1978). (This source is a private data system containing records of more than 470 000 Canadian business establishments.)

* The sectors and their corresponding SICs are outlined in Table 6.

** The previously published study used the 1971 Census of Population, 1971 Census of Manufacturing and 1974 Private Data Source. (See pages 15 to 18 for a more complete description.)

Where records appeared to be incomplete or contained conflicting data, efforts were made to correct possible errors by searching DREE's other data sources or contacting the private data source directly.

GEOGRAPHIC COVERAGE

The original study identified a total of 811 single-industry communities. It did not adopt a minimum size cut-off in terms of population and/or labour force because the intent was to gain some idea of the overall magnitude of the single-industry phenomenon in Canada. This resulted in the majority of communities being extremely small, unincorporated settlements (populations of 100 to 200). It was possible to include all communities because of the extensive geographic coverage and detail of the questions on the 1971 census. However, the 1976 census did not include a question on employment by industry, and, therefore, it is not possible for this edition to contain an analysis made at the same level of geographic detail. More detailed analysis of the "communities" identified in the original study also indicated that, because of limited infrastructure, places of less than 500 persons did not generally represent a significant level of community services. Such small communities tend to rely on larger places for essential services.

In light of these factors, it was decided that communities would be included in the addenda if they met any of the following criteria:

1. population of at least 1 000 and either 30 per cent of employment in one sector or 25 per cent of employment in one company;
2. population of between 500 and 1 000 and at least 50 persons employed in one sector; or
3. identifiable communities of uncertain population, but known to be less than 1 000 with at least 100 persons employed in one sector.

Different criteria were used for communities of less than 1 000 people as a result of data limitations. These different criteria were developed to reflect, to the greatest extent possible, the same principles that underlie the criteria applicable to larger centres. In other words, despite the fact that one uniform rule for community identification could not be imposed, an attempt has been made to use proxy measures which will effectively generate the same result as one set of criteria.

SINGLE-SECTOR CATEGORIES

The original study identified 10 types of industrial bases by which to categorize communities. (See page 13.) The addenda employ a 13-category classification. Table 6 provides a comparison between the two classifications.

The manufacturing sector has been redefined to highlight those communities engaged in the production of textiles, clothing, knitting and leather goods. The sector is, at present, going through considerable industrial adjustment because of increased pressure from foreign competition. The fact that these single-sector communities tend to be located in southern Québec adds another dimension to the issues posed by the adjustment process.

In order to reflect current concerns with energy resources in Canada, the refining and mining sector has been redefined to separate out communities dependent on fossil fuels.

The original study included a comprehensive category called "Construction, Tourism and Other Services". This has been separated into "Tourism", "Health and Education", and "Transportation". No "Construction" communities emerged from the 1978 analysis. This is due to the fact that construction camps were not treated as true communities, whereas in the 1971 census these camps appeared as unincorporated settlements.

A redefinition of agricultural service centres was undertaken to reflect the large number of prairie communities which were dependent upon agriculture. Prairie service centres are defined in the addenda as any community in the three prairie provinces with less than five per cent of its total labour force engaged in production activities other than agricultural production or processing. Thus, communities with significant employment in fishing, forestry, mining and/or non-food manufacturing were not selected as prairie service centres, nor were communities specializing in defence services.

A NEW LIST OF COMMUNITIES

This update and revision led to the production of a map showing the name, location, and economic activity of Canadian single-sector communities. This map may be found in the pocket at the back of this publication. A list of single-sector communities indicating the main economic activity, standard industrial classification code, 1976 population and labour force is included in the following addendum.

Table 7 provides a breakdown of single-sector communities by type of activity and by province. As shown in the table, the following resource-related industries form the economic base for 73 per cent of all single-sector communities:

- wood-based industries (28 per cent);
- prairie service centres (21 per cent);
- metal refining and mining (12 per cent); and
- fishing (12 per cent).

Quebec has the greatest number of single-sector communities (24 per cent). If prairie service centres were removed from the analysis, Quebec would account for more than 30 per cent of all single-sector centres. Quebec is also notable in that it has almost all Canadian single-sector manufacturing communities.

Table 8 provides a breakdown of single-sector communities by population size. The original study included 811 centres (424 centres of less than 1 000 people, 387 of more than 1 000 people) whereas this study includes only 426 (63 centres of less than 1 000 people, 363 centres of more than 1 000 people). This difference is due almost entirely to the elimination of very small communities from the analysis.

ADDENDUM

SINGLE-SECTOR COMMUNITIES*

BY PROVINCE

* As defined on DREE community data file.

NEWFOUNDLAND

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Arnold's Cove-Southern Harbour	Fishing (n.a.)		X		1 919	490
Baie Verte	Mining (079)		X		2 528	850
Bay Bulls	Fishing (102)		X		1 992	745
Bay de Verde	Fishing (102)	X	X	X	1 375	490
Belleoram	Fishing (041)		X		536	105
Bonavista	Fishing (102)	X	X		4 299	1 215
Buchans	Mining (059)	X	X	X	521	150
Burin	Fishing (102)	X	X	X	2 892	935
Burnt Island-Rose Blanche	Fishing (102)		X		1 898	555
Cartwright	Fishing (041)		X		675	225
Catalina	Fishing (102)	X	X	X	1 129	355
Change Islands	Fishing (041)		X		535	150
Channel-Port aux Basques	Transport (504)	X	X	X	6 187	2 200
Chapel Arm-Norman's Cove	Fishing (041)		X		1 867	580
Churchill Falls	Utilities (572)	X	X	X	930	330
Daniel's Harbour	Mining (059)	X	X	X	579	250
Dildo	Fishing (102)		X		1 637	660
Englee	Fishing (102)	X	X		989	220
Fermeuse-Renews-Port Kirwan	Fishing (n.a.)		X		1 199	335
Ferryland	Fishing (n.a.)		X		780	190
Fogo	Fishing (041)	X	X		1 103	280
Fortune	Fishing (102)	X	X	X	2 406	815
Gander	Transport (501)		X		9 301	3 900
Gaultois	Fishing (102)	X	X		558	170
Grand Bank	Fishing (102)	X	X	X	3 802	1 260
Grand Falls	Forestry (271)		X	X	15 078	5 480
Harbour Breton	Fishing (102)	X	X	X	2 317	615
Heart's Delight	Fishing (n.a.)		X		1 856	540
Isle aux Morts	Fishing (102)	X	X	X	1 270	400
Joe Batt's Arm	Fishing (102)		X		1 023	240

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Labrador City	Mining (059)	X	X	X	15 781	6 240
L'Anse-au-Loup-Forteau	Fishing (041)		X		1 250	415
La Scie	Fishing (102)		X		1 256	355
Long Harbour	Mining (378)	X	X	X	675	215
Marystown	Fishing (102)	X	X	X	5 915	1 785
Nain	Fishing (041)		X		812	280
Norris Arm	Forestry (031)	X	X	X	1 342	390
Port au Port	Fishing (102)		X		1 012	240
Port Hope Simpson	Fishing (041)		X		548	170
Port Saunders	Fishing (102)	X	X		691	190
Ramea	Fishing (102)	X	X	X	1 226	200[2]
Roddickton	Forestry (031)		X		1 234	250
Trepassey	Fishing (102)		X		1 427	405
Wesleyville	Fishing (041)	X	X		1 167	280

PRINCE EDWARD ISLAND

Borden	Transport (504)	X	X		589	215
Souris	Fishing (102)	X	X		1 447	530
Summerside	Defence (902)	X	X	X	14 145	5 945
Tignish	Fishing (041)	X	X	X	1 077	405

NOVA SCOTIA

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Antigonish	Education(806)	X	X	X	5 442	2 335
Berwick	Food and Beverage (100)	X	X		1 701	685
Bridgewater	Tires (183)	X	X	X	6 010	2 640
Canso	Fishing (102)	X	X	X	1 173	385
Chester	Furniture (259)	X	X	X	1 121	410[2]
Clark's Harbour	Fishing (102)	X	X	X	1 077	385
Hantsport	Forestry (271)	X	X		1 423	530
Ingonish Beach	Accommo-dation (881)		X		1 055	320[2]
Kingston-Greenwood	Defence (902)	X	X	X	2 462	830[2]
Liverpool	Forestry (271)	X	X	X	6 463	2 315
Lockeport	Fishing (102)	X	X	X	1 030	325
Louisbourg	Fishing (102)	X	X	X	1 519	595
Petit-de-Grat	Fishing (102)	X	X	X	1 655	520[2]
Pubnico	Fishing (102)	X	X		2 393	815
Pugwash	Mining (079)	X	X	X	746	300[2]
River Hebert-Joggins	Mining (061)	X	X	X	1 553	465
Sydney	Mining (061)		X		88 614	30 190
Wolfville	Education (806)	X	X	X	3 073	1 380

NEW BRUNSWICK

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Blacks Harbour	Fishing (102)	X	X	X	1 619	580
Canterbury	Forestry (271)	X	X		501	155
Cap-Pelé	Fishing (102)	X	X		2 287	1 020
Charlo	Forestry (271)	X	X	X	1 302	380
Chipman	Forestry (031)		X		1 999	620
Dalhousie	Forestry (271)	X	X	X	6 451	2 415
Doaktown	Forestry (251)	X	X		1 022	325
Eel River Crossing	Forestry (271)	X	X	X	811	200[2]
Gagetown	Defence (902)	X	X	X	655	245
Grand Harbour	Fishing (041)		X		527	180
Kedgwick	Forestry (251)		X		1 271	380
Lamèque	Fishing (102)	X	X		973	425
Lower Caraquet	Fishing (102)	X	X		1 728	600
Nackawic	Forestry (271)	X	X	X	1 341	490
Oromocto	Defence (902)	X	X	X	10 276	4 525
Paquetville	Food and Beverage (101)	X	X	X	601	215
Plaster Rock	Forestry (271)	X	X	X	1 368	495
Prince William	Mining (099)	X	X	X	500[2]	150[2]
Rivière Verte	Forestry (031)		X		1 009	335
Robertville	Mining (059)	X	X	X	928	360[2]
Ste. Anne de Madawaska	Forestry (031)		X		1 341	385
St. George	Forestry (274)	X	X	X	1 148	445
St. Leonard	Forestry (251)	X	X	X	1 593	480
St. Quentin	Forestry (031)		X		2 246	820
Shippegan	Fishing (102)	X	X		2 344	875

QUEBEC

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Acton Vale	Textile (186)		X		4 326	1 795
Asbestos	Mining (079)	X	X	X	14 395	5 785
Baie-Saint-Paul	Health (821)	X	X	X	4 062	1 600
Barraute	Forestry (031)	X	X		1 321	505
Bedford	Needles (399)	X	X	X	3 010	1 255
Belleterre	Forestry (252)	X	X	X	535	175
Bernierville[3]	Health (821)	X	X	X	2 182	685
Bromont	Electronic (399)	X	X	X	2 505	1 030
Bromptonville	Forestry (271)	X	X	X	2 992	1 175
Campbell's Bay	Forestry (031)		X		1 087	395
Carleton	Forestry (251)		X		2 538	940
Causapscal	Forestry (031)		X		2 743	905
Chandler	Forestry (271)	X	X	X	4 011	1 615
Clermont	Forestry (271)	X	X	X	3 518	1 290
Coleraine	Asbestos (079)	X	X	X	1 485	600[2]
Contrecoeur	Steel (291)	X	X	X	4 668	1 910
Cookshire	Clothing (165)		X		1 453	680
Cowansville	Clothing (165)		X		11 902	5 035
Crabtree	Forestry (271)	X	X	X	1 942	750
Daveluyville	Forestry (261)		X		1 321	545
Dégelis	Forestry (251)	X	X	X	3 304	1 085
Desbiens	Forestry (271)	X	X	X	4 689	1 720
Dolbeau	Forestry (251)		X		13 924	5 060
Donnacona	Forestry (271)	X	X	X	5 800	2 385
East Angus	Forestry (273)	X	X		4 417	1 740
East Broughton (CA)	Asbestos (079)	X	X	X	2 562	1 060
Farnham	Clothing (399)		X		6 476	2 735
Ferme-Neuve	Forestry (031)	X	X		2 113	725
Fermont	Mining (058)	X	X	X	2 913	1 350
Forestville (CA)	Forestry (031)	X	X	X	4 358	1 640

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Fort-Coulonge	Forestry (031)		X		1 683	610
Gagnon	Mining (058)	X	X	X	3 423	1 390
Girardville	Forestry (251)	X	X		1 035	400
Grenville	Non-metallic (359)	X	X	X	1 517	620
Havre-Saint-Pierre	Mining (058)	X	X	X	3 221	1 185
Hébertville-Station (CA)	Agriculture (101)	X	X		1 362	495
Huntingdon	Textile (182)	X	X	X	3 098	1 265
L'Annonciation	Health (821)	X	X	X	2 186	750
L'Islet	Transportation Equipment (324)	X	X	X	1 930	695
La Sarre	Forestry (n.a.)	X	X		4 978	2 040
La Tuque	Forestry (271)		X		12 067	4 870
Lac-au-Saumon	Forestry (251)	X	X	X	1 309	435
Lac Brome	Chemicals (377)	X	X	X	4 117	1 755
Lac-Etchemin	Health (821)	X	X	X	2 746	980
Lachute-Brownsburg	Ammunition (379)	X	X		15 042	6 340
Laurier-Station	Forestry (261)	X	X		1 260	470
Lebel-sur-Quévillon	Forestry (271)	X	X	X	3 591	1 435
Les Escoumins	Forestry (031)	X	X		1 811	495
Louiseville	Clothing (244)		X		6 766	2 750
Lyster	Metal Manufacturing (315)	X	X	X	811	340
Macamic	Health (821)	X	X		1 733	570
Magog	Clothing (181)	X	X	X	14 598	5 890
Malartic	Mining (051)	X	X		5 092	1 885
Maniwaki	Forestry (271)	X	X	X	5 969	2 470
Mansonville	Research (364)	X	X	X	590	240[2]
Maria	Health (821)	X	X	X	1 016	400[2]
Marsoui	Forestry (031)	X	X	X	541	200[2]
Matagami	Mining (059)	X	X		4 403	1 795
Mont-Rolland	Forestry (271)	X	X	X	1 591	680
Montebello	Tourism (881)	X	X		1 276	545
Murdochville	Mining (059)	X	X	X	3 704	1 555
New Richmond	Forestry (271)	X	X	X	4 295	1 555
Notre Dame-de-la-Doré	Forestry (251)	X	X	X	1 119	395
Notre Dame-du-Bon-Conseil	Food (101)	X	X		1 023	455

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Ormstown	Textiles (189)	x	X	X	1 503	585
Parent	Forestry (251)	X	X	X	385	130[2]
Paspébiac	Fishery (102)	X	X		1 807	615
Pont-Rouge	Building Products (n.a.)	X	X	X	3 342	1 355
Portage-du-Fort	Forestry (271)	X	X	X	390	150
Portneuf (CA)	Forestry (271)	X	X	X	3 225	1 310
Price	Forestry (031)	X	X	X	2 461	815
Richmond	Clothing (174)	X	X	X	4 482	1 950
Roberval	Health (821)		X		8 453	3 425
Saint-Anaclet	Health (821)	X	X	X	1 009	690
Saint-Alexis-des-Monts	Forestry (031)		X		1 815	845
Saint-Anselme	Food (101)	X	X	X	1 735	705
Saint-Césaire	Clothing (244)	X	X	X	2 701	1 170
Saint-Damien	Plastics (165)	X	X	X	1 678	450
Saint-Éleuthère	Forestry (031)		X		1 083	300[2]
Saint-François-d'Assise	Forestry (031)		X		1 100	300[2]
Saint-Fulgence	Forestry (031)		X		966	500[2]
Saint-Gédéon	Steel (302)	X	X	X	1 292	500
Saint-Honoré	Clothing (n.a.)		X		1 115	590
Saint-Joseph-de-Beauce	Forestry (031)		X		3 213	1 270
Saint-Michel-des-Saints	Forestry (251)	X	X	X	1 966	555
Saint-Pamphile	Forestry (031)		X		3 450	1 195
Saint-Raymond	Forestry (254)		X		3 926	1 605
Saint-Thècle	Forestry (251)	X	X	X	1 761	600
Saint-Tite	Leather (174)	X	X		3 128	1 250
Saint-Victor	Textiles (182)	X	X	X	1 044	405
Sacré-Coeur	Forestry (031)	X	X	X	1 252[2]	450[2]
Sainte-Adèle	Tourism (881)	X	X		4 186	1 890
Schefferville	Mining (058)	X	X	X	3 429	1 660
Sept-Îles	Mining (058)		X		30 617	13 300
Shawville	Mining (058)	X	X	X	1 724	730
Témiscaming	Forestry (271)	X	X	X	2 165	850

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Thetford Mines	Mining (079)	X	X		28 826	11 560
Thurso	Forestry (271)	X	X	X	3 066	1 195
Val-David	Tourism (881)		X		2 073	800[2]
Valcourt	Vehicles (329)	X	X	X	2 566	1 105
Waterville	Rubber (165)		X	X	1 458	625

ONTARIO

Angus	Defence (902)	X	X	X	3 494	1 470
Atikokan	Mining (058)	X	X		5 803	2 600
Beardmore	Forestry (031)		X		650	270[2]
Beaverton	Metal Products (306)	X	X	X	1 737	595
Bradford	Food and Beverage (051)		X		5 080	2 365
Capreol	Mining (058)		X		4 089	1 455
Cardinal	Food and Beverage (108)	X	X	X	1 867	695
Chalk River	Atomic Research (864)	X	X	X	1 095	445
Chesley	Furniture (261)	X	X		1 839	780
Chesterville	Food and Beverage (104)	X	X	X	1 324	570
Deep River	Federal Government (909)	X	X	X	5 565	2 465
Dryden	Forestry (273)	X	X	X	6 799	3 090
Dundalk	Automotive (325)	X	X	X	1 165	455
Durham	Furniture (261)		X		2 501	985
Ear Falls	Mining (099)		X		1 982	915

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Elliot Lake	Mining (059)	X	X		8 849	3 925
Espanola	Forestry (271)	X	X	X	5 926	2 320
Field	Forestry (251)		X		801	300[2]
Geraldton	Forestry (031)	X	X	X	3 127	1 420
Goderich	Heavy Equipment (315)	X	X	X	7 385	3 175
Hanover	Furniture (261)		X		5 691	2 570
Hearst	Forestry (251)		X		5 195	2 265
Hornepayne	Transport		X		1 694	580
Ignace	Mining (059)	X	X	X	1 983	880
Iron Bridge	Restaurant and Accommodation		X		790	350[2]
Iroquois	Textile (189)	X	X	X	1 278	510
Iroquois Falls	Forestry (271)	X	X	X	6 887	2 625
Kapuskasing	Forestry (271)	X	X	X	12 676	5 215
Lanark	Clothing (239)	X	X	X	803	380
Leamington	Food and Beverage (103)	X	X	X	11 169	4 675
Longlac	Forestry (252)	X	X	X	1 934	885
Manitouwadge	Mining (059)	X	X	X	3 551	1 535
Marathon	Forestry (271)	X	X	X	2 283	1 105
Mattawa	Forestry (251)	X	X		2 849	925
Milverton	Furniture (261)	X	X		1 393	565
Nakina	Transport (509)	X	X	X	620	220
Nipigon	Forestry (252)		X		2 724	1 140
Onaping Falls	Mining (059)		X		6 776	2 605
Ottawa	Federal Government (909)	X	X	X	521 341	257 230
Petawawa	Defence (902)	X	X	X	14 326	6 605
Pickle Lake	Mining (059)		X		508	220
Port Colborne	Smelting and Refining (295)		X		20 536	8 600
Red Lake-Balmertown	Mining (059)		X		4 893	2 260
Red Rock	Forestry (271)	X	X	X	1 694	695
Sault Ste. Marie	Steel (291)	X	X	X	81 048	34 045
Schreiber	Forestry (031)		X		2 010	745
Smooth Rock Falls	Forestry (271)	X	X	X	2 446	950
Spanish	Utilities		X		1 082	260

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Sturgeon Falls	Forestry (271)	X	X	X	6 400	2 145
Sudbury	Mining (059)		X		156 840	63 550
Temagami	Mining (058)	X	X	X	1 327	530
Terrace Bay	Forestry (271)	X	X	X	2 098	1 025
Thamesford	Agriculture (011)	X	X	X	1 872	810
Timmins	Mining (059)		X		44 747	17 475
Trenton	Defence (902)	X	X	X	32 634	14 355
Virginiatown	Mining (059)	X	X	X	1 189	395
Wawa	Mining (058)	X	X	X	4 272	1 700
West Lorne	Wood Products (254)	X	X		1 171	505
Wheatley	Fishing (102)	X	X	X	1 637	750
Windsor	Transportation Equipment (323)		X		222 756	94 115

MANITOBA

Town	Activity[1,4] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Arborg	PSC (650)		X		861	350
Ashern	PSC (650)		X		642	265
Birtle	PSC (650)		X		821	415
Carberry	Food Proc. (108)	X	X	X	1 423	565
Carman	PSC (650)		X		2 272	925
Churchill	Transport		X		1 900	455[2]
Dauphin	PSC (650)		X		9 109	3 765
Deloraine	PSC (650)		X		1 019	435
Fisher Branch	PSC (650)		X		529	215
Flin Flon	Mining (059)	X	X	X	10 306	4 380
Gilbert Plains	PSC (650)		X		847	300[2]
Gillam	Constr. (409)	X	X	X	2 839	1 455
Gladstone	PSC (650)		X		976	415
Grand Rapids	Utilities		X		655	230
Grandview	PSC (650)		X		1 013	355
Killarney	PSC (650)		X		2 348	895
Leaf Rapids	Mining (059)	X	X	X	2 067	850
Lynn Lake	Mining (059)	X	X	X	2 732	1 320
Manitou	PSC (650)		X		883	365
Melita	PSC (650)		X		1 169	485
Neepawa	PSC (650)		X		3 508	1 345
Niverville	PSC (650)		X		1 251	520
Pilot Mound-Crystal City	PSC (650)		X		1 243	490
Pinawa	Federal (864)	X	X	X	2 080	835
Pine Falls	Forestry (271)	X	X	X	1 100[2]	500
Roblin	PSC (650)		X		1 971	735
Russell	PSC (650)		X		1 524	645
Shoal Lake	PSC (650)		X		865	335
Snow Lake	Mining (059)	X	X	X	1 645	685
Souris	PSC (650)		X		1 712	775

Town	Activity[1,4] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Ste. Rose du Lac	PSC (650)		X		1 038	435
Swan River	PSC (650)		X		3 742	1 515
The Pas	Forestry (271)	X	X	X	6 602	2 945
Thompson	Mining (059)	X	X	X	17 291	7 600
Treherne	PSC (650)		X		706	275
Virden	PSC (650)		X		2 936	1 200

SASKATCHEWAN

Assiniboia	PSC (650)		X		2 738	1 080
Carnduff	PSC (650)		X		1 071	450
Davidson	PSC (650)		X		1 092	445
Eston	PSC (650)		X		1 354	645
Esterhazy	Mining (079)	X	X	X	2 894	1 055
Foam Lake	PSC (650)		X		1 387	515
Gravelbourg	PSC (650)		X		1 326	560
Grenfell	PSC (650)		X		1 363	555
Gull Lake	PSC (650)		X		1 053	450
Herbert	PSC (650)		X		986	320
Hudson Bay	Forestry (251)	X	X		2 280	930
Humboldt	PSC (650)		X		4 265	1 700
Ituna	PSC (650)		X		910	245
Kamsack	PSC (650)		X		2 726	1 025
Kelvington	PSC (650)		X		1 053	375
Kerrobert	PSC (650)		X		1 100	435
Langenburg	Mining (079)		X		1 197	425
Leader	PSC (650)		X		1 160	505
Macklin	PSC (650)		X		873	175

Town	Activity[1,4] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Maple Creek	PSC (650)		X		2 330	960
Melfort	PSC (650)		X		5 141	2 135
Naicam	PSC (650)		X		739	240
Nipawin	PSC (650)		X		4 317	1 585
North Battleford	PSC (650)		X		16 122	7 010
Outlook	PSC (650)		X		1 687	710
Porcupine Plain	PSC (650)		X		935	340
Preeceville	PSC (650)		X		1 170	495
Radville	PSC (650)		X		1 008	400
Rosetown	PSC (650)		X		2 551	1 135
Rosthern	PSC (650)		X		1 604	570
Shellbrook	PSC (650)		X		1 098	450
Spiritwood	PSC (650)		X		841	305
Swift Current	PSC (650)		X		14 264	6 520
Tisdale	PSC (650)		X		3 026	1 175
Uranimum City	Mining (059)	X	X	X	2 028	905
Wadena	PSC (650)		X		1 377	485
Wakaw	PSC (650)		X		1 031	380
Watson	PSC (650)		X		940	430
Whitewood	PSC (650)		X		1 072	380
Wilkie	PSC (650)		X		1 604	535
Wynyard	PSC (650)		X		2 045	830

ALBERTA

Town	Activity[1,4] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Banff	Accomo-dation (881)	X	X		3 849	1 400[2]
Blairmore (CA)	Mining (061)	X	X		7 282	2 740
Bow Island	PSC (650)		X		1 296	535
Canmore	Mining (061)			X	1 927	980
Cardston	PSC (650)		X		3 043	1 180
Carstairs	PSC (650)		X		1 059	100
Castor	PSC (650)		X		1 207	530
Cold Lake	Defence (902)	X	X	X	1 317	500
Evansburg-Entwistle	PSC (650)		X		1 051	405
Fairview	PSC (650)		X		2 248	900
Falher	PSC (650)		X		1 120	475
Fox Creek	Mining (064)	X	X		1 625	690
Fort McMurray	Mining (064)	X	X	X	15 424	6 840
Grande Cache	Mining (064)	X	X	X	4 116	1 825
Grand Centre	Defence (902)	X	X	X	2 780	1 100
Grimshaw	PSC (650)		X		1 665	675
Hanna	PSC (650)		X		2 627	1 105
Hinton	Forestry (271)	X	X	X	6 731	3 090
Jasper	Accommo-dation (881)	X	X		3 602	1 450[2]
Killam	PSC (650)		X		887	385
Lac la Biche	PSC (650)		X		1 954	660
Lacombe	PSC (650)		X		3 888	1 605
Lamont	PSC (650)		X		997	410
Mayerthorpe	PSC (650)		X		1 018	360
McLennan	PSC (650)		X		1 133	500
Nanton	PSC (650)		X		1 152	525
Oyen	PSC (650)		X		962	465
Ponoka	Health (821)		X		4 636	2 205
Provost	PSC (650)		X		1 532	615
Raymond	PSC (650)		X		2 290	780

Town	Activity[1,4] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Redwater	Chemicals (378)	X	X	X	1 493	620
Smoky Lake	PSC (650)		X		925	310
Spirit River	PSC (650)		X		1 020	395
Stony Plain	PSC (650)		X		2 717	1 070
St. Paul	PSC (650)		X		4 337	1 780
Strathmore	PSC (650)		X		1 561	695
Sundre	PSC (650)		X		1 099	440
Swan Hills	Mining (099)		X		2 012	845
Taber	Agriculture (103)	X	X		5 296	2 135
Tofield	PSC (650)		X		1 120	435
Vauxhall	Food Processing (103)	X	X	X	954	385
Vermilion	PSC (650)		X		3 182	1 335
Viking	PSC (650)		X		1 217	445
Vulcan	PSC (650)		X		1 442	625
Westlock	PSC (650)		X		3 721	1 450

BRITISH COLUMBIA

Ashcroft	Mining (059)	X	X		2 032	935
Barrière	Forestry (251)		X		835	355
Burns Lake	Forestry (251)		X	X	1 433	660
Cache Creek	Accommodation (881)	X	X		1 050	540
Campbell River	Forestry (271)		X		12 072	5 375
Cassiar	Mining (079)	X	X	X	801	430
Chemainus	Forestry (251)	X	X	X	2 129	805

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Chetwynd	Forestry (251)	X	X		1 487	560
Clearwater-Vavenby	Forestry (251)	X	X	X	1 611	810
Comox	Defence (902)	X	X	X	5 359	2 305
Crofton	Forestry (031)	X	X	X	1 143	470[2]
Duncan	Forestry (271)		X		4 106	1 800
Elkford	Mining (061)	X	X	X	1 873	790
Enderby	Forestry (251)	X	X	X	1 482	510
Fernie	Mining (061)	X	X	X	4 608	1 865
Fort St. James	Forestry (251)	X	X	X	2 110	880
Fraser Lake	Mining (059)	X	X	X	1 430	610
Fruitvale	Mining (295)	X	X	X	1 481	545
Gibsons-Port Mellon	Forestry (271)		X		2 074	865
Golden	Forestry (251)	X	X	X	3 282	1 555
Gold River	Forestry (271)	X	X	X	1 942	830
Granisle	Mining (059)	X	X		1 210	560
Harrison Hot Springs	Tourism (881)	X	X	X	3 496	1 465
Houston	Forestry (251)	X	X	X	2 673	1 245
Hudson's Hope	Construc-tion (409)	X	X	X	1 330	580
Kimberley	Mining (059)	X	X	X	7 111	2 995
Kitimat	Smelting (295)	X	X	X	11 956	5 485
Ladysmith	Forestry (251)		X		4 004	1 520
Lake Cowichan	Forestry (031)		X		2 369	920
Logan Lake	Mining (059)	X	X	X	1 388	555
Mackenzie	Forestry (251)	X	X	X	5 338	2 440
Masset	Defence (902)	X	X	X	1 563	690
Mica Creek	Construc-tion (409)	X	X	X	738	350
Montrose	Mining (295)	X	X	X	1 197	465
Nakusp	Forestry (031)		X		1 416	615
Ocean Falls	Forestry (271)	X	X	X	985	430[2]
Port Alberni	Forestry (271)		X		19 585	8 440
Port Alice	Forestry (271)	X	X	X	1 497	840
Port Hardy	Mining (059)	X	X	X	3 653	1 790
Powell River	Forestry (271)	X	X	X	13 694	5 450
Prince George	Forestry (271)		X		59 929	27 290
Quesnel	Forestry (251)		X		7 637	3 270
Sparwood	Mining (061)	X	X	X	4 050	1 635

Town	Activity[1] (SIC)	SIComm.	SSC	SCC	1976 Census Pop.	1976 Labour Force
Squamish	Forestry (271)		X		8 368	3 140
Stewart	Mining (059)	X	X	X	1 382	600
Tahsis	Forestry (031)	X	X	X	1 663	965
Terrace	Forestry (031)		X		10 251	4 625
Trail	Mining (295)	X	X	X	15 649	6 720
Youbou	Forestry (251)		X	X	1 064	440

YUKON AND NORTHWEST TERRITORIES

Faro	Mining (059)	X	X	X	1 544	790
Mayo	Mining (059)	X	X	X	448	175
Pine Point	Mining (059)	X	X	X	1 915	850

[1] The standard industrial classification is that of the largest company or firm in the community.

[2] Estimated.

[3] Also known as Saint-Ferdinand.

[4] PSC means Prairie Service Centre.

TABLE 6

COMPARISON OF SECTOR CATEGORIES

Original Sectors	Addendum Sectors	SIC Codes
Manufacturing	Manufacturing - Textiles, Clothing, Knitting, Leather	172-249
–	Manufacturing - Other	151-165, 286-289, 291-399 except 291, 294, 295, 365, 369
Refining and Mining: Metals	Refining and Mining: Metals	051-059, 291, 294, 295
Refining and Mining: Non-metals	Refining and Mining: Fuels	061-064, 365, 369
	Refining and Mining: Other Non-Metals	071-099
Wood-Based Industries	Wood-Based Industries	031-039, 251-274
Food Processing	Food Processing	001-021, 102-109 except 102
Fishing	Fishing	041,102
Utilities	Utilities	572-579
–	Tourism	881-886
Agricultural Service Centres	Prairie Service Centres	see text
Public Administration	Public Administration	902-991
–	Transportation	501-519
Construction, Tourism, and Other Services	–	–

TABLE 7

NUMBER OF SINGLE-SECTOR COMMUNITIES BY TYPE OF ECONOMIC ACTIVITY

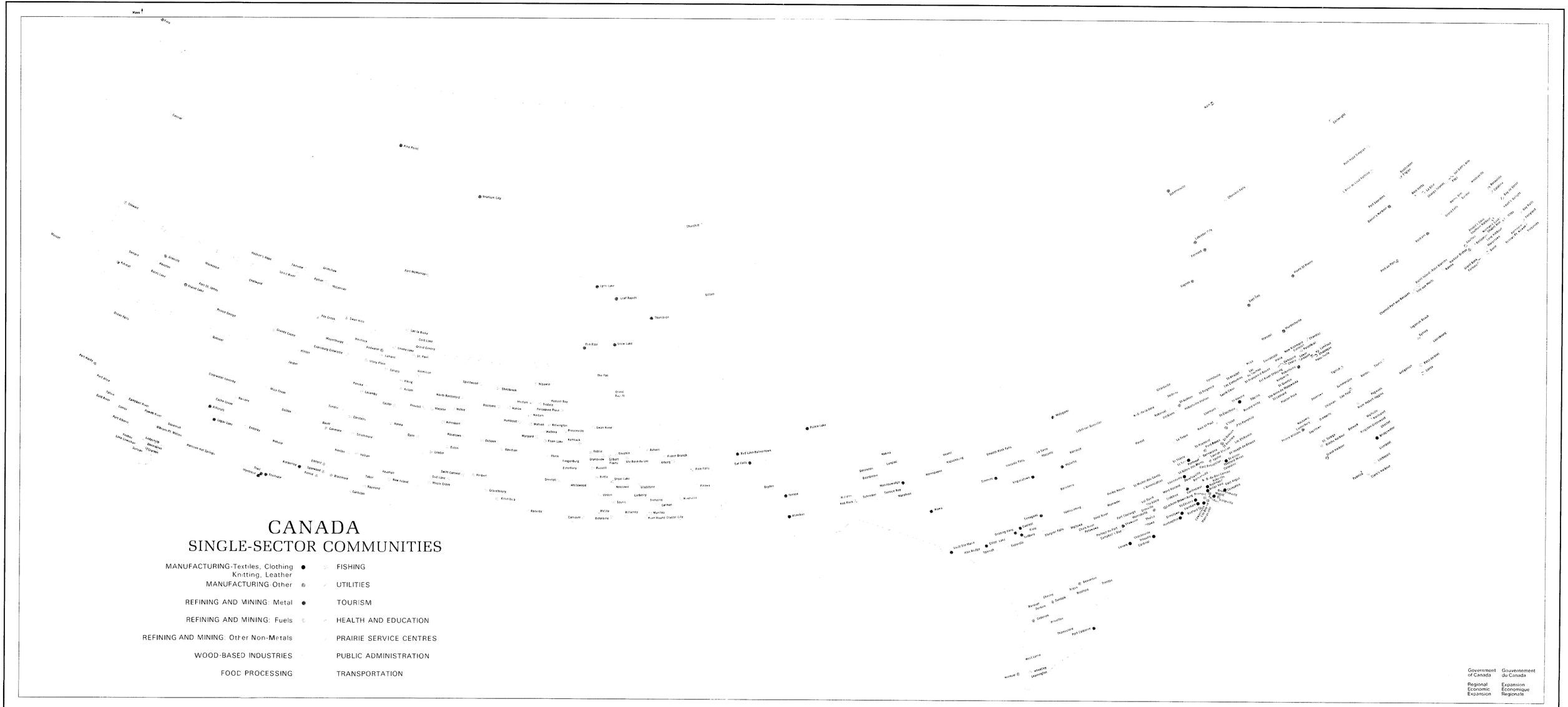
Industries	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	Yukon, NWT	Canada
Manufacturing – Textiles, Clothing Knitting, Leather												
Manufacturing – Other	–	–	–	–	12	4	–	–	1	–	–	17
Refining and Mining: Metal	3	–	–	2	10	16	5	1	–	11	3	51
Refining and Mining: Fuels	–	–	2	–	–	–	–	1	6	3	–	11
Refining and Mining: Other Non-Metals												
Wood-Based Industries	3	–	3	14	46	22	2	1	1	28	–	120
Food Processing	–	–	1	1	3	5	1	–	2	–	–	13
Fishing	33	2	6	6	1	1	–	–	–	–	–	49
Utilities	1	–	–	–	–	1	2	–	–	2	–	6

Industries	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	Yukon, NWT	Canada
Tourism	–	–	1	–	3	1	–	–	2	1	–	8
Health and Education	–	–	2	–	8	–	–	–	1	1	–	12
Prairie Service Centres	–	–	–	–	–	–	24	37	30	–	–	91
Public Administration	–	1	1	2	–	6	1	–	2	2	–	15
Transportation	2	1	–	–	1	2	1	–	–	–	–	7
	44	4	18	25	101	60	36	41	45	49	3	426

TABLE 8

SINGLE-SECTOR COMMUNITIES BY POPULATION SIZE (1976)

Population Size	Nfld.	PEI	NS	NB	Que.	Ont.	Man.	Sask.	Alta.	BC	Yukon, NWT	Canada
<500	0	0	0	0	2	0	0	0	0	0	1	3
500 – 999	13	1	1	8	5	6	10	7	5	4	0	60
1 000 – 4 999	26	2	13	15	79	32	22	31	36	33	2	291
5 000 – 29 999	5	1	3	2	14	16	4	3	4	11	0	63
30 000+	0	0	1	0	1	6	0	0	0	1	0	9
Total	44	4	18	25	101	60	36	41	45	49	3	426


CANADA
SINGLE-SECTOR COMMUNITIES
MANUFACTURING-Textiles, Clothing Knitting, Leather
MANUFACTURING Other
REFINING AND MINING: Metal
REFINING AND MINING: Fuels
REFINING AND MINING: Other Non-Metals
WOOD-BASED INDUSTRIES
FOOD PROCESSING
FISHING
UTILITIES
TOURISM
HEALTH AND EDUCATION
PRAIRIE SERVICE CENTRES
PUBLIC ADMINISTRATION
TRANSPORTATION
Government of Canada
Gouvernement du Canada
Regional Economic Expansion
Expansion Économique Régionale