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ATLANTIC DEVELOPMENT COUNCIL

MAY 1976

FOREWORD

The Atlantic Development Council was established by the Department of Regional Economic Expansion Act of the Parliament of Canada to advise the Minister on matters to which his duties, powers and functions extend in respect to the region comprising the Provinces of New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland. More specific terms of reference include giving consideration to, and making reports and recommendations to the Minister on plans, programs and proposals for fostering the economic expansion and social adjustment of the Atlantic Region.

The Regional Development Incentives Act (RDIA) is one of the principal means available to the Minister for direct stimulus of economic activity in the Region. After about two and a half years of the Act's operation, the Council felt that its impact in the Atlantic Region should be reviewed in the light of its general aims, and that recommendations warranted by its findings should be made to the Minister in the normal course of the Council's work. The RDIA program was the subject of much public debate at the time. The Department of Regional Economic Expansion was itself then beginning a policy review involving all of its programs, and wished to take into account the views of an advisory body reflecting the economic structure of one of the regions of Canada most conspicuously in need of the remedial benefits for which the department was created. It was in these circumstances that this study was undertaken, and readers are, therefore, asked to keep in mind that the report was first drafted in early 1973 about the period 1969-72.

The Council believes that the data obtained and provided in the study provide an accurate analysis of the operation of the RDIA program in the Atlantic Region during the period covered. Its recommendations were taken into account in the formulation of a number of changes in departmental administration and in the operation of the RDIA program itself that have since been put into effect. The Council further believes that the study will indicate some of the difficulties in Canada of influencing the patterns of economic behaviour in a region, and that periodic assessment of the program in its amended form should be undertaken again in due course.

The Council wishes to thank its staff for its scrupulous regard for objectivity in its study; to thank managers of the many firms in the region who cooperated in making such information available that must be regarded as commercially confidential; and to thank the Minister for his agreement to publish without alteration a study that was prepared for his private consideration, and one that the Council believes will contribute to a better understanding of the problems of economic disparity in the Atlantic Region.

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I. INTRODUCTORY STATEMENT

It would be difficult, if not impossible at this time, to make a firm, definitive and conclusive assessment of the impact on the Atlantic region of the regional development incentives program. In the first place, there has been, in respect of the program, no officially established and accepted set of specific objectives - qualitative descriptions of intermediate and ultimate aims - and targets against which results may be measured. Even if such standards and norms and the data necessary to measure their attainment existed, other factors would inhibit a hard and firm judgement. The program has been operating for a period of time which is still relatively short in the context of the far-reaching and complex changes which are required in the economy of the Atlantic region as a basis for satisfactory, self-perpetuating, long-term economic development. Thus, for example, the infrastructure program which complements the incentive program in the region's major growth centres, is intended to attract to such centres over time sufficient concentrations of industry to encourage further growth here and hence in the regional economy. Moreover, the incentives program has operated in a period of major economic disturbances and stresses, both internal and external; the early life of the program occurred in a setting of generally sluggish conditions in the national economy. Regional development programs cannot be expected to succeed in the absence of sustained, strong performance in the national economy.

In the light of the above qualifications, it was felt that a review of the RDIA program would be useful if it analyzed the contribution of the program both to the rate of change in manufacturing employment and to the structure of the manufacturing employment since the program's inception. It is also the purpose of this review to see whether the rate of change in manufacturing employment has been adequate; whether the nature of the change has been in accordance with a sound strategy for the further development of the regional economy; and what changes, if any, are needed in the RDIA program to make it more effective.

It is therefore less a question of making a firm, concise, once-for-all assessment of results of the program in terms of well-publicised and widely accepted criteria, and more a question of attempting to judge whether the key or critical foundations essential for the kind and pace of growth deemed necessary for the future have been initiated or introduced. Thus the main concern should be whether the principal directions of change are right and whether the pace and extent of that change is adequate.

II. SUMMARY OF FINDINGS OF STUDY OF ASPECTS OF EFFECTIVENESS OF RDIA PROGRAM IN THE ATLANTIC REGION

Introduction

1. This report is concerned with certain aspects of the effectiveness in the Atlantic Provinces of the industrial incentives program established under the Regional Development Incentives Act of 1969. In conjunction with the Special Areas program, the RDIA program is one of the federal government's major instruments for stimulating the growth of manufacturing employment and economic expansion in the less developed, and economically distressed, areas of Canada.
2. Under the Regional Development Incentives Act, most manufacturing or processing firms wishing to establish a new plant or to expand or modernize an existing plant in the Atlantic Provinces (with the exception of Labrador) can apply for a development incentive from the Department of Regional Economic Expansion. In the Atlantic Provinces a firm may receive an incentive of up to 35 per cent of the approved capital costs and \$7,000 for each direct job created by its assisted project. Under the legislation, the level of assistance possible in the Atlantic Provinces is somewhat higher than in other designated areas of Canada but, as elsewhere, the maximum incentive is subject to two limitations: it may not exceed \$30,000 for each job created directly by the project or 50 per cent of the capital to be employed in the operation, whichever is the lesser.
3. To provide firsthand source material for an assessment of the RDIA program in the Atlantic region, the Atlantic Development Council had a survey carried out in the winter of 1972-73 of all the 285 projects in the Atlantic Provinces that had accepted (and not subsequently declined) grants from the Department of Regional Economic Expansion during the period from the inception of the program in 1969 to the end of May 1972. The latter date was chosen because it was at the time the survey was planned and organized the latest date for which monthly reports on the RDIA program released by the Department were publicly available. While the survey is, therefore, confined to that period, data on the program to December 31, 1972, have been reviewed as part of this assessment.
4. Of the 285 projects, 108 had entered commercial production before the end of May 1972 and had received the first instalment of their RDIA grant. It was recognized that these 108 completed projects would be the principal source of information regarding the actual employment and wage impact of the program in the Atlantic region.

5. From these 108 projects a representative group was selected for personal interview:
 - (i) a random sample consisting of 51 firms that had received their first payment;
 - (ii) all the new facilities - this group numbered 52 projects which included 27 covered in the random sample and 4 in the group of large firms;
 - (iii) projects which were significantly larger than the other projects - 8 in number.

These groups are, as is indicated above, not mutually exclusive; the total interview group of projects, in fact, numbered 80.

6. In the course of these interviews, answers were sought to questions regarding the choice of location for the project, the influence of the RDIA grant on aspects of the projects such as timing and size, the amount and type of employment created and other factors. The interviews were conducted with senior firm officials responsible for the assisted project.
7. The remaining projects (205) in the group of 285 were sent a mail questionnaire of a shorter version than that used for the personal interviews.
8. The response rate to the questionnaire was very good. Seven of the eight large projects completed the questionnaire. Three projects in the random sample and eight of the fifty-two new projects were bankrupt or indefinitely out of production at the time of the interview survey. Excluding these projects, responses were obtained from 98 per cent of the projects in the random sample and approximately 96 per cent of the group of new facilities. In the mail questionnaire survey, which included 205 projects, there were 9 known bankruptcies and 16 projects that had declined the offer or had the offer withdrawn after May 31, 1972. Of the remaining 180 projects, about 48 per cent responded to the questionnaire.
9. In this document, findings and conclusions have been based primarily on the results of the interview group; however, results of the mail questionnaire have been used to check how representative the results of the interview group were.
10. This report is based upon the results of this survey and on information made public by the federal government with respect to incentive grants from the Department of Regional Economic Expansion.

11. The success of the RDIA program in the Atlantic Provinces may be measured by various criteria. It should make a significant contribution to the growth of the manufacturing sector in the region and it should increase the rate of manufacturing employment growth in the Atlantic Provinces *vis-à-vis* the rest of the country. It should also help to diversify the economic structure of the area. Finally, given the declared strategy of the current federal regional development policy, the acceleration and strengthening of the economic development of the Atlantic Provinces may be expected to come primarily through the development of the region's growth centres; the RDIA program should, therefore, significantly stimulate the development of these centres.

The Impact of the RDIA Program On Decision-Making in the Private Sector

12. If an entrepreneur changes his decision regarding the size, form, timing or location of a project, as a result of an incentive from government, the incentive program is having some effect on the regional incidence of investment decisions in the private sector. If he modifies his decision in a way beneficial to the Atlantic region the incentives program has created some beneficial direct economic impact that would not have been present but for the incentives program.
13. It can be expected that under any regional development incentives program there will be a certain number of projects which are assisted by grants from the public treasury but which would have gone ahead without the incentive. Of the projects in the random sample, respondents indicated that 36.2 per cent would have gone ahead without the RDIA grant. They accounted for only 14.9 per cent of eligible capital costs, 15.7 per cent of the total RDIA incentives and 21.0 per cent of expected additional employment, for the random sample group. According to the group of new facility respondents 31.0 per cent of the assisted projects would have gone ahead without the RDIA grant: these represented 16.4 per cent of eligible capital costs, 16.2 per cent of the total RDIA incentives and 24.9 per cent of expected additional employment for the new facilities group. In the majority of the cases for which it was indicated that the project would have gone ahead without the RDIA grant, at least one aspect of the investment decision, e.g. timing, size, or degree of mechanization, was altered because of the incentive, so that the incentive had some incremental impact. However, responses to "consistency-check" answers in the survey suggest that the number of projects which would have gone ahead without the RDIA grant is likely somewhat greater than the above-quoted figures.
14. An incentives program has a locational impact if the incentive induces economic activity to locate in an area where it would not have located without financial aid from government. The survey established that most businessmen contemplating expansion or modernization did not

perceive that they had a locational choice, i.e. to expand or modernize on their existing site or to build a new and/or more modern facility elsewhere. The potential locational impact of the DREE incentive program on existing firms wishing to expand or modernize must be considered small. Active consideration of alternative locations is more common amongst firms establishing new facilities and it is here that the RDIA program would seem to have its greatest potential scope for a locational impact. However, comparatively few of the new facility respondents considered more than one location for their project. This is partly explained by the fact that many of the businessmen involved indicated a strong business or personal attachment to a particular centre or area.

15. In terms of the Atlantic Provinces, the incentive program has an incremental locational impact if a firm that would have established a new facility outside the region is induced by the incentive to build a new facility in the Atlantic Provinces. Only one out of every seven (6 out of 42) new facility respondents considered a location outside the Atlantic Provinces for their project. Moreover, based on the results of the survey, in the period from 1969 to May 31, 1972, an average of only one new project per year had entered commercial production in the region that possibly would have located elsewhere but for the availability of the RDIA grant.
16. The survey also indicated that few projects have been influenced to locate in the major growth centres that would not have gone there but for the DREE incentive.
17. A "bringing forward in time" of investment is widely regarded by observers of the RDIA program as the most prevalent and important impact of the incentive. The survey results showed that 46.8 per cent of the projects of the random sample and 45.2 per cent of new facilities projects were brought forward in time by the incentive. A bringing forward in time was the most prevalent impact of the RDIA incentive with the exception of an impact on some aspects of the technology of the project. The importance of the timing impact suggests that perhaps the major role played by the RDIA program to date, as far as the Atlantic region is concerned, has been to offset a cyclical downturn in manufacturing investment.
18. On the other hand, some projects were delayed by the RDIA grant; this was the case for 19.2 per cent of the projects of the random sample and 7.7 per cent of the new facilities group.
19. An increase in the size of the assisted project, over and above what was originally planned, is another important impact on the investment decision which can result from the RDIA grant. Approximately 30 per cent of the assisted projects of the random sample were affected by the grant in terms of the amount of employment, the size of investment, the length of production runs and the number of product lines produced by the project. The percentages are approximately the same for new facility projects.

20. An impact on technology is an important incremental impact on the extent that the grant allows the use of more efficient and lower cost techniques and processes. The impact on technology was quite wide-spread, especially amongst the assisted projects involving expansion or modernization.
21. One of the major functions which the RDIA grant program is performing is the provision of capital to new ventures. Half the new facilities in the interview survey represented the formation of a new company. Perhaps more significantly, new companies accounted for 10 of the 18 new facility projects in industry groups outside the resource processing, food and beverage, and wood categories. Although projects representing the formation of new companies represent half of the projects in the new facilities group, these projects represent 80 per cent of the new facilities projects which are bankrupt, out of business, or unlikely to resume commercial production.

Incremental Direct Impact of the RDIA Program On Manufacturing Employment in the Atlantic Provinces

22. Information collected in the survey, on the number of employees and their paid hours of employment in the year ending October 31, 1972, in the assisted projects of the random sample, has been used to calculate the "incremental" direct employment attributable to the RDIA program. "Incremental" employment is defined as employment which would not have been created without the development incentive.
23. On an individual project basis, the survey results sometimes indicate a wide gap between actual employment and the estimated additional employment indicated in the public statistics published by the Department.
24. In the aggregate, however, on-site employment created by the assisted projects (random sample) came very close to the Department's published figures, being 95.9 per cent of expected additional employment.
25. Incremental employment, that which would not have been created without the development incentive, amounted to 83.6 per cent of expected additional employment.
26. A considerable proportion of the expected additional employment represents, however, not new jobs or employment gains but employment saving. An example of such a situation is the case where a grant is given for a project which represents the takeover or revival of a firm which is bankrupt or has gone or is going out of business. As a result incremental direct employment gain in the assisted projects of the random sample amounted to only 56.9 per cent of expected additional employment. This observation should not be taken as a reflection on the importance of "job saving". However, primary emphasis must focus on the program's success in creating additional, i.e. new, jobs.

27. The incentive cost of employment creation is calculated to be \$3,264 per job, based on the Department's published figures of expected additional employment. However, when the incentive cost of employment creation is calculated on the basis of full time jobs (52 weeks x 40 hours) this cost rises to \$4,563.
28. Employment gains created by the RDIA program are heavily eroded by job loss in the non-assisted portion of the manufacturing base. It is calculated that over the period 1969-72, employment gains of 2.2 resulted in net additional employment of one.

The Performance of the RDIA Program in the Atlantic Region

29. The RDIA program does not appear to have had any readily discernible effect on the relative growth performance of the manufacturing sector in the Atlantic Provinces during the period 1969-1972. The relative position of the Atlantic Provinces did not improve in the period 1969-1972 compared with the years between 1966 and 1969. That is to say, although the Atlantic region continued to increase its share of manufacturing employment in Canada, the share increased at the same rate as between 1966 and 1969.
30. In the Atlantic Provinces the rate of increase of net accepted offers has been falling since the early stages of the RDIA program. This same tendency is evident in the individual provinces.
31. Between 1969 and 1972, a net total of 1,957 projects accepted offers of DREE financial assistance. Of these projects, 353 were scheduled for the Atlantic Provinces and, according to DREE's published figures, were expected to create directly over 14,000 new jobs. This represents 17.2 per cent of the expected additional employment arising from all DREE incentives up to the end of 1972. It should be remembered, however, that the RDIA estimates of expected additional employment are gross figures and do not take account of job erosion. Moreover, a proportion of the RDIA expected employment does not represent additional employment but rather jobs saved (see section 26 above).
32. Initially the program was most successful in New Brunswick, but it does not appear to have gained any further momentum there in 1971 and 1972. In both Prince Edward Island and Newfoundland, the amount of activity under the program has been generally much lower than in New Brunswick and Nova Scotia. There is no indication that the program in the former provinces is gathering any momentum. The situation in Nova Scotia stands in sharp contrast to that of the other provinces. In comparison with New Brunswick, the RDIA program started slowly in Nova Scotia but there has been a significant increase in the monthly additional jobs announced for this province since 1970. The 1972 announcements for Nova Scotia included large expansions in the numbers employed at the two Michelin tire plants; projects of this scale are unlikely to be a frequent and regular occurrence.

33. The program has slowed down in the Atlantic Provinces relative to the other designated regions and particularly in relation to the central provinces of Quebec and Ontario, which increased their share of expected additional employment in 1971 and 1972. In this connection it is interesting to note that the central region has gained relative importance in terms of its percentage of net accepted offers not only with the designation of the Montreal metropolitan area, southwestern Quebec and the three eastern Ontario counties, but also because the program has gained, or at least maintained, its momentum in the "standard regions" of Ontario and Quebec.
34. The industrial distribution of all assisted projects in the Atlantic region corresponds fairly closely to the industrial distribution of the existing manufacturing base. However, if only the group of new projects is considered, it is apparent that the assisted projects are contributing towards some broadening of the manufacturing base and reducing the reliance of the region on resource-based manufacturing and resident industry. An industrial breakdown of the new facilities by province reveals that the assisted projects are doing more to broaden the manufacturing base in New Brunswick and Nova Scotia than in Newfoundland and Prince Edward Island.
35. One of the factors which has been widely regarded as tending to retard the growth of manufacturing employment in the Atlantic Provinces, relative to Canada as a whole, has been the comparative absence in the region of "growth" industries which, for the present purposes, are defined as those industries in which employment grew at a faster rate than in Canadian manufacturing industry as a whole during the 1961-1970 period. In 1969, only 32.6 per cent of manufacturing establishments in the Atlantic Provinces were in "growth" industries. However, some 40 per cent of the "new" facilities receiving RDIA assistance are in "growth" industries. The RDIA program appears to be making some progress in establishing "growth" industries in the Atlantic Provinces.
36. A key element in the present federal regional development strategy for the Atlantic region is the promotion of growth centres. In 1970 the federal government announced that four major growth centres in the region had been selected for special area status: St. John's (Newfoundland), Halifax-Dartmouth, Saint John (N.B.), and Moncton. These areas were seen to form the spearhead for the region's economic progress and so were designated to receive infrastructural assistance to aid their development. An examination of the annual increases in manufacturing employment between 1969 and 1972 provides little indication that the RDIA program is meeting with much success in the attempt to concentrate manufacturing employment in the growth centres. As a group, the growth centres have recorded lower increases (higher decreases) in manufacturing employment than the Atlantic Provinces as a whole.

37. As a group, the major growth centres have obtained just over 30 per cent of the employment in RDIA assisted new facilities in the Atlantic Provinces. These centres as a group had almost 25 per cent of Atlantic Provinces' manufacturing employment in 1969. Thus there appears to be a slight tendency for expected additional employment under the RDIA program to be concentrated in the growth centres. However, taken together, the four major growth centres are obtaining a considerably smaller share of "growth" industries than the Atlantic Provinces as a whole.
38. Lack of any significant observable impact of the RDIA program as presently designed and administered on the major growth centres does not, of course, indicate that the growth centre concept is not valid. It does suggest that as presently applied it is not proving a powerful instrument of regional or provincial development.

III. GENERAL CONCLUSIONS AND RECOMMENDATIONS

The incentives program in the Atlantic region has been a useful source of financial assistance for industry and has brought a welcome contribution to the growth of employment. Some of the assisted projects have been brought forward in time. The program has thus, to some extent, simply served as a counter-cyclical investment stimulus. It has, at least in New Brunswick and Nova Scotia, produced some sign of a beginning of some broadening and diversification of the manufacturing base.

Much of the activity under the program has come from expansions and modernizations of existing businesses in the region. As far as new operations are concerned, the evidence shows that the incentives program has not been effective in influencing the location of investments as between the Atlantic region and elsewhere. Business or personal attachment to the region on the part of the principals or owners, or proximity to the local market, have been the significant location stimuli for these new facilities.

Nor does the program appear to have had significant observable impact to date on the performance of the region's major growth centres relative to other areas in the region and in their respective provinces.

Moreover, the evidence to date and the trends with respect to offers and applications suggest that unless significant changes in policy and its applications are made, the program as far as the Atlantic region is concerned will not achieve further momentum but on the contrary may significantly run down.

It is evident that the program can no longer remain essentially passive, relying on the initiative of business for applications. It must be given a positive dynamic thrust which is guided to a much greater extent than at present by a clear concept of what industrial structure is to be promoted in each of the provinces and in the region as a whole. This requires a much stronger industrial intelligence and promotion effort, backed up by appropriate revisions in the policy of the incentive program and a streamlining of its administration.

Policy Differentiation

The survey results, together with the observations drawn from other published materials and the views from many sources, suggest that to be more effective, the programs should be divided into different categories. It would appear that expansions and modernizations of existing businesses could be treated on a more expeditious basis, possibly with some kind of fixed or automatic grant, provided that certain minimum criteria are met.

Such criteria would be concerned, for example, with adequacy of raw materials requirements, viability, general suitability.... A system of non-discriminatory grants for this group would speed up the grant application process, and free the review and administrative resources for more effective use in other areas. It is noted that the incidence of delayed projects was higher in the case of expansions and modernizations of established businesses than for new projects.

Special consideration should be given to those projects which involve the formation of a new company. The survey shows that it is in this category that the highest numbers of bankruptcies and failures occur. There is obviously a need for a better assessment of the viability of applications and a vigorous program of post-incentive care, surveillance and assistance. Consideration should be given to the establishment within the incentives program of arrangements which would enable the government to take an equity position in new ventures.

It appears unlikely that a one-shot cash grant, of a feasible amount, can by itself appreciably affect the location decisions of businessmen. This relates to the factors which govern business decisions on investment, the relatively small impact on per-unit costs of a grant of a size which could be considered politically feasible, and the great variation in the impact of different incentive measures on the universe of business firms. If outside investment is to be attracted to the region to a significant extent, it is suggested that a package of incentives and inducements would have to be employed so that negotiators have significant flexibility to develop the mix of measures which the specific development opportunity requires. This array of development inducements should, of course, also be available for significant new development proposals originating within the region.

Industrial Intelligence and Promotion

Successful application of an incentives program must, in the opinion of the Council, be founded upon a comprehensive industrial intelligence system; and opportunities must be systematically pursued and promoted in accordance with the guidance this provides.

Basic to this is a systematic, continuous, program aimed at identifying the industrial opportunities which appear most promising for the region in consideration of its assets and needs on the one hand and of the requirements of the industry concerned on the other hand.

The industrial promotion and development effort should involve agencies or groups working closely with the businessmen of the area to achieve well-researched and documented opportunities for expansion and development, particularly those which involve unexploited supply and demand relationships with other businesses in the area. Such a program must also work at attracting selectively, and on the basis of thoroughly researched and prepared opportunities, business interests from outside the region.

Administration of RDIA

Improvements are required in the administration of the incentives program. Complaints regarding long delays in the processing of applications are quite common; in some cases, particularly for small firms, information and documentation requirements are considered onerous. In some cases, delays in the receipt of first payment at the time and in the amount expected have caused serious financing problems and embarrassment to the firms involved. In at least some of these cases, this was probably unavoidably due to the legal requirements associated with first payments; but improved *communication* between the department and the firm would at least have mitigated, if not resolved, the problem in a number of cases.

A further problem concerns the kind and quality of information which is an input to decision-making on projects. There were a number of instances where a better knowledge of local conditions might have precluded the support of projects which subsequently were shown as wrongly located in relation to raw material sources which were quickly proven to be inadequate.

An integral part of the administration of the incentives program should be a vigorous program of post-incentive care, surveillance and assistance which includes, where necessary, the availability of top managerial emergency assistance plus scientific-technical operation and development support. Concern for and interest in an incentive-assisted project must in other words carry through to the period of its successful establishment and operation.

The Council has already recommended to the Minister a large measure of decentralization with regard to decision-making and administration of incentive grants. Such decentralization should do much to eliminate delays in the processing of applications and, equally important, ensure that there is a much more adequate assessment of the appropriateness, suitability and viability of the projects, and a much closer monitoring of projects in the post-incentive stage.

The Council also recommends that there be made available to applicants all assistance needed to prepare applications for incentives. This has been a significant problem for small businesses. To avoid the situation in which the same agency is involved in both the preparation of applications and the decision-making with respect to the application, it would seem preferable that this service be primarily under provincial auspices. However, federal cooperation in this program, if needed, should not be ruled out.

Reporting on RDIA

A revision of the Department's public information system with respect to incentive grants is recommended. The present system of reporting can sometimes be ambiguous and does not provide a good basis for analysis or assessment of the real impact of the program. Moreover, the present system

of reporting seems to be productive of needless friction and misunderstanding, particularly with respect to the probable employment figures associated with individual projects.

A system should be instituted for the prompter up-dating of reporting on incentive-assisted projects. Specifically, the tabulation of net accepted offers under the RDIA program should be adjusted promptly in cases where the project has ceased commercial production for other than seasonal reasons. Public information on the development incentives should be extended to cover the period beyond the announcement of the incentive through to the end of the control period and receipt of the final grant payment. To cover the problem of obtaining comprehensive and realistic employment estimates, consideration should be given to making periodic reporting on employment mandatory as a condition of grant approval. Alternatively, departmental procedures must be developed to permit comprehensive and meaningful reports on employment aspects of the grant. Consideration might be given to periodic reports which provide cumulative statements of activity to date on a more meaningful basis than that presently available from the monthly reports.

Growth Centres

The survey, which largely forms the basis of this report, does not, in itself, provide any conclusive evidence with respect to the effectiveness of the infrastructure program in these centres.

The growth centres have not shown dramatic performance under the incentives program but in the absence of agreed criteria for performance and of much more detailed knowledge of these centres than is readily available, there is no proof that the growth centre concept is not valid. It seems clear, however, that under the present format of the growth centre policy (which is essentially passive) these centres are unlikely to fulfil the developmental role assigned to them. If the growth centre program is to be continued, detailed integrated plans designed to systematically explore, outline and activate its potential must be drawn up and pursued. Moreover, infrastructure programs must be geared as precisely as possible with a comprehensive development plan and with definite industrial possibilities. The whole program affecting growth centres should be monitored on the basis of agreed criteria established in advance. This would provide the factual basis for decisions as to whether programs and policies at any point in time are working or, on the contrary, require change.

CHAPTER 1

INTRODUCTION

This report is concerned with the progress and effectiveness in the Atlantic Provinces of the industrial incentives program established under the Regional Development Incentives Act of 1969. This Act (RDIA) is the successor to the Area Development Incentives Act of 1965 and is administered by the Department of Regional Economic Expansion (DREE). In conjunction with the Special Areas program, the RDIA program is one of the Department's two major instruments for stimulating the growth of manufacturing employment and economic expansion in the less developed, the economically distressed, areas of Canada. The current RDIA program offers substantially higher incentives to industry than were available under the old Area Development Incentives Act and applies to a much wider area. In the Atlantic Provinces all but Labrador forms part of the "designated area" to which the RDIA program applies (Fig.1.1). Thus, in contrast to the former Area Development Agency incentives program, all the major urban centres in the Atlantic region qualify for industrial incentives under the RDIA program.

1.1 The Regional Development Incentives Act

The Regional Development Incentives Act provides "incentives for the development of productive employment opportunities in regions of Canada determined to require special measures to facilitate economic expansion and social adjustment"¹. Under this Act most manufacturing or processing firms wanting either to establish a new plant or to expand or modernize an existing plant in the areas designated under the program can apply for a development incentive from the Department of Regional Economic Expansion.

In most parts of Canada, including the Atlantic Provinces, the extent of the designated area to which the RDIA incentives apply has not changed since the inception of the program. Nevertheless, in December 1970, the main thrust of the program was substantially altered. Until that date the whole of the St. Lawrence-Great Lakes region extending from Montreal to Windsor was excluded from assistance under the Regional Development Incentives Act. With the amendment of the Act at the end of 1970 the Montreal metropolitan region, other parts of southwestern Quebec, and three

¹ *Regional Development Incentives Act*, 17-18, Elizabeth II, 1968-69, c.56 amended 1970-71, c.10. Information Canada, Ottawa, 1971.

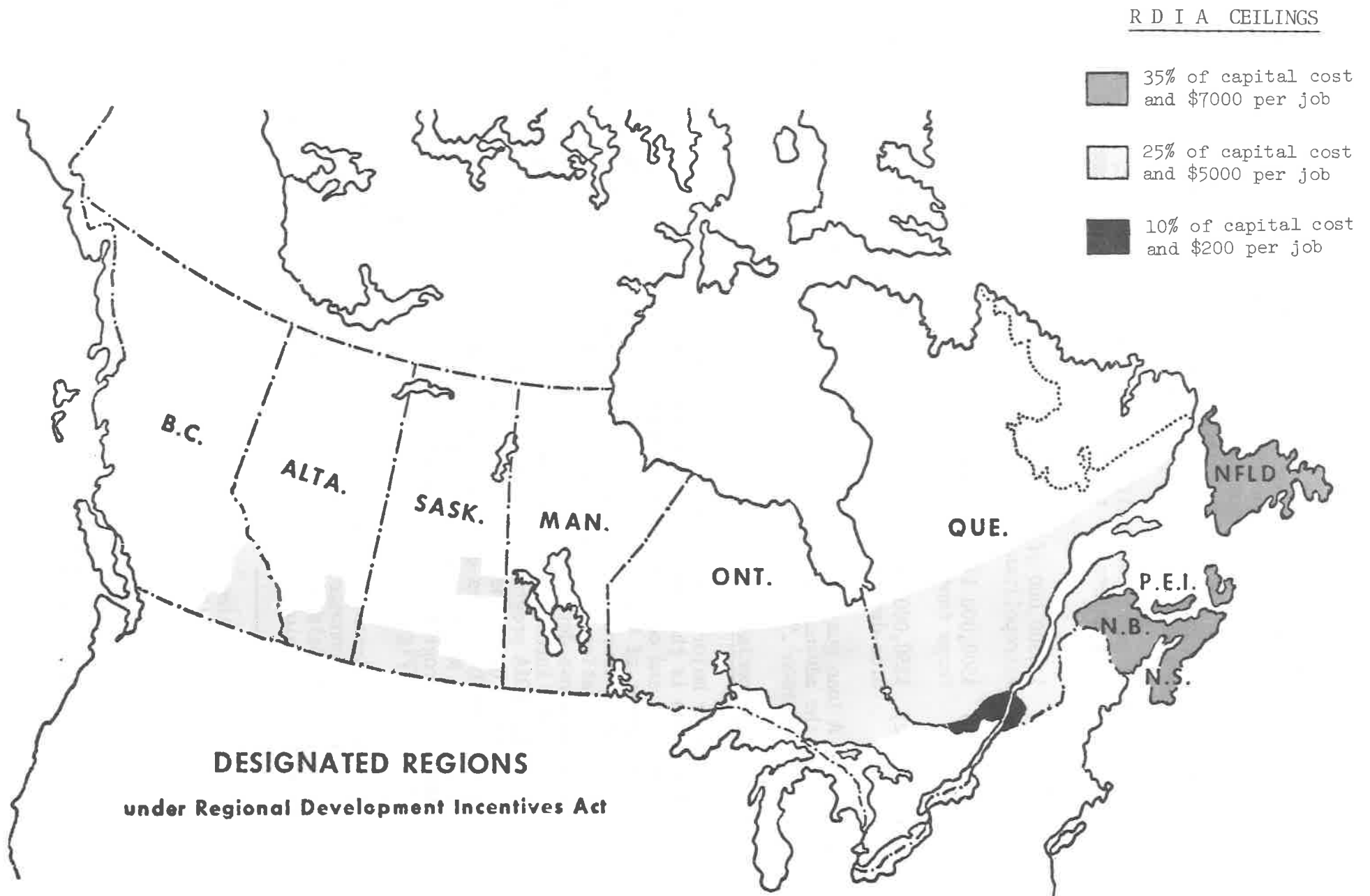
counties in eastern Ontario (Prescott, Stormont and Glengarry) became eligible for industrial incentives under the RDIA program. In these areas the program remains in effect until June 30, 1973; in the original designated areas, including the Atlantic Provinces, it continues until the end of 1973. With the addition of the Montreal region, southwestern Quebec and part of eastern Ontario, the RDIA designated region includes approximately 45 per cent of the Canadian labour force employed in manufacturing and 50 per cent of the Canadian population.

The structure of the incentives program was also modified by the amendments of December 1970, with the introduction of a three-tier system of incentives together with loan guarantees for manufacturing and commercial facilities. The three-tier incentive system currently in operation is as follows:

- (a) In the Montreal metropolitan area, southwestern Quebec and the three eastern Ontario counties, a firm may receive an incentive of up to 10 per cent of the approved capital costs and \$2,000 per new job created.
- (b) In other designated areas outside the Atlantic Provinces, a firm may receive a maximum grant of 25 per cent of approved capital costs plus \$5,000 per new job created.
- (c) In the Atlantic Provinces (excluding Labrador), a firm may receive an incentive of up to 35 per cent of approved capital costs and \$7,000 for each direct job created. (Fig.1.1). This incentive comprises a primary, secondary and special development incentive. The last applies only in the Atlantic region and amounts to no more than 10 per cent of the approved capital costs plus \$2,000 for each job created directly by the project. This special incentive can be awarded to any type of project covered by the RDIA program. A new facility, or an expansion of an existing facility that involves the production of a new product, may qualify for both the primary and secondary development incentives; the expansion or modernization of a facility may qualify for a primary, but not a secondary, development incentive. The primary incentive cannot exceed 20 per cent of the approved capital costs of the project or \$6,000,000, whichever is the lesser. The secondary development incentive cannot exceed 5 per cent of the approved capital costs plus \$5,000 per new job created directly by the project.

It should be noted that in all of these designated areas the maximum incentive or combined incentive may not exceed \$30,000 per job created directly by the project or 50 per cent of the capital to be employed in the operation, whichever is the lesser.

Figure 1.1



From the end of 1970, a loan guarantee could be given to any manufacturing enterprise in a designated area under the RDIA program, or to a commercial facility that provides commercial services including business offices, warehousing facilities, shopping centres, convention facilities, hotel accommodation or recreational facilities. The commercial facility must be located in a place that is a large centre of population and must provide services on a major scale in relation to the size of the place. However:

"a loan guarantee shall not be authorized in respect of a commercial facility unless the total capital costs of the commercial facility exceed:

- (a) \$2,500,000 if the commercial facility is located in the metropolitan area of Montreal,
- (b) \$500,000 if the commercial facility is located in any other large centre of population, or
- (c) \$250,000 if the commercial facility is located in any other area designated under the RDIA program.

A loan guarantee shall not exceed 90 per cent of the total amount of the advances made by the lender to the borrower plus the interest thereon²."

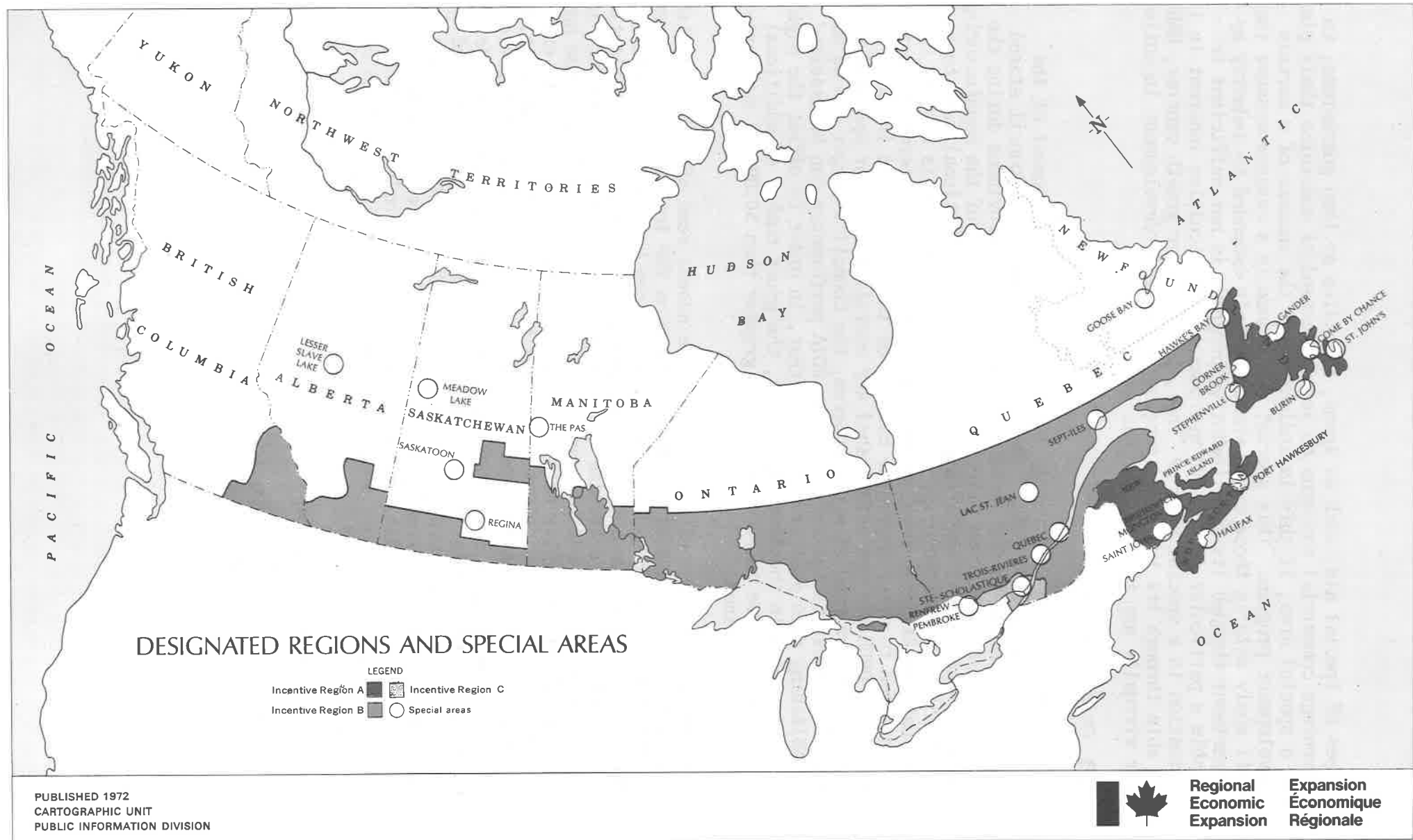
1.2 The Special Areas Program

The other major policy instrument of the Department of Regional Economic Expansion is the Special Areas program, which is designed to make the less developed and economically distressed areas more attractive for the development of business. Among other things, this program allows the Department to provide infrastructure assistance to centres or areas which, in consultation with the respective provinces, it has identified as growth centres whose development will aid in the economic expansion of a region. It was the intention of the new federal regional policy announced in 1969 that the RDIA program would aid the development of growth centres designated under the Special Areas program. In the Atlantic region the major growth centres designated under this program are Halifax-Dartmouth, Saint John, Moncton and St. John's. Other minor growth centres designated under the program include Corner Brook, Stephenville and the Strait of Canso area (Fig. 1.2).

The Special Areas program also allows the Department to give incentives to types of economic activity located in the growth centres that would not qualify for assistance under the RDIA program. According to the former Minister of Regional Economic Expansion, the program can "provide various

² *Regional Development Incentives Act*, 17-18, Elizabeth II, 1968-69 c.56 amended 1970-71, c.10. Information Canada, Ottawa, 1971.

Figure 1.2



types of special aid, such as loans, subsidies or loan guarantees, to encourage commercial concerns to settle, expand or modernize their plants in a special area, if this is indicated for the success of a certain development program. This special assistance is a *reserve* measure that will apply *only* in those cases where the help extended to industry by the Department through its main incentive programs is not sufficient to enable a particular concern to overcome the difficulties inherent in its situation in a special area".³ Thus, in the major growth centres, DREE is able through its two major programs to provide development incentives for virtually any type of economic activity.

1.3 Objectives of the Study

In its publication "A Strategy for the Economic Development of the Atlantic Region, 1971-1981"⁴ the Atlantic Development Council stated that the stimulus to the economy of the Atlantic Provinces during the period 1971-81 must come primarily from the growth of the manufacturing sector. The Council set a target of 50,000 net additional jobs to be created in the manufacturing sector in the course of this decade. Although the Atlantic Development Council target was determined in relation to the need to restructure the economy of the region, and in spite of the fact that DREE has not established any overall targets or specific targets for its RDIA or special areas program, the Council's target can be used as a useful yardstick against which the RDIA performance can be assessed. In establishing this goal it recognized that, in order to offset the high rate of job erosion in the Atlantic region, the gross number of additional jobs created would have to be considerably greater than 50,000 if the target were to be attained.

The overall objective of this study is to assess some of the identifiable and measurable effects of the RDIA program on the locational and investment decisions of firms and what contribution it can be expected to make to the employment target enunciated in the Council's strategy for the Atlantic region. In order to determine the size and nature of the employment impact attributable to the RDIA program, it was necessary to ascertain the number and type of jobs actually created by the assisted projects and to examine the impact of the development incentives on the investment and locational decisions of the assisted firms. The present report does not represent a complete assessment of the RDIA program. No attempt has been made to trace either the spatial and sectoral impacts arising from input and shipments of the assisted projects or the impact of the incentive on the profitability of an assisted project. Indeed a complete assessment of the effectiveness of the RDIA program requires further studies in a number of areas. The present report should be regarded as an investigation of a

³ The Honourable Jean Marchand, *Hansard*, March 20, 1970, p.6895.

⁴ Atlantic Development Council, *A Strategy for the Economic Development of the Atlantic Region, 1971-1981*, Ottawa, 1971.

limited number of aspects in what should be a continuing evaluation of the program. Of course, it should be remembered that the program has been in effect for only 3-4 years and that some major projects require a considerably longer period to reach fruition. Consequently, this study is concerned with the nature of progress to date and whether this progress provides the kind of foundation that the region needs for strong future growth.

It is considered, therefore, that there should be a survey of incentive recipients in the Atlantic Provinces to appraise the grant's influence on the recipient firm in a number of respects. It must be appreciated that the official employment information released on individual projects presents estimates of the additional employment to be created two to three years after the start of commercial production⁵. It was considered desirable to measure to what extent employment estimates were in fact being achieved, and also the extent to which the estimated additional employment officially credited to the RDIA program is incremental, i.e. employment that would not have been created but for the development incentives. Two surveys of grant recipients made under other auspices had also taken up these questions. In his study based on personal interviews (from 2-4 hours duration in the majority of cases) with 31 firms receiving RDIA grants, Dr. David Springate found that 11 of 18 large companies and 2 of 13 small companies were completely unaffected by the development grants⁶. In another study involving a mail survey of all firms accepting offers for projects in the Atlantic Provinces as of March 31, 1971 the Atlantic Provinces Economic Council found that 24.7 per cent who returned their questionnaire would have undertaken their project in the Atlantic region without the RDIA grant⁷.

Both studies made valuable contributions to the evaluation of the program established under the Regional Development Incentives Act. However, the Springate study was not exclusively concerned with firms located in the Atlantic region and, because of the nature of this survey, the sample of firms had to be kept quite small. The survey of the Atlantic Provinces Economic Council was carried out entirely by mail and, although the response rate was high for this kind of survey, is subject to the general criticisms which may be made of any mail survey. In particular, the people who respond to a mail survey may not be typical of the whole group under

⁵ The DREE *estimates* of additional employment represent anticipated employment arising from the assisted projects. It might be expected that these figures contain significant upward bias.

⁶ Springate, D.J.V. *Regional Development Incentive Grants and Private Investment in Canada: A Case Study of the Effect of Regional Development Incentives on the Investment Decisions of Manufacturing Firms*. Harvard University, 1972.

⁷ Atlantic Provinces Economic Council. *The Atlantic Economy Fifth Annual Review*, October 1971, pp. 36-72.

investigation. Moreover, because the APEC study was conducted with limited funds and over a short period, the length of the questionnaire was kept to a minimum.

It was decided, therefore, to undertake a survey of grant recipients in the Atlantic Provinces that would permit an assessment of the grant's influence on the recipient firm and would, it was hoped, not be open to criticism on account of the size and scope of the information base and the representativeness of the respondents.

1.4 Sources of Information for the Present Study

The present report is based on information with respect to RDIA incentives made public by the federal government and information derived from a survey of all the 285 projects in the Atlantic Provinces that had accepted grants from the Department of Regional Economic Expansion during the period from the inception of the program in 1969 to the end of May 1972⁸. Projects for which an offer of assistance had been accepted, but subsequently declined prior to May 31, 1972, were excluded from the study. Of the 285 projects, 108 had entered commercial production before the end of May 1972 and had received the first instalment of their RDIA grant, which amounts to no more than 80 per cent of the incentive offered to, and accepted by, them⁹.

It was recognized that the 108 completed projects that had received the first part of their grant from the Department of Regional Economic Expansion would be the principal source of reliable information regarding the employment and wage impact of the program in the Atlantic region. It was decided, therefore, that representative groups from these 108 projects should be selected for personal interview.

In the course of these interviews answers were sought to questions regarding the choice of location for the project, the relative importance of various types of financial assistance received by the firm, the influence of the RDIA grant on the project, the amount and type of employment created, the source of employees and the wages paid to them¹⁰.

⁸ The number of firms involved was less than 285 because some firms received offers of assistance for more than one project. Each of these projects is treated separately for the purposes of this study.

⁹ Under the *Regional Development Incentives Act*, up to 80 per cent of the development incentive is paid to the firm when the project has been brought into commercial production. In the case of a primary development incentive the remainder is paid to the firm over a period of 30 months from the date on which the project entered commercial production: in the case of a combined incentive it is paid over a period of 42 months.

¹⁰ The survey questionnaire is presented in Appendix B.

Eighty of the 108 projects that had entered commercial production before the end of May 1972 were selected for personal interview. These eighty projects comprise three groups selected because they are (i) abnormally large projects, (ii) typical of the firms that had received their first payment, or (iii) new facilities. These groups are not necessarily mutually exclusive.

1.4.1 Large Projects

Eight of the 108 projects were classed as abnormally large projects. They had received a first grant payment in excess of \$400,000. The findings of some research workers have shown that the impact of government aid on the behaviour patterns of larger firms may be quite different from the impact on smaller firms. In the light of these findings the eight large projects were isolated for the purposes of this study.

1.4.2 Random Sample

From the remaining 100 projects a random sample was selected for interview. The selection of the random sample was controlled by two considerations: the sample should have representation from all four provinces and it should have a confidence level of at least 95 per cent. Because of the very limited number of completed projects in Newfoundland, the projects on Prince Edward Island and Newfoundland were treated as one group and those in Nova Scotia and New Brunswick were treated as another. A random sample of firms was then drawn from each stratum in proportion to the number of projects in each group. The stratified random sample of 51 firms has a level of precision of ± 15 per cent i.e. the stratum mean will lie between ± 15 per cent of the true value of the stratum population mean.

1.4.3 New Facilities

The new facilities¹¹ constructed with assistance under the regional development incentives program were also deemed to be of especial interest as regards the locational impact of the program. There were 52 such projects included in the 108 projects that had entered commercial production by May 31, 1972. Of these 52, 27 were covered in the random sample (1.4.2) and 4 were included in the group of large firms (1.4.1). It was decided to include the remaining 21 new facilities in the interview group so that part of the report could be based on a coverage of all 52 facilities. When subsequent reference is made to the group of new facilities it will refer to the group of 52 completed new facilities unless otherwise stated.

¹¹ Under the *Regional Development Incentives Act*, a new facility means a new structure to house manufacturing or processing equipment.

1.4.4 Mail Survey

The firms that were not selected for interview were sent a shortened version of the questionnaire, which omitted the questions relating to employment and wages. These sections were omitted for two reasons: the questions were irrelevant for the projects that had not entered commercial production; and little control could be exercised over the quality of the responses regarding employment and wages so that, given the detailed and complex nature of some of the information required, no useful purpose could be served by asking these questions.

1.4.5 Response Rate

The response rate to the questionnaire was exceptionally high. Seven of the eight large projects completed the questionnaire. It emerged that three projects in the random sample and eight of the fifty-two new projects were bankrupt or indefinitely out of production at the time of the interview survey. Leaving these projects aside, responses were obtained for 98 per cent of the projects in the random sample and approximately 96 per cent of the group of new facilities. In the mail questionnaire survey, which comprised 205 projects, there are nine known bankruptcies and 16 projects that had declined the offer or had the offer withdrawn after May 31, 1972. Of the remaining 180 projects, about 48 per cent responded to the questionnaire.

The present report is based primarily on the information gathered during interviews with senior officials responsible for the assisted projects. The interview sample is much greater than that used by Springate and is supplemented by information from a mail survey of all assisted projects not selected for interview. The questionnaire is more exhaustive than that used by APEC and the response rate from assisted projects is much higher. Moreover, an interview survey forms the core of the information on which the report's findings are based.

1.5 Outline of the Report

The next two chapters will provide an economic perspective for the present survey. Chapter 2 reviews the economic performance of the Atlantic region and its manufacturing sector *vis-à-vis* the rest of the country during the period preceding the introduction of the RDIA program in the Atlantic Provinces, together with the industrial and spatial distribution of the RDIA grants in the region up to December 31, 1972.

Chapter 4 provides a detailed analysis of how the RDIA program affects decision-making in the private sector. It identifies those projects on which there was no impact and the extent and nature of the impact on the remaining projects. This chapter includes a general analysis of the effect of the grant on employment in the assisted projects, but the detailed analysis of the impact on employment, and the cost of job creation in the assisted projects, is reserved for Chapter 5, where the actual

performance of the program from the viewpoint of job creation is compared with the expected performance as discussed in Chapter 3. It is not enough to know how many jobs have been created and whether these are full-time or part-time. It is also essential to know where the employees in the assisted projects were recruited, how much job training they are receiving, and what they are paid for their work. These aspects are the focus of attention in Chapter 6. Chapter 7 presents the conclusions and recommendations arising from the survey.

The appendix contains a section which examines the extent to which the 108 projects are representative of all projects granted assistance by (a) May 31, 1972 and (b) the end of 1972. It also examines the question of the extent to which the random sample is representative of the projects completed by May 31, 1972.

CHAPTER 2

PERFORMANCE OF THE RDIA PROGRAM IN THE ATLANTIC PROVINCES

The success of the RDIA program in the Atlantic Provinces must be measured by various criteria. In order to assist in the solution of the Atlantic Provinces' economic problems, and more particularly to achieve the Council's manufacturing employment target, the program must make a significant contribution to the growth of the manufacturing sector in the region. Secondly, it must increase the rate of manufacturing employment growth in the Atlantic Provinces *vis-à-vis* the rest of the country if one of the underlying causes of regional disparities is to be removed. The manufacturing base in the Atlantic region is not only small but basically raw-material oriented. It is necessary to diversify the economic structure of the area and it is to be hoped that the RDIA program will help in this regard. Finally, given the declared strategy of the current federal regional development policy, the economic revival of the Atlantic Provinces may be expected to come primarily through the development of the region's growth centres. The RDIA program should help the development of these centres. It is the purpose of this chapter to measure, from published statistics of the operation of the RDIA program, the overall performance of the program in respect of these four objectives.

2.1 Public Information on the Assisted Projects

Information on the assisted projects is contained in a monthly report, Report on Regional Development Incentives, Canada Department of Regional Economic Expansion. This report provides information on projects accepting offers of incentive grants during the month and includes a figure representing the expected number of jobs to be created directly by the project as determined by the Department on the basis of information supplied by the applicant. This figure is currently entitled Expected Direct New Jobs, but has been variously entitled Expected Employment, Estimated Employment and Expected Additional Employment over the life of the monthly reports.

Expected direct new jobs are estimated as the average direct employment over the second and third years of commercial production in the assisted project. Expected direct new jobs excludes off-site employment (employees based on the facility but spending the majority of their working time off the premises, e.g. wood workers, fishermen, driver-salesmen). Further, the number of jobs equals the number of full-time jobs plus the full time equivalent of part-time jobs. A full-time job is defined as a job that would normally provide forty (40) or more weeks of work a year. A part-time job is defined as a job that would normally provide less than 40

weeks of work a year. Part-time jobs are converted to full-time equivalents by dividing by 40 the number of weeks worked by part-time employees over the year.

On occasion, an offer is withdrawn by the Department or rejected by the applicant after publication of its acceptance. In these cases, published statistics are subsequently amended. However, other changes can and do occur without being reflected in the published figures. Some projects which have accepted offers (and also in some cases received a first payment from the Department) have subsequently ceased commercial production due to bankruptcy, shortage of raw materials, or other reasons. However, the projects and the associated employment are not, under present reporting procedures, withdrawn from the published lists of net accepted offers. For these reasons, published information on the individual net accepted offers does not always reflect the current situation.

A related, although different, question in considering the employment aspect of the program is the extent to which the indicated expected additional employment numbers are or will be achieved. It must be remembered that the published figures are the expected average over the second and third years of commercial production in the assisted project.

2.2 The Atlantic Provinces and the Other Designated Regions

In the previous chapter it was noted that, commencing in 1966, manufacturing employment has grown more quickly in the Atlantic Provinces than in Canada as a whole. The former Area Development Agency incentives program may have been responsible for some part of the improved relative performance of the Atlantic region. By way of contrast, the RDIA program does not appear to have had any readily discernible effect on the relative growth performance of the manufacturing sector in the Atlantic Provinces during the period 1969-1972. This is evident from the annual average rates of manufacturing employment growth presented in Table 2.1. The relative position of the Atlantic Provinces did not improve in the period 1969-1972 compared with the years between 1966 and 1969. In other words, the Atlantic region continued to increase its share of manufacturing employment in Canada, but the share increased at the same rate as between 1966 and 1969. This lack of any noticeable effect from the RDIA program during the period 1969-1972 cannot be explained simply by reference to the time lag that occurs between the announcement of a DREE offer of assistance and the project entering commercial production, for in nine out of every ten cases examined in the survey the project was brought into commercial production within a year of the offer of RDIA assistance being received. Possible reasons will be advanced later for the lack of a noticeably greater impact from the RDIA program than from its predecessor.

Table 2.1

Average Annual Growth Rate of Manufacturing Employment in the
Atlantic Provinces and Canada, 1961-1972

Years	Atlantic Provinces per cent	Canada per cent	Atlantic Provinces minus Canada per cent
1961-72	2.2	1.8	.4
1961-69	2.7	2.7	
(i) 1961-66	3.2	4.0	-.8
(ii) 1966-69	1.9	.6	1.3
1969-72	.7	-.5	1.2

Source: Statistics Canada, Census of Manufacturers and Employment, Earnings and Hours. Estimates to 1970 are based on the Census of Manufacturers; estimates for subsequent years are based on Employment, Earnings and Hours.

Between 1969 and 1972, a net total of 1,957 projects accepted offers of DREE financial assistance (Table 2.2). Of these projects, 353 were scheduled for the Atlantic Provinces and, according to DREE estimates, were expected to create *directly* over 14,000 new jobs. This represents 17.2 per cent of the expected additional employment arising from all DREE incentives up to the end of 1972.

Important features of the program's performance are revealed by Table 2.3. In this table the expected additional employment arising from offers under the program is broken down by region and by time periods. This table also makes it possible to compare each region's share of expected additional employment with its share of the total manufacturing employment in the regions designated to receive DREE incentives, with the amendments of December 1970, the designated regions accounted for around 42.3 per cent of the 1,642,000 Canadians employed in manufacturing activities. The Atlantic Provinces account for 10.6 per cent of the manufacturing employment in the designated regions, compared with 21.5 per cent in the period before Montreal, southwestern Quebec and the three eastern Ontario counties were designated as eligible to receive incentives. From Table 2.3 it is apparent that, from the inception of the program until the end of 1972, each of the Atlantic Provinces attracted a share of additional employment from the RDIA program larger than its share of existing manufacturing employment. It is also clear that the Atlantic Provinces' share of expected additional

Table 2.2

Net Accepted Offers under the R.D.I.A. Program
and the Special Areas Program to December 31, 1972

Province or Designated Region	Projects	Expected Eligible Capital Cost (000's)	Expected Additional Employment	Estimate and Amount of Incentive (000's)
Atlantic Provinces ¹	353	285,343	14,087	81,358
Newfoundland	61	22,839	1,963	8,565
P.E.I.	34	9,643	778	3,617
Nova Scotia	119	181,146	5,720	40,076
New Brunswick	139	71,715	5,626	29,100
Quebec				
Standard Region ²	532	497,061	24,097	103,184
Montreal & Southwestern Quebec	660	346,818	25,054	46,502
Ontario				
Standard Region ²	89	210,104	5,030	35,376
Prescott, Glengarry and Stormont counties	24	23,988	1,745	4,201
Manitoba	174	65,354	5,964	17,168
Saskatchewan	47	31,415	2,344	7,392
Alberta	47	139,883	2,253	25,479
British Columbia	31	16,383	1,178	3,728
TOTAL	1,957	1,616,349	81,752	324,389

¹ No incentives have been given in the Atlantic Provinces under the Special Areas program.

² Standard Region refers to Zone B in Fig. 1.1. In Quebec, the St. Scholastique special area has been included in the Standard Region statistics and in Ontario the Renfrew-Pembroke special area has been included with the Standard Region.

Source: Canada Department of Regional Economic Expansion, *Report on Regional Development Incentives, 1969-1972*.

Table 2.3

Percentage Distribution of Manufacturing Employment in the Designated Regions
and of Expected Employment Arising from Net Accepted Offers under the
RDIA Program and the Special Areas Program by Province and Period

Area	Manufacturing Employment as a percentage of Total Manufacturing Employment in Designated Regions (1968)*		Expected Additional Employment			
			Aug. 1969 - Dec. 1970 per cent	Jan. 1971 - Dec. 1971 per cent	Jan. 1972 - Dec. 1972 per cent	Aug. 1969 - Dec. 31, per cent
Atlantic Provinces	10.6	(21.5) **	23.8	15.9	14.9	17.2
Newfoundland (excluding Labrador)	1.7	(3.4)	2.7	4.4	.6	2.4
P.E.I.	.3	(.7)	1.5	1.2	.4	.9
Nova Scotia	4.7	(9.4)	7.0	4.9	8.8	7.0
New Brunswick	3.9	(8.0)	12.6	5.4	5.1	6.9
Quebec						
- Standard Region	21.5	(43.6)	46.4	23.6	25.3	29.5
- Montreal & Southwestern Quebec	49.4			35.4	43.1	30.7
Ontario						
- Standard Region	7.1	(14.5)	8.8	5.2	5.6	6.2
- Stormont, Glengarry and Prescott Counties	1.3			2.4	3.0	2.1
Manitoba	6.4	(13.0)	8.8	10.1	4.2	7.3
Saskatchewan	1.5	(3.0)	4.6	2.7	2.1	2.9
Alberta	1.0	(2.0)	6.6	2.3	1.0	2.7
British Columbia	1.2	(2.3)	1.0	2.5	.8	1.4
TOTAL:	100.0	(100.0)	100.0	100.0	100.0	100.0

* In 1968, total manufacturing employment in the designated regions (including Montreal, southwestern Quebec and the three eastern Ontario counties) was 694,000. For the whole of Canada, total manufacturing employment was 1,642,000 in 1968.

** Figures in parentheses refer to the distribution of manufacturing employment in the designated region before the December 1970 addition of the Montreal metropolitan area, southwestern Quebec and the three eastern Ontario counties.

Source: Canada Department of Regional Economic Expansion, Report on Regional Development Incentives, 1969-1972.

employment resulting from the RDIA program dropped sharply after December 1970 and was also lower in 1972 than in 1971. This indicates that the program has slowed down in the Atlantic Provinces relative to the other designated regions and particularly in relation to the central provinces of Quebec and Ontario which increased their share of expected additional employment in 1971 and 1972.

The slowdown in the performance of the RDIA program in the Atlantic Provinces compared with the central provinces results from a number of factors. The RDIA program is essentially passive and depends heavily on grant applications from businessmen in the individual designated regions. The existing manufacturing base in the Atlantic Provinces is comparatively small and the region's locational attributes for manufacturing activity are generally more limited than those of Ontario and Quebec, so that potential manufacturing opportunities are likely to be exhausted more quickly. It is probable that a large proportion of these opportunities has already been tapped by the projects offered RDIA assistance between 1969-1972. The declining rate at which RDIA assisted projects have been announced for the Atlantic region is discussed further in section 2.3. The slowdown of the program in the region is no doubt also related to the ability of the RDIA program to influence the locational decisions of businessmen planning to undertake a new project. In this connection it is interesting to note that the central region has gained relative importance in terms of its percentage of net accepted offers not only with the designation of the Montreal metropolitan area, southwestern Quebec and the three eastern Ontario counties but also because the program has gained, or at least maintained, its momentum in the "standard regions" of Ontario and Quebec.

The potential influence of an incentives program on the locational choice of a firm is governed, among other things, by how many firms have some degree of freedom in their locational decisions, by the geographical area covered by the incentives program and by the level of assistance available in the regions designated as eligible to receive incentives. In theory at least, grants are supposed to attract activity to the designated regions that would have located in the undesignated regions or elsewhere if an incentives program did not exist. When a large part of a country is designated, "footloose" firms have a larger number of available locations in which they may establish and receive government assistance. Other things being equal, it might be expected that a manufacturing firm, in an effort to avoid unnecessary risk, will choose a location nearer to the place it would have chosen without a system of incentives. In the initial phase of the RDIA program, ending in December 1970, a firm could get the same level of assistance by locating in a designated area in the central provinces, as by locating in the Atlantic Region. The extension of the incentives program to the Montreal, southwestern Quebec and eastern Ontario region in December 1970 probably enhanced the attraction of the central region even though, in an effort to help the Atlantic region, the extension was coupled with a stepped system of incentives. This (three-tier) system of incentives is only effective if all the incentives are given at or near the ceiling, so that the intended differentials in the level of incentives are

retained. If incentives are given at the ceiling in the Montreal area, but much below the ceiling in the Atlantic region, the comparative advantage of the Atlantic region under the program will be reduced. Moreover, if (as is often held) many businessmen are primarily concerned with risk avoidance, many firms may choose to locate in the Montreal region or eastern Ontario, where they can get some government help, rather than in the Atlantic Provinces where assistance is, at least in theory, considerably greater. Consequently, the special development incentive introduced for the Atlantic region in December 1970 may have added very little to the locational pull of the Atlantic Provinces because firms can locate in other designated regions nearer to, or in, the Canadian industrial heartland where many businessmen perceive that there is much smaller risk involved for a manufacturing enterprise.

2.3 The RDIA Program and the Atlantic Provinces

In the Atlantic Provinces the rate of growth of net accepted offers has been falling since the early stages of the RDIA program and same tendency is evident in the individual provinces. It may be that much of the potential for expanding existing manufacturing operations has already been realized through the incentives offers to date. It may also be a major effect of the RDIA program that it brings forward in time projects that were scheduled for a later date¹. These two factors might be sufficient to account for a flattening out of the effect of the RDIA program over time or, in other words, a decrease in the rate of growth in the number of net accepted offers after the initial phase of the program. It is likely, however, that the effects of these two factors have been reinforced by the performance of the Canadian economy during the lifetime of the RDIA program, which commenced in a period of depressed activity in the manufacturing sector. It could be argued that the sluggishness of this sector of the Canadian economy explains why the RDIA program is not gaining strength in the region. In this respect it should be noted that the manufacturing sector showed considerably more strength in 1972 while the performance of the RDIA program showed only marginal improvement. Information on grant applications might indicate whether strengthening the manufacturing sector will result in an improved performance of the RDIA program on the Atlantic Provinces in 1973, but such information is not made public on a regional basis.

As already noted, the official figures suggest that over 14,000 new jobs can be expected in the region as a result of the net accepted offers announced between 1969 and 1972. Table 2.4 shows that, on a monthly basis, the average number of new jobs announced as a result of net accepted offers rose from 259 in the period ending December 1970 to 429 per month in 1972. It must be remembered that there is normally a time lag between the time the grant is announced and the actual creation of the jobs announced. Within the overall

¹ The impact of the RDIA grants on the timing of assisted projects is examined in Chapter 3.

Fig. 2.1

R.D.I.A. Program in the Atlantic Provinces Cumulative Net Accepted Offers by Quarter for 1969/72

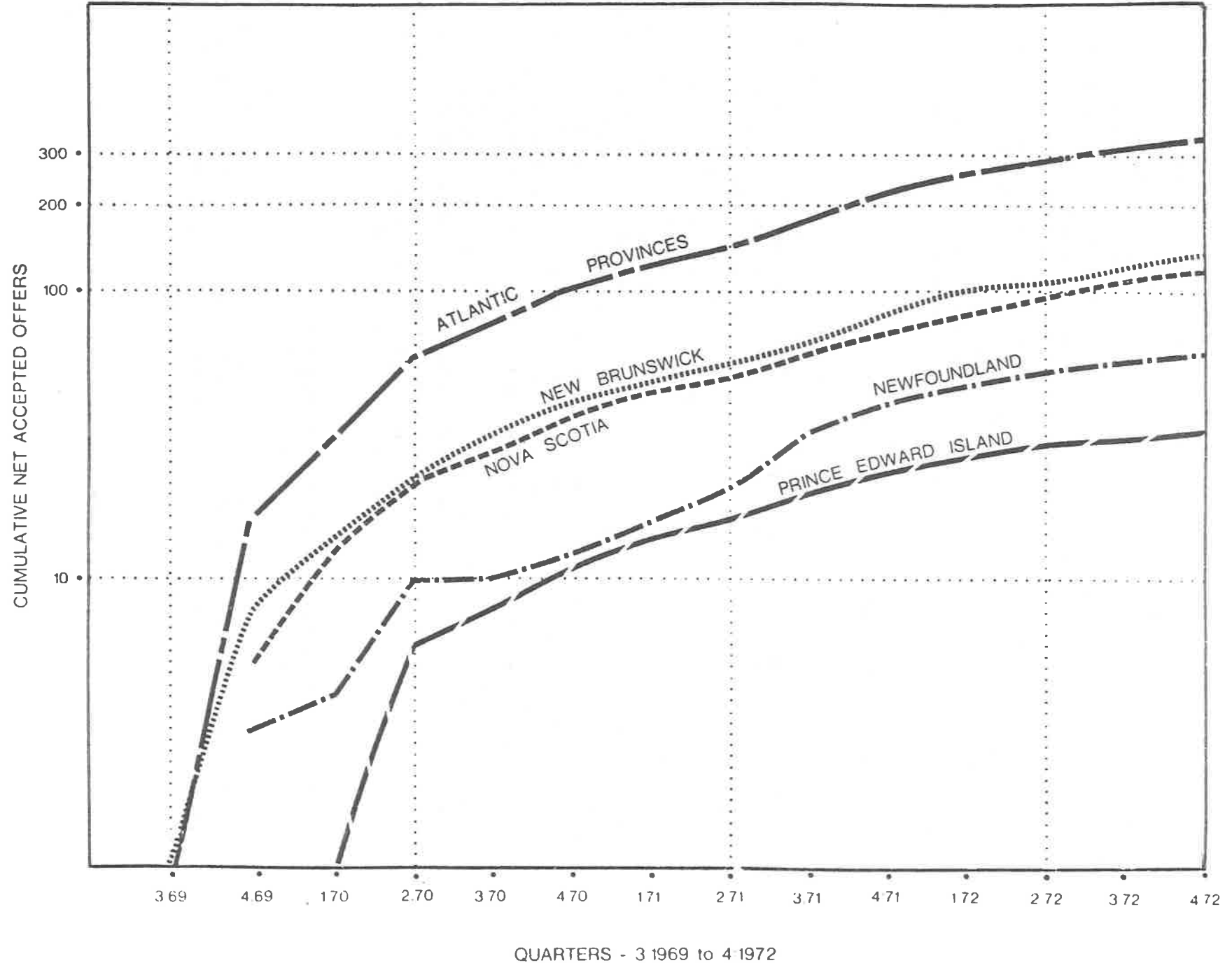


Table 2.4
Anticipated Direct New Employment Generated by the RDIA Program
in the Atlantic Provinces, 1969-1972
According to DREE Estimates

Province	Expected Additional Employment Created by the RDIA Program				Average Monthly Expected Additional Employment		
	Aug. 1969- Dec. 1970	1971	1972	1969-1972	1969-70 (Aug. 69 - Dec. 70)	1971	1972
Newfoundland	504	1,246	213	1,963	30	104	18
Prince Edward Island	279	355	144	778	16	30	12
Nova Scotia	1,289	1,396	3,035	5,720	76	116	253
New Brunswick	2,338	1,532	1,756	5,626	138	128	146
Atlantic Provinces	4,410	4,529	5,148	14,087	259	377	429

Source: Canada Department of Regional Economic Expansion, Report on Regional Development Incentives.

upward trend in the monthly number of jobs announced under the program, there are significant intra-regional variations in both the scale of job creation and trends over the 1969-1972 period. These points are revealed by Table 2.4.

Initially the program was most successful in New Brunswick, but it does not appear to have gained any further momentum there in 1971 and 1972. The average monthly number of new jobs announced was only slightly higher in 1972 than in the 1969-1970 period. In both Prince Edward Island and Newfoundland, the amount of activity under the program has been generally much lower than in New Brunswick and Nova Scotia. There is no indication that the program in the former provinces is gathering any momentum. Indeed, if a comparison of the 1971 and 1972 figures provides any indication of a trend, it would suggest that the program is losing some momentum in Prince Edward Island and Newfoundland.

The situation in Nova Scotia stands in sharp contrast to that of the other provinces. In comparison with New Brunswick, the RDIA program in Nova Scotia started slowly; but there has been a significant increase in the monthly additional jobs announced for this province since 1970. Indeed, it is the general increase in the number of additional jobs announced for Nova Scotia that has provided the bulk of the increase in expected additional employment in the Atlantic Provinces. It should be noted, however, that the 1972 announcements for Nova Scotia included large expansions in the numbers employed at the two Michelin Tire plants. Projects on this scale are unlikely to be a frequent and regular occurrence; it cannot be expected, simply on the basis of trends, that the rate of growth in the average monthly employment announced under the RDIA program will be maintained at the 1969-1972 level.

In Table 2.5 the provincial distribution of the estimated employment created under the program is compared to the provincial distribution of manufacturing employment in the Atlantic Provinces. From this table it can be seen that both New Brunswick and Prince Edward Island have attracted a greater share of the regional employment expectations under the RDIA program than their share of manufacturing employment in the Atlantic Provinces. Nova Scotia has attracted somewhat less than its share, although the increasing activity under the RDIA program in this province suggests that it may improve its relative position in the near future. It is clear that Newfoundland has attracted less than its share of expected RDIA assisted new employment when compared to the province's share of the Atlantic region's manufacturing employment. This suggests that the program may be less suited to the needs of the Newfoundland economy than elsewhere. Two possible reasons for this may be the smaller average size of manufacturing businesses in Newfoundland than in Nova Scotia and New Brunswick¹,

¹ A grant can only be given if the eligible capital costs exceed \$30,000 in the case of an expansion or modernization and \$60,000 in the case of a new facility.

Table 2.5

Provincial Distribution of Expected New Jobs under the RDIA Program
and of Manufacturing Employment in 1970

Province	Share of Expected Additional Employ- ment under RDIA Program in the Atlantic Provinces	Share of Manufacturing Employment in the Atlantic Provinces in 1970
	1969-1972 per cent	per cent
Newfoundland	13.9	17.1
Prince Edward Island	5.5	3.7
Nova Scotia	40.6	42.0
New Brunswick	39.9	37.2

and the fact that a significant proportion of Newfoundland's manufacturing employment is in industries that are not eligible for RDIA assistance.

In recent years, Canadian manufacturing has been a source of concern. While output, with the exception of two years (1967 and 1970) has continued to expand at generally high rates, employment has stagnated since 1966. Whereas growth in manufacturing employment averaged 4 per cent between 1961 and 1966, for the period 1967-70, the growth rate has averaged -1 per cent per year: employment has actually declined. As Table 2.6 shows, preliminary figures indicate it again declined in 1970-71, but increased slightly in 1971-72. Since 1970 in Canada, as a whole, and 1971 in the region, rates of investment growth have declined also.

The regional performance has been similar to that of the nation with rates of growth for the overall period 1961-70 corresponding closely to national rates. The slowdown which occurred in the region since 1966, however, was smaller. As a result, with the exception of investment in 1972, manufacturing growth rates in the region were generally higher between 1967 and 1972 than for the nation.

Investment, while holding steady in Canada, declined by 29 per cent in the region during 1972, after outperforming the national growth over the previous three years. Another regional decline of 11 per cent is expected in 1973 while again the national scene will see an increase of 7.5 per cent. All of the decline for 1973 will take place in Newfoundland and New

Table 2.6

Rates of Growth in Manufacturing
Canada and the Atlantic Region 1971-1972

Canada	1961-66 per cent	1967-70 per cent	1969-70 per cent	1970-71 per cent	1971-72 per cent
Output (shipments)	9.7	5.7	1.0	6.2	9.2
Employment	4.0	-0.1	-2.3	-1.0*	1.6*
Investment	18.0	4.4	18.8	-3.5	0.3
Atlantic Provinces					
Output (shipments)	8.3	6.8	4.3	7.8**	12.8**
Employment	3.2	1.1	-1.3	0.6*	2.8*
Investment	23.2	10.5	42.6	28.8	-29.2

* Preliminary estimates. ** Excludes P.E.I.

Source: Statistics Canada: Census of Manufacturing; Employment, Earnings and Hours; and Private and Public Investment in Canada.

Brunswick where 1973 forecast levels of manufacturing investment are less than half their 1971 levels. While the level in Nova Scotia is expected to be above the 1972 level, it will still be significantly below that of 1971.

In Chapter 1 it was noted that the Atlantic Development Council has proposed a target of 50,000 net additional jobs in the manufacturing sector during the period 1971-1981, which amounts to an average annual figure of 5,000 net additional jobs over the decade. During 1971 and 1972, 9,777 expected additional jobs were announced under the RDIA program. At first inspection, it might appear that the RDIA program is approaching the Council's targets. It should be remembered, however, that the RDIA estimates of expected additional employment are gross figures and take no account of job erosion. Moreover, it is necessary to examine the extent to which the estimates of additional employment are being achieved. The implications of these observations for the performance of the RDIA program, and how great a contribution it has made to the achievement of the Atlantic Development Council's targets, will be examined in Chapter 4.

An assessment of the impact of the RDIA program on manufacturing investment in the Atlantic Provinces poses a number of problems. The estimated investment announced for each project relates to the capital costs deemed eligible when assessing the amount of DREE assistance for the assisted project. These *eligible capital costs* do not include the costs of moveable equipment used outside the facility (e.g. delivery trucks, fishing boats). In this respect they understate the amount of fixed capital formation. On the other hand, the RDIA announcements sometimes include cases where the incentive grant is used to purchase the assets of a bankrupt firm, an existing vacant structure, or used equipment. This simple transfer of capital assets from one owner to another cannot be regarded as new capital formation, so that eligible capital costs cannot always be regarded as new fixed capital formation. It is also necessary to remember that some projects would have gone ahead without RDIA assistance¹. Consequently, not all eligible capital costs are *incremental* or attributable to the RDIA program.

In spite of these major drawbacks to the published data on eligible capital costs, it is desirable to have some idea of the impact of the RDIA program on manufacturing investment in the Atlantic region. An accurate assessment of this effect would necessitate a detailed analysis of eligible capital costs at the individual project level to see how these costs can be compared to the manufacturing investment figures released by Statistics Canada. This comparison has not been possible. In Table 3.6, Statistics Canada figures for manufacturing investment in the Atlantic Provinces are presented together with the eligible capital cost figures for the DREE assisted projects. Bearing in mind the problems stated above, the following points are noteworthy, Total manufacturing investment in the region between 1969 and 1972 was more than 5.8 times as great as the combined eligible capital costs of assisted projects announced during this same period. It would appear that the RDIA assisted projects did not make a major contribution to manufacturing investment in the region during these years. This reflects not only the time-lag between the announcement of the DREE assisted project and the actual investment in the project but, more importantly, the fact that much manufacturing investment in the region occurred in projects for which DREE assistance was not available, e.g. the Come by Chance oil refinery, the Stephenville linerboard mill and the new oil refinery at the Strait of Canso. The intraregional variations are also striking. For both Newfoundland and New Brunswick their respective shares of announced investment (total eligible capital costs) by DREE assisted projects were far less than their share of the total manufacturing investment in the region between 1969 and 1972. The converse was true in Nova Scotia and Prince Edward Island.

¹ This question is examined in Chapter 3.

Table 2.7
Expected Eligible Capital Costs for RDIA Assisted Projects
and Total Manufacturing Investment for the Atlantic Provinces and Canada, 1969-1972

Region	Total Manufacturing Investment (Capital and Repair)				Expected Eligible Capital Costs		
	1969	1970	1971	1972	Aug. 1969- Dec. 1970	1971	1972
		millions of dollars				millions of dollars	
Newfoundland	35.0	56.3	153.4	104.8	2.7	13.9	6.2
Prince Edward Island	2.3	2.3	3.3	2.3	2.8	2.8	4.0
Nova Scotia	136.8	200.0	227.6	173.6	111.2	11.4	58.6
New Brunswick	119.3	168.8	166.4	109.0	31.3	15.5	24.9
Atlantic Provinces	293.4	427.4	550.7	389.7	148.0	43.6	93.7
- per cent increase from previous year		(45.7)	(28.8)	(-29.2)			
Canada	3,906.0	4,640.3	4,477.6	4,492.8			
- per cent increase from previous year		(18.8)	(-3.5)	(.3)			

Sources: (1) Canada Department of Regional Economic Expansion, Report on Regional Development Incentives.
(2) Statistics Canada, Private and Public Investment in Canada.

2.4 Industrial Distribution of Assisted Projects

Two facets of the Atlantic Provinces' manufacturing sector that give cause for concern are its narrow base and its poor representation of the growth industries that spearheaded expansion of the Canadian manufacturing industry during the 1960's. If the RDIA program is to make a substantial contribution to the solution of the region's economic problems, it is imperative that the assisted projects contribute to a broadening of the manufacturing base and particularly to the creation of employment in manufacturing industries that are growing at a faster rate than Canadian manufacturing industry as a whole. The representation of growth industries in the group of assisted projects should be much greater than their representation in the region's existing manufacturing base. It will be the purpose of this section to examine the industrial distribution of the assisted projects in order to determine whether they display a more diversified industrial distribution than the population of manufacturing establishments in existence at the time the RDIA program began operation.

2.4.1 Industrial Diversification

The purpose of this section is to identify the extent to which industrial diversification has occurred. This discussion should not be taken to mean that projects which do not contribute to industrial diversification are not wanted in the region. Firms that create or have the potential to create either forward and backward linkages in the region or a fuller (or full) utilisation of existing production, service or infrastructural capacity in the region or both, and that are of a competitive size, well located, use modern technology and have good access to markets, are an asset to the region whether or not they contribute to diversification of its industrial base. This is not to say that industrial diversification should not be an important objective of the program but rather that good opportunities which fit into the regional or provincial economic structure should not be sacrificed whilst awaiting projects that would broaden the industrial base.

Because the RDIA program is essentially *passive*, and largely dependent on indigenous businessmen for grant applications, it might be expected that the industrial distribution of assisted projects would correspond closely to the industrial distribution of the existing manufacturing base. Reference to Table 2.8 shows that the industrial distribution of the assisted projects does, in fact, correspond fairly closely to the industrial distribution of the existing manufacturing base. However, it is the group of new projects, and to a much lesser degree new product expansions, which represents additions to the manufacturing base that can produce the required industrial diversification. It is necessary, therefore, to focus attention on these new projects.

In the Atlantic Provinces, as a whole, the food and beverage industries and the printing, publishing and allied industries are not so heavily represented in the group of new facilities projects as in the existing

manufacturing base (Table 2.8). The rubber and plastics products industries, machinery industries and electrical products industries have a significantly greater representation in the group of assisted projects than they do in the existing manufacturing base. Thus it is apparent that the assisted projects are contributing towards some broadening of the manufacturing base and reducing the reliance of the region on resource-based manufacturing and resident industry.

Tables 2.8 to 2.11 present an industrial breakdown of the new projects on a provincial basis. From these tables it is apparent that the assisted projects are doing more to broaden the manufacturing base in New Brunswick and Nova Scotia than in Newfoundland and Prince Edward Island. In Newfoundland, as is seen in Table 2.9, new projects are heavily concentrated in the food and beverages group and especially in the fish products industry. The wood industries account for a smaller portion of assisted projects than might be expected from this industry's representation in the existing manufacturing base. By way of contrast, a relatively large proportion of assisted projects are in the rubber and plastics products industries, electrical products industry and metal fabricating industry which contribute to some broadening of the province's manufacturing base. In Prince Edward Island, however, there is no evidence of any tendency towards a broadening of the manufacturing base. Well over half the new projects are in the fish products industry or fruit and vegetable processing industries (Table 2.10).

A relatively strong representation of the rubber and plastics products industries, metal fabricating industries, machinery industries and electrical products industries amongst the new projects is producing some diversification of the manufacturing base in Nova Scotia (Table 2.11). In contrast to the situation in Newfoundland, the fish products industry and the food and beverages industry group are not so heavily represented in the group of new projects as in the existing manufacturing base. The same applies to the printing, publishing and allied industries. The concentration of new projects in the wood industries results in large part from a number of projects in the woodworking and prefabricated housing industries.

In New Brunswick, neither the traditional industries of the food and beverages group nor those of the printing, publishing and allied industries are as heavily represented in the group of assisted projects as might be expected (Table 2.12). As in Nova Scotia, a relatively high concentration of the new projects in the transportation equipment industries, electrical products industries, rubber and plastics products industries and machinery industries makes for some broadening of the provincial manufacturing base.

Table 2.8
Industrial Distribution of Atlantic Provinces' Manufacturing
Establishments in 1969 and of RDIA Assisted
Projects in Atlantic Provinces 1969-1972

S.I.C. Classification		New Projects Receiving RDIA Assistance 1969-1972		Total RDIA Assisted Projects 1969-1972		Manufacturing Establishments 1969	
Major Industry Group	Industry	No.	per cent	No.	per cent	No.	per cent
1	Food & Beverage Industries*	42	26.3	137	38.8	658	35.0
	Fish Product Industry	19	11.9	70	19.8	243	12.9
	Fruit & Vegetable Processing Industry	9	5.6	23	6.5	21	1.1
2	Tobacco Products Industries	3	1.9	4	1.1	0	24.5
3	Rubber & Plastic Products Industries	8	5.0	15	4.2	0	0
4	Leather Industries	2	1.3	2	.6	9	.4
5	Textile Industries	2	1.3	6	1.7	26	1.4
6	Knitting Mills	1	.6	1	.3	8	.4
7	Clothing Industries	2	1.3	5	1.4	11	.6
8	Wood Industries*	36	22.5	51	14.4	461	24.5
	Sawmills, Planing Mills & Shingle Mills	15	9.4	25	7.1	340	18.1
	Sash, Door & Other Millwork Plants	8	5.0	11	3.1	64	3.4
9	Furniture & Fixtures Industries	7	4.4	12	3.4	70	3.7
10	Paper & Allied Industries	1	.6	3	.9	36	1.9
11	Printing, Publishing & Allied Industries	2	1.3	10	2.8	155	8.2
12	Primary Metal Industries	0	0	4	1.1	15	.8
13	Metal Fabricating Industries	10	6.2	33	9.3	106	5.6
14	Machinery Industries	8	5.0	12	3.4	16	.9
15	Transportation Equipment Industries	6	3.8	14	4.0	83	4.4
16	Electrical Products Industries	11	6.9	15	4.2	11	.6
17	Non-Metallic Mineral Products Industries	8	5.0	15	4.2	95	5.1
18	Petroleum & Coal Products Industries	4	.6	1	.3	4	.2
19	Chemical & Chemical Products Industries	4	2.5	4	1.1	33	1.8
20	Miscellaneous Manufacturing Industries	6	3.8	9	2.5	84	4.5
	TOTAL: All Industries	160	100	353	100	1,881	100

Source: 1. Canada Department of Regional Economic Expansion, Reports
on Regional Development Incentives.

2. Statistics Canada, Census of Manufacturers.

* Individual industry totals do not equal the total for the Major Industry
Group because of grants to projects in other industries of the Major
Industry Group.

Table 2.9
Industrial Distribution of Newfoundland Manufacturing
Establishments in 1969 and of RDIA
Assisted Projects in Newfoundland 1969-1972

S.I.C. Classification		New Projects Receiving RDIA Assistance 1969-1972		Total RDIA Assisted Projects 1969-1972		Manufacturing Establishments 1969	
Major Industry Group	Industry	No.	per cent	No.	per cent	No.	per cent
1	Food & Beverage Industries*	14	45.2	37	60.7	97	37.5
	Fish Product Industry	11	35.5	29	47.5	51	19.7
	Fruit & Vegetable Processing Industry	1	3.2	5	8.2	2	.8
2	Tobacco Products Industries	0	0	0	0	0	0
3	Rubber & Plastic Products Industries	2	6.5	2	3.3	0	0
4	Leather Industries	0	0	0	0	3	1.2
5	Textile Industries	0	0	0	0	2	.8
6	Knitting Mills	0	0	0	0	0	0
7	Clothing Industries	0	0	0	0	2	.8
8	Wood Industries*	3	9.7	4	6.6	57	22.0
	Sawmills, Planing Mills & Shingle Mills	3	9.7	4	6.6	57	22.0
9	Furniture & Fixtures Industries	1	3.2	2	3.3	4	1.5
10	Paper & Allied Industries	1	3.2	1	1.6	4	1.5
11	Printing, Publishing & Allied Industries	0	0	0	0	26	10.0
12	Primary Metal Industries	0	0	0	0	2	.8
13	Metal Fabricating Industries	3	9.7	5	8.2	10	3.9
14	Machinery Industries	0	0	0	0	0	0
15	Transportation Equipment Industries	1	3.2	1	1.6	7	2.7
16	Electrical Products	2	6.5	2	3.3	1	.4
17	Non-Metallic Mineral Products Industries	2	6.5	3	4.9	15	5.8
18	Petroleum & Coal Products	0	0	0	0	1	.4
19	Chemical & Chemical Products Industries	1	3.2	1	1.6	5	1.9
20	Miscellaneous Manufacturing	0	0	2	3.3	6	2.3
	TOTAL: All Industries	31	100	61	100	259	100

Source: 1. Canada Department of Regional Economic Expansion, Reports on Regional Development Incentives.

2. Statistics Canada, Census of Manufacturers.

* Individual industry totals do not equal the total for the Major Industry Group because of grants to projects in other industries of the Major Industry Group.

Table 2.10

Industrial Distribution of Prince Edward Island
Manufacturing Establishments in 1969 and of RDIA
Assisted Projects in Prince Edward Island 1969-1972

S.I.C. Classification		New Projects Receiving RDIA Assistance 1969-1972		Total RDIA Assisted Projects 1969-1972		Manufacturing Establishments 1969	
Major Industry Group	Industry	No.	per cent	No.	per cent	No.	per cent
1	Food & Beverage Industries*	8	57.1	23	67.7	79	53.4
	Fish Product Industry	3	21.4	10	29.4	21	14.2
	Fruit & Vegetable Processing Industry	5	35.7	9	26.5	6	4.1
2	Tobacco Products Industries	2	14.3	2	5.9	4	2.7
3	Rubber & Plastic Products Industries	0	0	0	0	0	0
4	Leather Industries	0	0	0	0	1	.7
5	Textile Industries	1	7.1	1	2.9	4	2.7
6	Knitting Mills	0	0	0	0	0	0
7	Clothing Industries	0	0	0	0	0	0
8	Wood Industries*	2	14.2	2	5.8	28	18.9
	Sawmills, Planing Mills & Shingle Mills	1	7.1	1	2.9	23	15.5
	Sash, Door & Other Millwork Plants	1	7.1	1	2.9	3	2.0
9	Furniture & Fixtures Industries	0	0	0	0	1	.7
10	Paper & Allied Industries	0	0	0	0	1	.7
11	Printing, Publishing & Allied Industries	0	0	0	0	7	4.7
12	Primary Metal Industries	0	0	0	0	0	0
13	Metal Fabricating Industries	0	0	3	8.8	6	4.1
14	Machinery Industries	1	7.1	2	5.9	2	1.4
15	Transportation Equipment Industries	0	0	1	2.9	6	4.1
16	Electrical Products Industries	0	0	0	0	0	0
17	Non-Metallic Mineral Products Industries	0	0	0	0	5	3.4
18	Petroleum & Coal Products Industries	0	0	0	0	0	0
19	Chemical & Chemical Products Industries	0	0	0	0	4	2.7
20	Miscellaneous Manufacturing Industries	0	0	0	0	4	2.7
	TOTAL: All Industries	14	100	34	100	148	100

Source: 1. Canada Department of Regional Economic Expansion, Reports on Regional Development Incentives.

2. Statistics Canada, Census of Manufacturers.

* Individual industry totals do not equal the total for the Major Industry Group because of grants to projects in other industries of the Major Industry Group.

Table 2.11

Industrial Distribution of Nova Scotian Manufacturing
Establishments in 1969 and of RDIA Assisted
Projects in Nova Scotia 1969-1972

S.I.C. Classification		New Projects Receiving RDIA Assistance 1969-1972		Total RDIA Assisted Projects 1969-1972		Manufacturing Establishments 1969	
Major Industry Group	Industry	No.	per cent	No.	per cent	No.	per cent
1	Food & Beverage Industries*	10	22.2	41	34.4	274	32.4
	Fish Product Industry	3	6.7	19	16.0	104	12.3
	Fruit & Vegetable Processing Industry	1	2.2	6	5.0	10	1.2
2	Tobacco Products Industries	1	2.2	2	1.7	0	0
3	Rubber & Plastic Products Industries	2	4.4	6	5.0	0	0
4	Leather Industries	1	2.2	1	.8	1	.1
5	Textile Industries	1	2.2	3	2.5	12	1.4
6	Knitting Mills	0	0	0	0	6	.7
7	Clothing Industries	0	0	2	1.7	4	.5
8	Wood Industries*	12	26.7	17	14.3	209	24.7
	Sawmills, Planing Mills & Shingle Mills	3	6.7	8	6.7	161	19.0
	Sash, Door & Other Millwork Plants	5	11.1	5	4.2	24	2.9
9	Furniture & Fixtures Industries	2	4.4	2	1.7	40	4.7
10	Paper & Allied Industries	0	0	1	.8	13	1.5
11	Printing, Publishing & Allied Industries	0	0	4	3.4	74	8.8
12	Primary Metal Industries	0	0	4	3.4	6	.7
13	Metal Fabricating Industries	4	8.9	13	10.9	50	5.9
14	Machinery Industries	4	8.9	6	5.0	7	.8
15	Transportation Equipment Industries	2	4.4	6	5.0	55	6.9
16	Electrical Products Industries	4	8.9	6	5.0	5	.6
17	Non-Metallic Mineral Products Industries	1	2.2	3	2.5	38	4.5
18	Petroleum & Coal Products Industries	0	0	0	0	2	.2
19	Chemical & Chemical Products Industries	0	0	0	0	10	1.2
20	Miscellaneous Manufacturing Industries	1	2.2	2	1.7	37	4.4
	TOTAL: All Industries	45	100	119	100	846	100

Source: 1. Canada Department of Regional Economic Expansion, Reports on Regional Development Incentives.

2. Statistics Canada, Census of Manufacturers.

* Individual industry totals do not equal the total for the Major Industry Group because of grants to projects in other industries of the Major Industry Group.

Table 2.12

Industrial Distribution of New Brunswick Manufacturing
Establishments in 1969 and of RDIA Assisted
Projects in New Brunswick 1969-1972

S.I.C. Classification		New Projects Receiving RDIA Assistance 1969-1972		Total RDIA Assisted Projects 1969-1972		Manufacturing Establishments 1969	
Major Industry Group	Industry	No.	per cent	No.	per cent	No.	per cent
1	Food & Beverage Industries*	10	14.3	36	25.9	208	33.1
	Fish Product Industry	2	2.9	12	8.6	67	10.7
	Fruit & Vegetable Processing Industry	2	2.9	3	2.2	3	.5
2	Tobacco Products Industries	0	0	0	0	0	0
3	Rubber & Plastic Products Industries	4	5.7	7	5.2	0	0
4	Leather Industries	0	0	0	0	0	0
5	Textile Industries	0	0	2	1.4	8	1.3
6	Knitting Mills	1	1.4	1	.7	2	.3
7	Clothing Industries	2	2.9	3	2.2	5	.8
8	Wood Industries*	19	27.1	28	20.1	150	23.9
	Sawmills, Planing Mills & Shingle Mills	8	11.4	12	8.6	99	15.8
	Sash, Door & Other Millwork Plants	2	2.9	4	2.9	28	4.5
9	Furniture & Fixtures Industries	4	5.7	8	5.8	25	4.0
10	Paper & Allied Industries	0	0	1	.7	18	2.9
11	Printing, Publishing & Allied Industries	2	2.9	6	4.3	48	7.6
12	Primary Metal Industries	0	0	0	0	7	1.1
13	Metal Fabricating Industries	3	4.3	12	8.6	40	6.4
14	Machinery Industries	3	4.3	4	2.9	7	1.1
15	Transportation Equipment Industries	3	4.3	6	4.3	12	1.9
16	Electrical Products Industries	5	7.1	7	5.0	5	.8
17	Non-Metallic Mineral Products Industries	5	7.1	9	6.5	37	5.9
18	Petroleum & Coal Products Industries	1	1.4	1	.7	1	.2
19	Chemical & Chemical Products Industries	3	4.3	3	2.2	14	2.2
20	Miscellaneous Manufacturing Industries	5	7.1	5	3.6	37	5.9
	TOTAL: All Industries	70	100	139	100	628	100

Source: 1. Canada Department of Regional Economic Expansion, Reports
on Regional Development Incentives.

2. Statistics Canada, Census of Manufacturers.

* Individual industry totals do not equal the total for the Major Industry
Group because of grants to projects in other industries of the Major
Industry Group.

2.4.2 Representation of Growth Industries in RDIA Assisted Projects

As mentioned earlier one of the factors which has historically tended to retard the growth of manufacturing employment in the Atlantic Provinces relative to Canada as a whole, has been the relative absence in the region of growth industries which, for the present purposes, are defined as those industries in which employment grew at a faster rate than in Canadian manufacturing industry as a whole during the 1961-1970 period.

The Statistics Canada publication "Growth Patterns in Manufacturing Employment"¹ quantifies the *drag* on the growth of manufacturing employment in the Atlantic Provinces resulting from the small representation of growth industries in the manufacturing base of the region. An unpublished update of "Growth Patterns in Manufacturing Employment" covering the period 1961-70 has been provided through the courtesy of the Regional Statistics Unit, Manufacturing and Primary Industries Division, Statistics Canada, and is employed in the following analysis.

Table 2.13 presents data for the period 1961-70 on the net relative change in manufacturing employment and its components, industry mix and regional share for the Atlantic provinces. *Net relative change* is defined as the difference between the *actual* change in employment in the manufacturing industries for a particular region or province and the *national* growth, where national growth is defined as the growth in employment that would have occurred in the region if employment in its manufacturing industries had grown at the same rate as the average for all manufacturing industries in Canada as a whole. For example, manufacturing employment grew by 27.6 per cent in Newfoundland over the 1961-70 period and by 19.4 per cent in Canada as a whole. Net relative change (8.2 per cent) for Newfoundland equals the Newfoundland growth rate (27.6 per cent) minus the Canada growth rate (19.4 per cent).

Net relative change is broken down into two components. The first component is the effect of *industry mix*, which is defined as the difference between the growth (or decline) of employment in the manufacturing industries in a particular region that would be expected if employment grew in each industry at the *national* rate for that industry and the employment that would have existed if employment in each industry had grown at the *national* rate for all industries. Thus a region or province with a high proportion of its manufacturing employment in industries where the national growth in employment is lower than the national average for all industries is likely to have a negative industry mix.

The second component is *regional share* which is defined as the difference between the actual change in employment in the manufacturing industries for a particular region and the change of employment that would have occurred if each industry had grown (or declined) at the same rate as that

¹ Statistics Canada *Growth Patterns in Manufacturing Employment, 1961-1967*. Information Canada, Ottawa, 1971.

industry did in the nation as a whole over the period. This component measures a region's competitiveness, in a particular industry, relative to the rest of the country.

From Table 2.13 it should be noted that the growth in the Atlantic Provinces (19.8 per cent) was slightly faster than in Canada as a whole (19.4 per cent) between 1961 and 1970. This resulted in a small net relative change. This change comprised a large positive regional share component (i.e. the measure of a region's industrial competitiveness relative to the rest of the nation) offset by an almost equally large industry mix component (i.e. the change attributable to the particular distribution of industries in the region). More specifically, the negative industry mix resulted from dependence on slow growth industries such as the bulk of those in the food and beverages and wood categories. The industry mix had a severe effect on employment growth in New Brunswick, which is especially dependent on the wood industries group and pulp and paper mills.

Table 2.14 presents the same kind of data as Table 2.13 but for the period 1961-67. It can be seen that the Atlantic Provinces increased its share of total national manufacturing employment over the period 1967-70. Over the period 1961-67 manufacturing employment in the Atlantic Provinces grew slower than for the whole of Canada. However, over the total period 1961-70 manufacturing employment in the Atlantic Provinces grew at a slightly faster rate than for the whole of Canada. Furthermore, all the improvement in the growth of manufacturing employment in the Atlantic Provinces over the 1967-70 period has occurred in the regional share component of net relative change. The Atlantic Provinces increased its share of total manufacturing employment by improving its competitive position relative to manufacturers in the rest of Canada. Over the period 1961-67 the regional share component represented an increase of 1.5 per cent over 1961 employment. Over the period 1961-70, the regional share component represented an increase of 6.8 per cent over 1961 employment. However, the industry mix component exerted a greater drag on the growth of employment through the 1961-70 period than during the 1961-67 period. For the 1961-70 period the industry mix component represented a decline of 6.4 per cent from 1961 employment, while over the 1961-67 period it represented a decline of 5.1 per cent of the 1961 employment.

It is conceivable that the Atlantic region can continue to increase its share of national manufacturing employment by improving its competitiveness relative to the rest of Canada. However, it is most unlikely that the targets for manufacturing employment set by the Atlantic Development Council can be met unless the manufacturing base of the Atlantic Provinces can be broadened by the attraction of growth industries.

Table 2.15 lists the Canadian growth industries for the period 1961-70, while Table 2.16 compares the proportion of growth industries in the RDIA assisted new facilities to the proportion of growth industries in the existing manufacturing base. Some 40 per cent of the new facilities are in growth industries. As of 1969, only 32.6 per cent of manufacturing

Table 2.13

Components of Employment Change 1961-70

Area	Manufacturing Employment Total Employees					Net Relative Change		Components of Net Relative Change		
	1961	1970	Change		National Growth	Numerical	per cent	Industry Mix	Regional Share	
			Numerical	per cent					Numerical	per cent
Newfoundland	10,000	12,768	2,768	27.6	1,938	829	8.2	- 202	1,031	10.3
Prince Edward Island	1,792	2,777	985	54.9	347	637	35.5	- 196	834	46.5
Nova Scotia	27,994	31,347	3,353	11.9	5,427	2,074	-7.4	- 1,081	- 992	- 3.5
New Brunswick	22,575	27,795	5,220	23.1	4,376	843	3.7	- 2,510	3,353	14.8
Atlantic Provinces	62,361	74,687	12,326	19.8	12,088	235	.4	- 3,989	- 4,226	6.8
Canada	1,314,861	1,569,780	254,919	19.4	254,919	-	-	-	-	-

Source: Statistics Canada, *Growth Patterns in Manufacturing Employment 1961-1967* and unpublished data 1968-70. Figures on total employment do not agree with those published in Census of Manufacturers because head office employees are excluded.

Table 2.14

Components of Employment Change 1961-67

Area	Manufacturing Employment Total Employees					Net Relative Change		Components of Net Relative Change		
	1961	1967	Change		National Growth	Numerical	per cent	Industry Mix	Regional Share	
			Numerical	per cent					Numerical	per cent
Newfoundland	9,769	11,496	1,727	17.6	2,113	- 386	- 3.9	469	83	0.8
Prince Edward Island	1,681	2,253	572	34.0	363	208	12.3	139	347	20.6
Nova Scotia	27,395	32,521	5,126	18.7	5,926	- 800	- 2.9	760	- 40	- 0.1
New Brunswick	22,186	25,794	3,608	16.2	4,799	- 1,191	- 5.3	1,721	529	2.3
Atlantic Provinces	61,031	72,064	11,033	18.1	13,201	- 2,169	- 3.5	3,089	919	1.5
Canada	1,297,872	1,578,658	280,786	21.6	280,786	-	-	-	-	-

Source: Statistics Canada, *Growth Patterns in Manufacturing Employment 1961-1967*.

Employment figures for 1961 do not agree with those of Table 6 because data on working owners and partners have been excluded.

Table 2.15

Growth Industries - Canadian Manufacturing¹

1961- 1970

<u>S.I.C.² Code</u>	<u>Manufacturing Industry</u>
103	Poultry Processors
111	Fish Products Industry
135	Vegetable Oil Mills
139	Miscellaneous Food Manufacturers
143	Distilleries
147	Winderies
163	Rubber Tire & Tube Manufacturers
201	Synthetic Textile Mills
216	Carpet Mat & Rug Industry
218	Textile Dyeing & Finishing Plants
219	Linoleum & Coated Fabrics Industry
221	Canvas Products Industry
229	Miscellaneous Textile Industries
264	Office Furniture Industry
266	Other Furniture Industry
273	Paper Box & Bag Manufacturers
274	Other Paper Converters
288	Publishing Only
291	Iron & Steel Mills
292	Steel Pipe & Tube Mills
294	Iron Foundries
295	Smelting & Refining
296	Aluminum Rolling, Casting & Extruding
298	Metal Rolling, Casting & Extruding, N.E.S.
301	Boiler & Plate Works
302	Fabricated Structural Metal Industry
304	Metal Stamping, Pressing & Coating Industry

Table 2.15 (cont'd.)

<u>S.I.C. Code</u>	<u>Manufacturing Industry</u>
305	Wire & Wire Products Manufacturers
306	Hardware, Tool & Cutlery Manufacturers
308	Machine Shops
309	Miscellaneous Metal Fabricating Industry
315	Miscellaneous Machinery & Equipment Manufacturers
316	Commercial Refrigeration & Air Conditioning Equipment
318	Office & Store Manufacturing
323	Motor Vehicle Manufacturers
324	Truck Body & Trailer Manufacturers
325	Motor Vehicle Parts & Accessories Manufacturers
326	Railroad Rolling Stock Industry
328	Boatbuilding & Repair
329	Miscellaneous Vehicle Manufacturers
331	Manufacturers of Small Electrical Appliances
335	Commercial Communications Equipment Manufacturers
336	Electrical Industrial Equipment Manufacturers
337	Battery Manufacturers
338	Manufacturers of Electric Wire & Cable
339	Manufacturers of Misc. Electrical Products
348	Ready-Mix Concrete Manufacturers
352	Refractories Manufacturers
354	Mineral Wool Manufacturers
356	Glass & Glass Products Manufacturers
359	Other Non-Metallic Mineral Products Manufacturers
371	Explosives & Ammunition Manufacturers

Table 2.15 (cont'd.)

<u>S.I.C. Code</u>	<u>Manufacturing Industry</u>
374	Manufacturers of Pharmaceuticals & Medicines
377	Manufacturers of Toilet Preparations
378	Manufacturers of Industrial Chemicals
379	Other Chemical Industries
381	Scientific & Professional Equipment Manufacturers
385	Plastic Fabricators, N.E.S.
393	Sporting Goods & Toy Industry
397	Signs & Displays Industry

¹ A growth industry is one in which total employment grew at a greater rate over the 1961-70 period than the average rate for all manufacturing industries.

² The 1960 S.I.C. is used for this classification.

establishments in the Atlantic Provinces were in growth industries. The RDIA program appears to be making some progress in establishing growth industries in the Atlantic Provinces.

Table 2.16

New Facilities in Growth Industries

RDIA Assisted Projects 1969-72

Province	New Projects in Growth Industries		Establishments in Growth Industries, 1969	
	No.	Per cent of all New Projects	No.	Per cent of all New Projects
Newfoundland	19	61.3	84	32.4
Prince Edward Island	3	21.4	40	27.0
Nova Scotia	19	42.2	283	33.5
New Brunswick	23	32.9	207	33.0
Atlantic Provinces	64	40.0	614	32.6

Source: Canada Department of Regional Economic Expansion, Report on Regional Development Incentives and Statistics Canada, Census of Manufacturers.

2.5 Individual Centres within the Atlantic Region

The keystone of the present federal regional development strategy is the promotion of growth centres as a means of solving the economic problems of the Atlantic region. In 1970 the federal government announced that four major growth centres in the region had been selected for special area status: St. John's (Newfoundland), Halifax-Dartmouth, Saint John (N.B.) and Moncton. These areas were seen as the spearhead for the region's economic progress and so were designated to receive infrastructure assistance to aid their development. For the successful development of these centres the RDIA program (together with the special area incentives, where necessary) must help the industrial development of these major centres. It is the purpose of this section to assess the relative performance of the four major growth centres under the DREE incentives program. The share of activity of each special area under the program will be compared to its share of the regional manufacturing activity in 1969 and analysed for its industrial distribution.

Two points should be noted at the outset of this discussion. First, the published estimates of RDIA activity for individual centres must be treated with caution. An analysis of RDIA activity by individual centres is necessarily concerned with quite small numbers, and one more project of even moderate size could change the results quite markedly. It is also recognized that some projects listed as having accepted an RDIA grant may not overcome startup problems. If these projects and their associated employment do not materialize, the aggregate performance of the major growth centres and performance of the individual centres could change significantly from that indicated by published net accepted offers. Secondly, as has been indicated earlier, a substantial portion of expected additional employment is not employment gains but employment saving or replacement. This is one reason why published Statistics Canada data on manufacturing employment by individual centres reveal very little impact traceable to the RDIA program .

The number of assisted projects and the amount of expected additional employment for the four major growth centres under consideration are shown in Table 2.17. Each centre's share of RDIA activity in the Atlantic Provinces is compared to its share of the Atlantic region's manufacturing activity in 1969. The new facility project type is examined separately because it is of greater significance: the Special Areas can be expected to attract a large share of expansions and modernizations simply through having a large share of the region's existing manufacturing activity.

Table 2.17 reveals that, as a group, the major growth centres have obtained just over 30 per cent of the employment in new facilities in the Atlantic Provinces. These centres as a group had almost 25 per cent of manufacturing employment in the Atlantic Provinces in 1969. Thus there appears to be a slight tendency for expected additional employment under the RDIA program to be concentrated in the growth centres.

It must be realized that the resource processing industries such as fish products, fruit and vegetable processing, and sawmills and planing mills, have been a major source of regional manufacturing growth and that these resource processing industries have also comprised a large portion of the total activity under the RDIA program. With the possible exception of St. John's, the four Special Areas are not well located for these resource processing activities.

The recent locational trend of manufacturing employment in the Atlantic Provinces is outlined in Table 2.18. It can be seen that two of the growth centres (Halifax-Dartmouth and Saint John) lost manufacturing employment over the 1961-69 period and that none of the major growth centres gained manufacturing employment as fast as the Atlantic Provinces as a whole. As a group, the growth centres recorded an annual average increase of .1 per cent over 1961-69 while the Atlantic Provinces recorded an average increase of 2.7 per cent. It is perhaps remarkable that the growth centres have attracted as much RDIA activity as they have, considering that the program is essentially passive, with the choice of location primarily determined by market forces.

Table 2.17

Performance of Growth Centres and other Selected Centres
under the RDIA Program, 1969-1972

GROWTH CENTRES	Regional Development Incentives Act - Net Accepted Offers								Manufacturing Industries in 1969			
	NEW PROJECTS				TOTAL ACCEPTED OFFERS				ESTABLISHMENTS		EMPLOYEES	
	Projects	per cent of A.P. Total	Expected Additional Employment	per cent of A.P. Total	Projects	per cent of A.P. Total	Expected Additional Employment	per cent of A.P. Total	No.	per cent of A.P. Total	No.	per cent of A.P. Total
St. John's Special Area	11	6.9	487	5.6	19	5.4	606	4.3	81	4.3	2,752	3.6
Halifax-Dartmouth Special Area	13	8.1	1,324	15.3	27	7.6	1,533	10.9	134	7.1	7,360	9.5
Saint John Special Area	8	5.0	500	5.8	19	5.4	1,197	8.5	86	4.6	6,653	8.6
Moncton Special Area	13	8.1	331	3.8	25	7.1	590	4.2	61	3.2	2,268	2.9
Growth Centres	45	28.1	2,642	30.6	90	25.4	3,962	27.9	362	19.3	19,033	24.7
Stephenville	6	3.8	343	4.0	7	2.0	351	2.5	N/A	N/A	N/A	N/A
Amherst	5	3.1	264	3.1	6	1.7	272	1.9	24	1.3	958	1.2
Truro	7	4.4	409	4.7	14	4.0	561	4.0	26	1.4	1,508	2.0
<u>TOTAL</u>	63	39.4	3,658	42.4	117	33.1	5,110	36.3	412	21.9	21,376	27.9

Source: Canada Department of Regional Economic Expansion, Report on Regional Development Incentives and Statistics Canada, Census of Manufacturers. Manufacturing data for St. John's (Newfoundland), Halifax-Dartmouth and Saint John (NB), are for the Census Metropolitan area while data for Moncton is for the city of Moncton. The reader should note that the St. John's (Newfoundland), Halifax-Dartmouth and Moncton Special Areas are larger than the Census Metropolitan Area, in the case of the first two and the city in the case of Moncton. For these three centres the comparisons of the table tend to overstate the impact of the program. For Saint John the impact of the program is understated because the Special Area is smaller than the Census Metropolitan Area. The bias introduced by this non-conformity of reporting boundaries is small in all cases.

Table 2.18

MANUFACTURING EMPLOYMENT, IN THE
GROWTH CENTRES, 1961-1972

GROWTH CENTRES	Annual Average Per Cent Increase Manufacturing Employment			
	1961-69	1969-70	1970-71	1971-72*
St. John's	1.5	-6.6	-1.9	-1.1
Halifax-Dartmouth	- .5	-9.1	.1	-
Saint John	- .2	1.0	-4.2	8.2
Moncton	1.3	1.0	2.2	5.0
Growth Centres	.1	-4.2	-1.3	1.0
Atlantic Provinces	2.7	-1.3	.6	2.7

* Nine months of 1972 over nine months of 1971.

Source: Based on data from Statistics Canada. Increases for 1961-70 are based on data from the Census of Manufacturers. Increases for subsequent years are based on data from Employment, Earnings and Hours. Employment estimates for St. John's, Halifax-Dartmouth and Saint John are for the Census Metropolitan Area. Estimates for 1961-70 for Moncton are based on the city of Moncton while estimates for subsequent years are based on the city of Moncton plus the parishes of Moncton and Coverdale.

Table 2.19
Manufacturing Establishments in Residential Industries

Special Areas

1970

Residential Industry	Special Area			
	St. John's per cent	Halifax- Dartmouth per cent	Moncton per cent	Saint John per cent
101-Meat & Poultry Products Ind.	3.4	.7	4.3	3.4
104-Dairy Products Industry	3.4	.7	8.6	3.4
107-Bakery Products Industry	7.9	7.5	18.6	7.9
109-Beverage Industries	6.7	6.2	2.9	6.7
286-Commercial Printing	13.5	13.7	8.6	13.5
288-Publishing Only	1.1	.7	1.4	1.1
289-Publishing & Printing	2.2	2.1	2.9	2.5
308-Machine Shops	2.2	5.5	5.7	2.2
353-Stone Products Mfrs.	3.4	.7	-	3.4
354-Concrete Products Mfrs.	3.4	2.7	1.4	-
355-Ready-Mix Concrete Mfrs.	3.4	2.1	2.9	3.4
391-Scientific and Professional Equipment Industries	3.4	6.2	5.7	3.4
397-Signs & Display Industry	2.2	3.4	2.9	2.2
TOTAL- Residential Industry	52.8	52.2	65.9	53.1

Source: Statistics Canada, List of Establishments reporting to the 1970
Census of Manufacturing.

Table 2.20

Performance of Growth Centres and Other Selected Centres
Regional Development Incentives Act
as of December 31, 1972

GROWTH CENTRES	Regional Development Incentives Act - Accepted Offers								Manufacturing Industries in 1969			
	NEW PROJECTS				TOTAL ACCEPTED OFFERS				ESTABLISHMENTS		EMPLOYEES	
	Projects	per cent of Prov. Total	Expected Additional Employment	per cent of Prov. Total	Projects	per cent of Prov. Total	Expected Additional Employment	per cent of Prov. Total	No.	per cent of Prov. Total	No.	per cent of Prov. Total
St. John's Special Area	11	35.5	487	37.9	19	31.2	606	30.9	81	31.3	2,752	22.4
Halifax-Dartmouth Special Area	13	28.9	1,324	42.9	27	22.5	1,533	26.8	134	15.8	7,360	22.2
Saint John Special Area	8	11.4	500	13.2	19	13.7	1,197	21.3	86	13.7	6,653	22.9
Moncton Special Area	13	18.6	331	8.8	25	18.0	590	10.5	61	9.7	2,268	7.8
Stephenville	6	19.3	343	26.7	7	11.5	351	17.9	N/A	N/A	N/A	N/A
Amherst	5	11.1	264	8.5	6	5.0	272	4.8	24	2.8	958	2.9
Truro (incl. Debert)	7	15.6	409	13.2	14	11.7	561	9.8	26	3.1	1,508	4.5

Source: Canada Department of Regional Economic Expansion, Report on Regional Development Incentives and Statistics Canada, Census of Manufacturers. Manufacturing data for St. John's (Newfoundland), Halifax-Dartmouth, and Saint John (NB), are for the Census Metropolitan Area while data for Moncton is for the city of Moncton.

Table 2.17 also includes figures showing the relative performance of three other smaller centres (Stephenville, Amherst and Truro) that have attracted a substantial amount of activity under the RDIA program. These three centres have obtained almost half as much expected additional employment under the program as the four major growth centres. Their performance suggests that the growth centres are not exceptionally attractive locations, relative to other centres, for manufacturing industry within the Atlantic Provinces. Together, the four growth centres and these three smaller centres have attracted over 42 per cent of the expected additional employment in new facilities.

Table 2.19 provides further insight into the locational qualities of the growth centres relative to other centres in the Atlantic Provinces. This highlights the fact that residential, or market oriented, industries make up a considerable portion of the manufacturing base in the four Special Areas. In other words, much of the manufacturing base in the Special Areas is composed of activities established to serve the local markets in and around these population centres. This is especially true for Moncton, which is more favourably located than the other Special Areas to perform the role of a distribution centre. In contrast to the Special Areas, only approximately 35 per cent of the total manufacturing base of the Atlantic Provinces is composed of the market oriented activities listed in Table 2.18.

The data of Table 2.19 suggest that the only major attraction the four Special Areas possess for the location of manufacturing industries is the size of their local markets. It is unlikely that an industry selling the majority of its output on the national or export markets would derive significant benefits from locating in a Special Area rather than in one of a number of other centres.

In assessing the performance of the individual growth centres, employment expected from net accepted offers under the program is compared, both for new facilities and total offers, with the centre's share of provincial (Table 2.20) and regional (Table 2.17) manufacturing employment for 1969². It is also relevant in assessing a centre's performance under the program to weigh this performance against its past growth in manufacturing employment.

Using these criteria, St. John's and Halifax have performed quite well while Moncton and Saint John have not. Halifax-Dartmouth has obtained a larger share of employment from new facilities than could be expected from its existing share of employment either in the Atlantic Provinces or in Nova Scotia. Halifax-Dartmouth has done less well in terms of expected employment from total offers because of a large number of small modernizations and expansions.

² This is the latest year for which fully comparable and complete statistics are available.

As noted earlier, the performance of Halifax-Dartmouth is exaggerated by these figures because some projects and employment included in the figures are unlikely to materialize. If these projects should materialize Halifax-Dartmouth's performance is quite good, considering that the area lost manufacturing employment steadily over the 1960s. St. John's has done reasonably well when judged on the basis of employment from new facilities or from total offers in relation to its existing share of Newfoundland or Atlantic Provinces' manufacturing employment. However, much of the manufacturing employment in fish and forest products industries in Newfoundland is not in the St. John's special areas and some of the manufacturing activities (e.g. newsprint production) are not eligible for DREE grants.

The performance of the New Brunswick growth centres has not been particularly good. Saint John has not obtained a share of employment from new facilities or total accepted offers equal to its share of either New Brunswick or Atlantic Provinces' manufacturing employment. This is not surprising, considering that the city actually lost manufacturing employment over the period 1961-69. Moncton has obtained only a slightly larger share of RDIA employment in relation to its existing share, which is disappointing considering that manufacturing employment in Moncton grew steadily over the period 1961-69.

If a growth centre approach to development is to meet with success, the designated growth centres must attract growth industries. Table 2.21 presents the number of new facilities in growth industries for the growth centres and for the Atlantic Provinces as a whole. From this table it can be seen that only the St. John's Special Area has obtained a larger share of growth industries than the Atlantic region. As a group the growth centres are obtaining a considerably smaller share of growth industries than the Atlantic Provinces as a whole.

Table 2.21
New Projects in Growth Industries
RDIA Assisted Projects

Growth Centres	New Projects in Growth Industries	
	Number	Percentage of Total New Projects
St. John's, Nfld.	5	45.5
Saint John, N.B.	2	25.0
Moncton	3	23.1
Halifax-Dartmouth	4	30.8
All Growth Centres	14	31.1
Atlantic Provinces	64	40.0

Source: Canada Department of Regional Economic Expansion, *Report on Regional Development Incentives*.

The findings of Table 2.21 can be compared to those of Table 2.23, which presents for 1970 for the Special Areas, the proportion of the manufacturing base accounted for by growth industries. It can be seen that only St. John's (Newfoundland) has obtained a proportion of growth industries from the program higher than its existing proportion of growth industries.

Table 2.22
Manufacturing Establishments in Growth Industries
Special Areas
1970

Special Areas	Establishments in Growth Industries	Total Manufacturing Establishments	Establishments in Growth Industries as Percentage of Total Establish- ments
St. John's, (Nfld.)	30	89	33.7
Halifax-Dartmouth	53	146	36.3
Moncton	21	70	30.0
Saint John, (N.B.)	38	82	46.3
Total: Growth Centres	142	387	36.7

Source: Statistics Canada, List of Establishments reporting to the 1970 Census of Manufacturing.

The performance of the growth centres over the 1960s in terms of growth in manufacturing employment indicates that market forces have gradually diffused manufacturing employment throughout the Atlantic Provinces. Furthermore, an examination of the annual increases in manufacturing employment for 1969-70, 1970-71 and 1971-72, provides little indication that the RDIA program is meeting with much success in the attempt to concentrate manufacturing employment in the growth centres. As a group, the growth centres have continued to record lower increases (higher decreases) in manufacturing employment than the Atlantic Provinces as a whole. The growth centres, in fact, do not appear to possess any significant locational attractions relative to other centres other than the size of their local markets.

CHAPTER 3

THE IMPACT OF THE RDIA PROGRAM ON DECISION MAKING IN THE PRIVATE SECTOR

A program of regional development incentives to industry is one mechanism by which governments attempt to influence the regional incidence of investment decisions in the private sector. The aim is to increase the rate of investment and industrial growth in less developed or slow growth regions *vis-à-vis* the rest of the country. Industrial incentives may achieve this objective in a number of ways. They may persuade outside firms to locate new plants, or to expand their existing plants, in the chosen regions rather than elsewhere. The incentives may induce local entrepreneurs in the less developed or slow growth regions to expand their production, modernize their plant, produce new products or build new plants. Alternatively, the incentives may encourage outside or local firms who plan to establish, expand or modernize their operations in the region, to do so at an earlier date. In this instance, however, the impact of an incentives program on the rate of industrial growth may be purely ephemeral, for it may have a significant timing effect on industrial investment only in the early stages; on the other hand, it may have a demonstration effect, resulting in the stimulation of further investment.

If an entrepreneur modifies his decision regarding the size, technology, timing or location of a project, as a result of an incentive from government, the incentive program is having some effect on the regional incidence of investment decisions in the private sector. If he modifies his decision in a way beneficial to a slow growth region the incentives program has had some beneficial or incremental impact on the region. In other words, some direct economic impact has occurred that would not have been present but for the incentives program. It is the objective of this chapter to identify specifically the incremental impact of the RDIA program on the survey respondents.

This chapter is divided into five major sections. The first identifies the projects which would have gone ahead without the RDIA incentive and those where the RDIA offer had no impact on the investment and locational decisions associated with the assisted project. In subsequent sections the RDIA influence on the location, timing, size and technology of the project is examined. For the most part the responses from the random sample form the basis of the discussion. However, as a locational impact is more likely to arise in the case of a new facility, the discussion of the grant's influence on locational decisions is based on responses from the new facility population. Table 3.1 presents the expected additional employment, incentive per job and capital cost per job for the various types of projects included in the random sample. Three projects in the random sample were bankrupt or out of business at the time of the survey and

information was not forthcoming on one of the remaining projects. This analysis of the random sample responses is based on interviews with 47 firms or 97.9 per cent of the grant recipients in commercial production in the fall of 1972.

Table 3.2 presents the same information for the group of new facilities. Three of the fifty-two projects in this classification are in fact relocations; four are firms that have rebuilt their plants on their former sites. The rest are either new companies, new subsidiaries or new plants of existing companies. Of the fifty-two new facilities eight (15.4 per cent) were bankrupt at the time of the survey. As would be expected, the responses of these bankrupt projects to the questionnaire were incomplete and the related projects have been excluded from the analysis in this section. Information on two of the remaining 44 firms was not forthcoming, so that the following analysis is based on a 95.5 per cent response rate amongst firms still in commercial production. It will be noted from Table 3.2 that 40.4 per cent of the new facility grant recipients were new companies.

3.1 Projects which would have gone ahead without DREE assistance

It can be expected that under any regional development incentives program there will be a certain number of firms who receive grants from the public treasury but where the grant has no incremental effect on the project. In other words, the project would have gone ahead in the same form, at the same place, at the same time and on the same scale without the incentive. In these cases a company has been able to convince the government that it needs assistance to undertake a project when in fact it does not. The incentives given to such firms represent simply a transfer of funds from the public to the private sector without any direct regional development impact. Needless to say, it is essential for a government to keep the number of these firms to an absolute minimum.

As is indicated in Table 3.3 (a), 36.2 per cent of the assisted projects in the random sample indicated that they would have gone ahead without the RDIA grant. The projects in the random sample which would have gone ahead without the RDIA grant were heavily weighted by smaller projects. Hence the group accounted for only 14.9 per cent of eligible capital costs, 15.7 per cent of the total RDIA incentives and 21.0 per cent of expected additional employment. According to the group of new project respondents, 31.0 per cent of the assisted projects would have gone ahead without the RDIA grant (Table 3.3 (b))¹. In both the random sample and the new projects, incentive per job and the capital cost per job are lower for projects which would have gone ahead without the incentive than they are for

¹ With regard to the mail questionnaire survey, 20 per cent of all the respondents indicated that the project would have gone ahead without the RDIA grant. This conforms closely to the results of the APEC mail questionnaire survey where 19.2 per cent of the respondents to the questionnaire "Would the project have been undertaken without the RDIA grant?", replied in the affirmative.

projects which would have not gone ahead without the grant. This results from the fact that the former group of projects includes a large proportion of small labour intensive projects which involve a small amount of eligible capital cost per job and a resulting small amount of incentive per job.

Table 3.1

Expected Additional Employment, Capital Cost per Job
and Incentive per Job for Random Sample

	Per cent of random sample population	Expected Additional Employment		Capital Cost per job	Incentive per job
		Number	per cent	\$	\$
New Companies	29.4	764	44.3	6,213	2,692
Expansions, Moderniza- tions and New Plants of Existing Firms	62.7	855	49.5	10,819	3,847
Bankrupt firms *	5.9	67	3.9	5,510	2,348
No Replies	2.0	40	2.3	2,475	1,248
Total:	100.0	1,726	100.0	8,381	3,218

* No information available.

Table 3.2

Expected Additional Employment, Capital Cost per Job
and Incentive per Job for New facility Population

	Per cent of new facility population	Employment		Capital Cost per job	Incentive per job
		Number	per cent	\$	\$
New Companies	40.4	1,058	31.9	6,347	3,019
New subsidiaries and new plants of existing companies (including rebuildings and relo- cations)	40.4	1,804	54.5	11,028	5,885
Bankrupt Firms	15.4	311	9.4	6,830	2,377
No Replies	3.8	140	4.2	10,212	4,042
Total:	100.0	3,313	100.0	9,105*	4,562*

* If the lost jobs associated with projects which are out of commercial production are taken off the total expected employment, the incentive per job rises to \$5,035.

Table 3.3

Responses to Question 13 of Questionnaire

Would you have gone ahead with this project
without an RDIA Incentive Grant?

(a) Random Sample Respondents

Respondents	Eligible Capital Costs	RDIA Incentives	Expected Additional Employment	Incentive per job	Capital Cost per job
per cent	per cent	per cent	per cent	\$	\$
Yes 36.2	14.9	15.7	21.0	2,463	6,134
No 63.8	85.1	84.3	79.0	3,525	9,313
Total - 100.0	100.0	100.0	100.0	3,302	8,645

(b) New Facility Respondents

Respondents	Eligible Capital Costs	RDIA Incentives	Expected Additional Employment	Incentive per job	Capital Cost per job
per cent	per cent	per cent	per cent	\$	\$
Yes 31.0	16.4	16.2	24.9	3,140	6,116
No 69.0	83.6	83.8	75.1	5,382	10,350
Total - 100.0	100.0	100.0	100.0	4,825	9,298

In designing the questionnaire it was realized that the responses to Question 13 (Would you have gone ahead with this project without the RDIA grant?) could be somewhat misleading. For a firm that answers "YES" to this question there is no doubt the project would have gone ahead without the grant. Of course, this does not eliminate the possibility that the grant had some effect on, for example, the timing of the project. For a grant to have had no impact on the firm, the firm would have to answer YES to Question 13 and NO to all parts of Questions 14, 15 and 16 (i.e. the questions relating to the impact of the grant on the timing, size and technology of the project). It is realized that some businessmen may be

reluctant to answer YES to Question 13. In a situation where incentive grants to industry are widely available, a bargaining position with respect to government is not to be unexpected. Moreover, in an atmosphere of keen public discussion of the incentive program, businessmen may be reluctant to indicate that the project would have gone ahead without a grant.

A number of crosschecks were therefore developed in the questionnaire. If the interviewees indicated that the decision to undertake the project was taken prior to the grant application and prior to the offer being made. (Question 1 & 12) and also that the RDIA grant affected the timing of the project it may be regarded as probable that, in spite of the negative response to Question 13, the project would have gone ahead at the later date than without the RDIA grant. Ten firms in the random sample entered this category. In some cases the dubious nature of these negative answers to Question 13 was further supported by the fact that the project had entered commercial production before it had received a grant offer.

The projects which indicated that they would have gone ahead without the RDIA grants indicated that they were quite significantly affected by the incentive in various aspects of their investment decision. In the majority of cases, at least one aspect of the investment decision was altered because of the incentive. In most of the cases, therefore, the incentive had some incremental impact. Table 3.4 sets out the effects of the RDIA grant on the investment decision in the case of the projects which would have gone ahead without the grant. Three respondents from the random sample (6.4 per cent) and four from the group of new facilities (9.5 per cent) indicated that their investment decisions were completely unaffected by the incentive. These projects cannot be classified as in any way incremental to the RDIA program.

As indicated in Chapter 1, Springate found that 2 of 13 (15.4 per cent) of the smaller companies (i.e. those with annual revenues less than \$20 million) he interviewed were completely unaffected by the RDIA incentive². In making comparisons to Springate's findings, this report is concerned mainly with his findings on small companies because most of the companies researched by him in the Maritimes were smaller companies³.

Table 3.5 outlines the various impacts of the RDIA grant on the investment decision of random sample and new facility respondents. It should be emphasized that the percentages refer to the number of projects affected. For example, 19 (45.2 per cent) of the 42 new facilities indicated that the project was brought forward in time whilst 16 (38.0 per cent) of the new facilities indicated that the RDIA grant was responsible for a change in the amount of employment created by the project. Because an individual project can be affected in more than one way, the percentages of Table 3.5 tend to exaggerate the impact of the RDIA program on the investment decision.

² Springate, D.J.V. *Op. cit.*, pp. 220-270.

³ *ibid*, p. 120.

Table 3.4

Projects (30) Which Would Have Gone Ahead
Without the Incentive:

Aspects of the Investment Decision Affected
by RDIA Grant*

	Number of Aspects of Investment Decision Affected									
	0	1	2	3	4	5	6	7	8	9
Random Sample: Number of Projects (17)	3	5	1	1	1	2	2	2	0	0
New facilities: Number of Projects (13)	4	1	0	1	2	2	2	1	0	0

* Nine aspects of the investment decision are included: timing (brought forward in time), size of employment, size of investment, length of projection runs, number of product lines, type of manufacturing process, quality of production equipment, increased mechanization, and decreased mechanization.

Table 3.5

Impact on Investment Decision of RDIA Grant
Assisted Projects Affected As A Proportion Of
All Assisted Projects

<u>Impact</u>	Random Sample		New Facilities	
	All Projects	Projects Which Would Have Gone Ahead With-out Grant	All Projects	Projects Which Would Have Gone Ahead With-out Grant
	per cent	per cent	per cent	per cent
<u>1. Timing</u>				
Was date on which construc- tion of Project began:				
(a) brought forward	46.8	52.9	45.2	53.8
(b) delayed	19.2	23.5	9.5	15.3
by incentive?				
<u>2. Size</u>				
Was the grant responsible for changing plans for the size of project in terms of:				
(a) Employment	27.7	23.5	38.0	53.8
(b) Investment	29.8	35.3	30.9	46.1
(c) Length of production runs-	25.5	23.5	26.1	23.0
(d) Number of product lines?	31.9	23.5	28.5	38.4
<u>3. Technology</u>				
Was grant responsible for changing plans in terms of:				
(a) Changing the type of manufacturing process used-	29.8	29.4	16.6	7.6
(b) Improving quality of production equipment-	59.6	52.9	47.6	46.1
(c) Increasing degree of mechanization-	57.4	52.9	40.4	38.4
(d) Decreasing degree of mechanization?	0.0	0.0	2.3	7.6
<u>4. Investment Decision</u>				
Completely unaffected by grant.	6.4	17.6	9.5	30.8

3.2 Impact on the Locational Decision

An incentives program has a locational impact if it induces economic activity to locate in an area where it would not have located without the financial aid from government. For the purposes of this report the locational impact may be divided into two categories: that which involves a locational shift between the Atlantic Provinces and outside areas; that which represents a locational change within the Atlantic region. Questions 4, 5 and 6 were designed primarily to indicate whether the RDIA grant had an incremental effect on the locational decision. In question 4, the respondents were asked to identify the *key* factor which *first* led them to consider an Atlantic Provinces' location for their project. Question 5 identifies those firms that considered locations outside the region, whilst question 6 asks them to identify the chief factors influencing their *decision* to locate in the Atlantic Provinces. Questions 7, 8 and 10 were asked to determine, amongst other things, the locational options that firms considered within the region and what influence the RDIA grant and various government agencies had on the choice of a particular location for the project.

The survey established that in the decision to enlarge, modernize or diversify production capacity there was normally no active consideration of other locations for existing enterprises. Most businessmen contemplating expansion or modernization did not perceive that they had a locational choice, i.e. to expand or modernize on their existing site or to build a new, more modern, facility elsewhere. This was especially true of those operating single-plant firms with room to expand nearby. Hence the potential locational impact of the DREE incentive program on existing firms wishing to expand or modernize must be considered small. Only in certain cases can the incentive be expected to have any chance of influencing the choice of location for an expansion or modernization. These are where a national or international multi-branch firm wants to enlarge its operations and is faced with the choice of expanding its productive capacity at one of its plants in either the Atlantic Provinces or elsewhere. If the firm is persuaded by the RDIA grant to expand in the Atlantic region rather than elsewhere, a locational impact may be attributed to the DREE program which is beneficial to the Atlantic Provinces.

Active consideration of alternative locations is more common among firms establishing new facilities and it is here that the RDIA program would seem to have its greatest scope for a locational impact. It is for this reason that this assessment of the locational impact of the RDIA program is based on the replies from the population of new projects that had entered commercial production by May 31, 1972.

Comparatively few of the new facility respondents considered more than one location for their project. This is partly a matter of terminology, i.e. the department's classification of new projects. Sometimes a new facility represents a new structure to house the expansion of an existing and well-established firm or a rebuilding of premises destroyed by fire. In some

cases, projects so classified represent the purchase of the assets of a bankrupt firm. This does not normally involve any locational choice.

Leaving aside these cases where a new facility refers to the replacement or revival of an existing facility, it is clear from the survey that in the majority of the remaining cases the principal(s) did not consider more than one location. Many of the businessmen involved indicated in their response a strong business or personal attachment to a particular centre or area. This was usually the primary reason why they decided to locate in the Atlantic region (Table 3.6) and in a particular centre (Table 3.7). Moreover, for about 60 per cent of the respondents, previous production experience or business contacts in the region was the key factor which *first* led them to consider an Atlantic Provinces' location for the project (Table 3.8).

Table 3.6

Most Important Factors Influencing the
Decision to Locate New Facilities in
the Atlantic Provinces

Factor	Most Important Factor	Second Factor	Third Factor
Business Attachment to Area	16	5	3
Personal Attachment to Area	5	2	0
Atlantic Provinces Market	9	5	2
Raw Material Supply	5	6	2
RDIA Assistance	5	2	1
Availability of Suitable Labour	1	5	3
Provincial Aid	0	2	0
Living Conditions in the Region	0	0	2
Other Factors	1	2	0
No Reply	0	13	29
Total No. of Projects : 42			

Table 3.7

Most Important Factor Influencing Firms
to Locate on their Present Site

(Question 7)

Business Attachment to Area	20
Access to Raw Materials	7
Government Aid	4
Access to Markets	3
Available Suitable Site	2
Cooperative attitude of Local People	2
Transportation	1
Labour Supply	1
Adequate Infrastructure	1
No Reply	1
Total No. of Projects	42

Table 3.8

Responses to the question 4: the key
factor which first led respondents to
consider an Atlantic Provinces' location
for his projects

<u>Key Factor</u>	<u>Number of times</u> <u>mentioned by respondents</u>
Previous production experience in the region	21
Business contacts in the region	4
Advertisement by a provincial or municipal agency	0
Knowledge of RDIA grant availability	9*
Approached by a provincial or municipal agency	3
Approach by DREE to establish project in the region	0
Other	5
Total No. of Projects:	42

* Most of these answers are by indigenous businessmen who did not consider outside locations and would not have gone ahead without the RDIA grant.

3.2.1. Government influence and the choice of locations: the Atlantic Provinces and outside regions

In terms of the Atlantic Provinces, the incentive program has an incremental impact if a firm that would have established a new facility outside the region is induced by the incentive to build a new facility in the Atlantic Provinces. An appraisal of the RDIA program's influence in this regard can be derived from the responses to Questions 4, 5 and 6.

Only one out of every seven (i.e. 6 out of 42) respondents considered a location outside the Atlantic Provinces for their project. With regard to three of these projects the locational decision involved a straight choice between centres in the USA, and centres in the Atlantic Provinces. In particular it was a choice between the eastern seaboard of the USA and a location in Canada close to the United States - New Brunswick border. A location in eastern New Brunswick would afford these firms relatively easy road access to United States markets for their products whilst allowing them to take advantage of certain locational attributes of the Atlantic Provinces (e.g. easier access to raw materials, financial assistance from government).

With regard to the other three projects for which locations outside the Atlantic Provinces were considered, the locational decision involved a choice between (a) expanding an existing facility or building a new one in Ontario or Quebec and (b) building a new facility in the Atlantic Provinces⁵. Relocation of economic activity within Canada, although a politically sensitive issue, does not appear to be a significant outcome of the DREE incentive program in relation to the Atlantic Provinces. In only one case could it be said with any degree of certainty that the RDIA grant produced an Atlantic region gain at the expense of central Canada⁶.

Of the six grant recipients that considered locations outside the Atlantic Provinces for their project, three would not have located in the Atlantic region without the DREE incentive. Thus, in the period from 1969 to May 31, 1972, an average of one new project a year had entered commercial production in the region that possibly would have located elsewhere but for the availability of the RDIA grant. Clearly, in the first three years of its operation, the RDIA incentive program had an insignificant effect on drawing industrial activity to the Atlantic Provinces from elsewhere.

⁵ This point is supported by the answers to the mail questionnaire survey from new facility respondents considering other locations in Canada for their project.

⁶ Returns from the mail questionnaire survey tend to confirm this conclusion.

The extent to which promotional activity by federal, provincial and municipal agencies had an impact on the locations chosen for the six new projects that considered locations outside the region can be gauged from their replies to Question 4. This question relates to the key factor *first* leading the respondent to consider an Atlantic Provinces' location for his project. The replies indicate that an approach by DREE did not initiate consideration of the region in any of the six cases under consideration. Advertisements by provincial and municipal agencies were equally ineffective.

3.2.2. Government influence and the choice of location within the Atlantic Provinces

In Question 7 the firms were asked to indicate other locations in the Atlantic Provinces that they considered for their projects and the main reason why they chose their present location⁷.

In Question 10 the interviewees were asked to indicate which was the most important of a list of factors (Question 9) in influencing their choice of location. Some kind of government assistance could have been given as a response to this question.

In 70 per cent of the new facilities the respondent indicated that no other locations in the Atlantic Provinces were even considered for the project⁸. This locational inertia stems in part from the area entrepreneurs; in part from the necessity to be near local resources or markets; and in a few cases from the purchase of a bankrupt plant where locational options are rarely available⁹.

⁷ A total of eight (25.8 per cent) of the new facility respondents to the mail questionnaire survey indicated that they considered locations outside the Atlantic Provinces. However, none of these respondents indicated that the project would have gone ahead without the RDIA grant. Five of the eight indicated that the RDIA grant was the most important factor influencing them to locate in the Atlantic Provinces.

⁸ A slightly smaller proportion (62.1 per cent) of the new facility respondents to the mail questionnaire survey indicated that no other locations in the Atlantic Provinces were considered for the project.

⁹ The purchase of a bankrupt facility has a locational option in the case of, for example, a prefabricated fish reduction plant that can be moved from one area to another.

From the point of view of governmental influence on location choice it is interesting to note the structure of the locational options considered by twelve respondents. In seven of the twelve cases the interviewees indicated that other provinces were considered; in five, the locational choice was limited to other places in the province wherein the project was eventually established.

3.2.3. Locational Impact of the RDIA grants

As already indicated it appears that the incentives program has only an insignificant impact on the locational decisions of grant recipients in the Atlantic Provinces: few projects have been attracted to the region that would have located outside but for the DREE grant; few projects have been attracted to the growth centres that would not have gone there but for the DREE incentive.

The lack of any significant location impact from the grants in these two fields stems partly from the program itself and partly from the characteristics of the new facilities. With regard to the program itself, it is clear that DREE promotional activity has been of limited effect during the first three years and the Department's operations. Few projects have been drawn to the region from outside and few projects have been induced to locate in the designated growth centres. Although the ceiling for DREE aid is higher in the region than outside, this is only an important promotional advantage for the region if incentives are given at or near the ceiling in most cases and if the combined federal-provincial incentive in the Atlantic Provinces is significantly greater than the federal-provincial incentive in other areas. There is no evidence to show that this is the case. There is also no evidence to show that the size of RDIA grants is structured to focus on the growth centres.

The nature of the new facilities also makes a locational impact less likely. A large number of the new projects are raw material oriented and the majority were established by businessmen with some strong attachment to a particular part of the Atlantic Provinces.

It is important to recognise that for most established businessmen the decision whether or not to go ahead with a project seems to be taken independently of the availability of government assistance. A businessman tends to assess whether the project is viable or not without government aid. If it is not, he will not go ahead with the venture. If it is viable, he will adopt a bargaining position with respect to assistance programs¹⁰.

¹⁰ This conclusion is supported by the works of, for example,

- (1) Due, J. "Studies of State-Local Tax Influences on the Location of Industry", *National Tax Journal*, June 1961, pp. 163-173.
- (2) Cyert, R. and March, J. *A Behavioural Theory of the Firm*, Prentice Hall, Englewood Cliffs, 1963.

3.3 Impact on Timing

A bringing forward in time of investment is suggested by some observers of the RDIA program to be one of the most widespread, as well as the major impact of the incentive. To test the impact of the RDIA program on the timing of the flow of investment, respondents were asked whether the date on which construction of the project *began* was (a) brought forward, or (b) delayed by the RDIA grant.

As shown in Table 3.5, 46.8 per cent of the projects of the random sample and 45.2 per cent of new facilities projects were brought forward in time by the incentive¹¹. A bringing forward in time was the most prevalent impact of the RDIA incentive with the exception of an impact on some aspects of the technology of the project. Of projects which indicated that they would have gone ahead without the RDIA incentive, 52.9 per cent of those in the random sample and 53.8 per cent of the new facilities indicated that there was a bringing forward of investment, making this the most prevalent impact for these projects.

These findings stand in contrast to those of Springate who found an effect in 3 out of 13 projects (23.1 per cent)¹². There is still a noticeable difference between his findings and those of the present report which confirms the results of the survey by the Atlantic Provinces Economic Council. In its survey, APEC found that the timing of the project was affected by the availability of a grant in 49.3 per cent of the cases¹³.

A project brought forward in time represents a gain in that, if the project proves a lasting success, benefits which would have only come into being in, say, 1973 are now available in 1972 as well¹⁴. The benefits from the project in subsequent years cannot, of course, be attributed to the grant.

¹¹ As a comparison, 41.9 per cent of all the respondents to the mail questionnaire indicated that the date on which construction of the project began was brought forward by the incentive.

¹² Springate, D.J.V., *op. cit.*, p. 69.

¹³ Atlantic Provinces Economic Council, *op. cit.*, p. 69.

¹⁴ Atlantic Provinces Economic Council, *op. cit.*, p. 69.

A project which was brought forward in time has been defined as an incremental project. A bringing forward in time of investment is an important impact and cannot be measured adequately in terms of the direct benefits outlined above. Bringing forward investment in time can contribute greatly to the quickening and strengthening of the development process in an area where the growth of private investment is sluggish. A speeding up or clustering of investment, and the resulting flows of spending and income, may have a beneficial effect on business confidence and expectations. Increased opportunities and potential are more visible to businessmen and the thrust to further rounds of investment is greater than if the investment were spaced out over time. The total contribution to the economic growth of the area can be much greater than if the projects were to occur over a longer period of time; this is the so-called *demonstration effect*.

The initiation of the RDIA program coincided with a major slow down of economic activity in Canada. Investment in manufacturing has been one of the weakest sectors of the Canadian economy over the recent past, primarily due to low levels of market demand, poor profitability and a low level of utilization of capacity in many manufacturing industries. Relatively low levels of internally generated funds, as measured by cash flows, in addition to the cost of corporate credit, have also contributed to the weakness in manufacturing investment. Table 3.9 examines profit margins and ratio of output to capacity in the manufacturing industries. The evidence suggests that in many cases DREE financial aid was sufficient to overcome the negative impact on investment of low profits, poor sales, and low operating ratios, and induce businessmen to initiate delayed or postponed investment and to bring forward investment scheduled for a later date.

Table 3.9

Profit Margins and Ratio of Output to Capacity in
Canadian Manufacturing Industries 1962-1971

	Average 1962-68 per cent	1969 per cent	1970 per cent	1971 per cent
Profit Margins before provision for income taxes	7.5	7.0	5.1	6.1
Ratio of Output to Capacity in Manufact- uring Industries	-	87.7	82.5	82.4

Source: Statistics Canada, Industrial Corporations, Financial Statistics and W.A. Beckett Associates, Monthly Business Analysis.

It should be noted here that although only 36.2 per cent of the projects in the random sample indicated that they would have gone ahead without the RDIA grant, 46.8 per cent indicated that the project was brought forward in time. This suggests that more projects would have gone ahead without DREE assistance at a later date than was indicated in the response to the direct question "Would you have gone ahead with this project without an RDIA incentive grant?" and that the most important impact of the grant is a bringing forward in time of scheduled investment.

Table 3.10 examines percentage increases in manufacturing investment for the past three years for the Atlantic Provinces and Canada. Manufacturing investment in the Atlantic Provinces was much stronger than in Canada for the years 1970 and 1971.

Although it was indicated in Section 3.2 that the RDIA program could not have been responsible for a great deal of the level of manufacturing investment in the Atlantic Provinces, the data provided additional evidence that the grants induced a bringing forward in time of investment.

Perhaps the major role played by the RDIA program to date has been to offset a cyclical downturn in manufacturing investment. It is likely that the major impact of the DREE grants has been to offset the impediments to investment caused by a cyclical slowdown in the structure of the economy of the Atlantic Provinces.

Table 3.10

Annual Per Cent Increase in
Manufacturing Investment in the
Atlantic Provinces and Canada, 1970-72.

	1970 per cent	1971 per cent	1972 per cent
Atlantic Provinces	45.7	28.8	-29.2
Canada	18.8	-3.5	0.3

Source: Statistics Canada, Private and Public Investment in Canada.

Evidence that the RDIA program has not come to grips with the structural impediments to manufacturing investment is apparent in published statistics on manufacturing investment and in the trend of net accepted offers under the RDIA program. Table 3.10 shows that in 1972 manufacturing investment in the Atlantic Provinces declined sharply while for Canada as a whole manufacturing investment remained at 1971 levels.

The indications for 1973 are that for Canada as a whole manufacturing investment will recover strongly, an increase of 7.5 per cent over 1972 levels, while in the Atlantic Provinces it again will decline by 11.3 per cent. As was pointed out in Chapter 2, the Atlantic Provinces' share of total Canadian manufacturing investment now stands at approximately the level of the 1966-1969 period, before the RDIA program began.

Figures on net accepted offers under the RDIA program for the Atlantic Provinces show that net accepted offers for 1972 (128) were only slightly greater than for 1971 (124) despite increasing strength of manufacturing investment particularly in 1973.

It will be recalled (Table 3.5) that 19.2 per cent of the projects in the random sample and 7.7 per cent of the new facilities had the project delayed by the RDIA grant¹⁵. A delay would have occurred, for example, where a firm was ready to go ahead immediately with the project but, aware of the possibility of an RDIA grant, applied for the grant and the application took some time to process. In extreme cases, where alterations to the applications were made, this may have taken a year or so and there would have been a detrimental effect, e.g. employment benefits during the application period were lost. Delayed projects must be subtracted from projects brought forward in order to ascertain the net timing effect.

The higher proportion of delayed projects in the random sample than in the new facilities must be due to a higher proportion of delayed projects among expansions and modernizations than among new facilities. It will be recalled that one half of the new facilities represented the formation of new companies, and that moreover the rate of bankruptcies among the new companies was relatively high. Apparently it takes longer on the average to process the applications of existing businesses - expansions and modernizations - than it takes to decide on assistance to completely new ventures.

3.4 Impact on Size of Project

An increase in the size of the assisted project above what was originally planned is another important effect on the investment decision which can result from the RDIA grant. This has been defined as an incremental impact of the RDIA program.

In order to determine the extent of this effect the respondents were asked whether the RDIA assistance was responsible for changing the plans for the size of the assisted project in any one of four aspects of size: employment; investment (total capital costs excluding working capital); length of production run (s) for products produced; number of product lines.

¹⁵ In comparison, 21.3 per cent of the respondents to the mail questionnaire survey indicated that the project was delayed by the RDIA grant.

The effect on size came about in two basic ways. In some cases, knowledge of the availability of a grant induced the businessman to submit plans to DREE for a larger project than would otherwise have been the case. In other cases, the Department in discussion persuaded the applicant to undertake a larger project than that originally planned.

As can be seen from Table 3.5 approximately 30 per cent of the random sample projects were affected in each of the four aspects of size. These percentages are not very different for new facilities projects¹⁶. A slightly greater proportion of the new facilities (38.0 per cent) was affected in the employment aspect than with the random sample (27.7 per cent). No reason is apparent for this difference. The size of the change in employment exhibited a wide variation ranging from 5 to 200 per cent. Most projects indicated a size in the range of 25 to 75 per cent.

Springate found that 3 of the 13 small companies (23.0 per cent) increased the plans for the size of their project because of the availability of DREE assistance¹⁷. He reports that two other projects moved scheduled investment ahead in time, and regards this as a size effect. In our analysis this would be regarded as a timing effect. The Atlantic Provinces Economic Council reported that 57.5 per cent of the assisted projects responded that the size of the expansion or new facility was affected by the availability of a grant¹⁸.

The size of the change in investment also showed a wide range, from 1 to 100 per cent. The benefits from an increase in the size of the assisted project can be greater than just the additional employment which would not have occurred without the incentive. To the extent that increased size leads to greater efficiency and lower operating costs the RDIA grant, by enabling an increase in size, may be responsible for establishing a viable and competitive enterprise which would not have been possible otherwise. By increasing size the grant could also increase the profitability of the assisted project and enhance the potential for future growth and expansion.

A determination of the extent to which the incentive played the above role would require a much more detailed study than was possible in the present survey. No indication can be given on the basis of the survey information of the extent to which the incentive fulfilled this function.

¹⁶ The respondents to the mail questionnaire survey indicated that the RDIA grant was responsible for a change in plans for the size of the project in terms of investment and employment for approximately 35 per cent of the projects and in terms of length of production runs, and number of product lines, in approximately 21 per cent of the projects.

¹⁷ Springate, D.J.V., *op cit.*, pp. 252-258.

¹⁸ Atlantic Provinces Economic Council, *op. cit.*, p. 69.

3.5 Impact on Technology

An impact on technology is an important incremental impact to the extent that the grant allows the use of more efficient and lower cost techniques and processes.

Respondents were asked whether the RDIA grant was responsible for changing the plans for the technology of the assisted project in any of four aspects: the type of manufacturing process used; improving the quality of production equipment; increasing the degree of mechanization; decreasing the degree of mechanization. As can be seen from Table 3.6 there was a distinct impact on technology which, because of the expansions and modernizations, was more prevalent in the random sample than it was in the new facilities group.

3.6 The RDIA Grant As a Source Of Capital For New Ventures

An important function of the DREE grant appears to be the provision of capital for new ventures. The extent to which the grants are being used as a source of venture capital is here considered (in the absence of a better measure) to be the number of assisted projects which represent the formation of a new company. The key criterion which should be used in determining whether a grant represents the provision of venture capital is whether the project has a supply of capital from some private source. Some of the new companies do of course have such a source of capital. Although this measure has some limitations it is felt that, on the whole, it is a fair measure of the extent to which the incentive is acting as a source of venture capital.

Half the new facilities represented the formation of a new company¹⁹. Perhaps more significantly, new companies accounted for 10 of the 18 new facility projects in industry groups outside the Resource Processing, Food and Beverage and Wood categories, (i.e. outside the traditional regional industries).

These findings approximate those of Springate, who concluded that a high proportion of DREE's total influence on the Canadian investment scene is felt as a supply of venture capital rather than the modification of committed investment (that would take place anyway in some form) as a result of incentives²⁰. He concluded that much of DREE's influence on small companies is due to this role as a supply of capital. The grants it offers enable investment to take place by removing impediments²¹.

¹⁹ This proportion was even higher among the respondents to the mail questionnaire survey as 61.3 per cent of new facilities represented the formation of a new company.

²⁰ Springate, D.J.V., *op. cit.*, pp. 288-289.

²¹ *Ibid.*, p. 271.

Table 3.11 compares sources of financial assistance for the projects in the new facilities group and the subset of new companies within this group. It is evident that proportionally more of the new companies are financed from various public sources, including provincial and municipal, than the new facilities right across the spectrum of sources of financial assistance.

The evidence suggests that the incentive grant is not being efficiently used as a source of venture capital. In the first place, eight of the twenty-one new companies (38 per cent) indicated that they would have gone ahead without the grant. This indicates in part the problem facing DREE in analyzing effectively these applications. No historical data on these firms' operations exists as in the case of established firms. Although projects representing the formation of new companies make up half of the projects in the new facilities group, these are 80 per cent of the new facilities projects which were bankrupt, out of business, or unlikely to regain commercial production.

These figures indicate some of the problems involved in assessing these types of projects and also suggest the need for a vigorous assistance program to new companies extending from the time the grant is offered to at least the end of the three and one-half year control period.

The heavy financing of these new companies from public sources suggests the need for measures which would have the positive effect of encouraging both greater responsibility in the assessment of the application and greater interest in how the project fares after receipt of the incentive.

Considering the problem of bankruptcies among the assisted projects of the new facilities group as a whole and not just new companies, it is somewhat surprising to find that the greatest difficulties were experienced in the forest products and fish sectors and were derived primarily from the non-availability of resources in commercially exploitable quantities. This suggests that a more incisive analysis of the resource base would help to ensure a reduction in the number of failures amongst the new facilities receiving financial support from public funds.

Table 3.11
Sources of Financial Assistance
New Projects

Source of Financial Assistance	Assisted Projects Receiving Financial Assistance		Projects ranking Source of Financial Assistance as Most Important to Project ¹	
	All Assisted Projects	New Companies	All Assisted Projects	New Companies
<u>Federal</u>				
RDIA grant	100.0	100.0	88.1	95.2
DREE Loan				
Guarantee ²	2.4	4.8	-	-
Other	26.2	28.6	-	-
<u>Provincial</u>				
Loan	45.2	47.6	11.9	4.8
Loan Guarantee	16.7	19.0	-	-
Other	16.7	14.3	-	-
<u>Municipal</u>				
Concession on property taxes	19.0	28.6	2.4	4.8
Concession on industrial park site, etc.	9.5	14.3	-	-
Other	-	-	-	-

¹ Individual rankings of sources of assistance do not always add to the total of assisted projects because some projects ranked one or more sources of assistance as being of equal importance.

² The bulk of assistance in this category came from the various industrial assistance programs of the Department of Industry, Trade and Commerce such as PAIT, PEP, etc.

CHAPTER 4
INCREMENTAL DIRECT IMPACT OF THE RDIA
PROGRAM ON MANUFACTURING EMPLOYMENT IN THE
ATLANTIC PROVINCES

4.1 Introduction

The Atlantic Development Council has proposed a target of 50,000 additional jobs in the manufacturing sector of the Atlantic Provinces over the period 1971-81. This is a net requirement (i.e. job gains minus job losses equals net additional jobs). A program such as the RDIA Program, designed to foster the growth of manufacturing employment must of necessity be concerned with both sides of this equation. The same result in terms of net additional jobs can be achieved by creating new jobs (increasing job gains) or by *saving* a like number of jobs, i.e. reducing job losses. The survey collected information on employment created by the assisted project to determine, among other things, the extent to which predicted employment increases were in fact being achieved. This chapter uses the survey results to calculate the direct employment gain attributable to the RDIA program.

Finally, Statistics Canada data on the growth of manufacturing employment will be used in order to estimate roughly the impact of the RDIA Program on manufacturing employment in the Atlantic Provinces.

4.2 Employment Created by the Assisted Projects - Survey Results

This section analyses the employment created by the assisted projects of the random sample and the eight large projects¹. The analysis is based on 50, or 98.0 per cent of the 51 projects comprising the random sample² and 6 of the 8 large projects.

¹ For reasons of confidentiality, a detailed analysis of employment in the large projects cannot be presented. The general nature of the principal findings will be presented in conjunction with the analysis of employment in the assisted projects of the random sample.

² Three bankruptcies which we were unable to contact have been added to the 47 responses of the random sample. The one project which declined to provide the necessary information has been excluded. By including the bankrupt projects in the analysis, and recording employment on the projects as zero over the 12 months of operation ending on October 31, 1973, we are under-estimating total employment in the assisted projects slightly because some of these projects were in operation at least part of the period and employed people.

There are various methods of assessing the amount of employment created by the RDIA program. The analysis which follows calculates the net realized direct employment gain which can be attributed to the RDIA program. Data on employees and paid hours in the assisted projects in the year ending October 31, 1972 are used as the basis for the calculations.

The 50 projects were to provide an expected additional employment of 1,686, according to the official announcements accompanying the acceptance of each incentive offer. Table 4.1 below summarizes the employment situation in the projects of the random sample as of October 31, 1972. The table displays the employment picture at one particular point in time; it is obvious that the estimates will be affected by seasonality.

The total of On-Site Employees employed by the assisted project, (off-site employment is not included in the estimates of expected additional employment) amounts to 95.9 per cent of the estimated expected additional employment. In *aggregate* then, employment in the assisted projects is very close to the Department estimates.

Table 4.1
Expected Direct New Jobs
Random Sample

Total number of On-Site Employees in facility at date offer accepted	1,514
Total number of On-Site Employees in facility at October 31, 1972	3,137
Number of On-Site Employees employed by the assisted project at October 31, 1972	1,617
Expected Additional Employment to be created by the assisted projects (estimated at time of acceptance of the incentive offer)	1,686
On-Site Employees employed by assisted project at October 31, 1972 (third item expressed as a percentage of fourth item) ³	95.9 per cent

³ For the large projects on-site employees employed by the assisted project at October 31, 1972 amounted to only 61.3 per cent of the expected additional employment estimated at time of acceptance of the incentive offer.

Table 4.2 summarizes the employment created by the assisted projects of the random sample during the year ending October 31, 1972. Estimates of employment supplied by the Department are averages over the second and third years of commercial production. The majority of the projects in the random sample - 90 per cent - were into their second year of commercial production as of October 31, 1972. However, very little evidence of a buildup of employment towards the estimates of the Department was found in any of the assisted projects.

Average monthly on-site employment associated with the assisted projects of the random sample during the year ending October 31, 1972 amounted to 1,641 employees, 97.3 per cent of the expected additional employment of 1,686⁴.

The estimates are biased upward by seasonal effects on the demand for labour in projects which had not completed a full year of commercial production by October 31, 1972. This bias is very slight because of the very few projects which had not completed a full year of commercial production.

It was noted earlier in this section that under departmental procedures a full-time job is taken as one which would provide 40 weeks of work per year. In addition a part-time job is converted to a full-time job by dividing by 40 the number of weeks worked by part-time employees over the year. The survey collected data on total paid hours, which makes it possible to calculate the man-years of employment created by the RDIA Program on a somewhat different basis. In these calculations, man-years have been calculated on a full year, 40 hour week basis, i.e. by dividing total paid hours by 2,080. Table 4.3 shows the resulting estimates of man-years. The calculations of man-years on this basis - as contrasted with the basis of the 40 week year which is incorporated in the Departmental published figures - is considered a better measure of year-round employment.

Definitions:

1. Average monthly employees are calculated by adding the number of employees receiving pay on the last payday of every month of the indicated period and dividing by the number of months.
2. A full-time employee is defined as one who would normally be employed year-round (fifty or more weeks of work per year).
3. Off-site employees are employees on the company payroll who spend most of their working time away from the plant's main physical facilities.

⁴ For the large projects average monthly on-site employment during the year ending October 31, 1972 amounted to 56.5 per cent of the expected additional employment estimated at the time of acceptance of the incentive offer.

4. Production and related workers include, in addition to those engaged in production and assembly, working foremen and workers employed in storing, inspecting, handling, packing, warehousing, maintenance, repair, janitorial services.
5. Administrative and office employees include all executive and supervisory officials, managers, technical employees and factory supervisors above the working foreman level and clerical staffs.

Table 4.2

Employment Associated with the Assisted Projects
for the year ending October 31, 1972

Projects In Random Sample

	<u>Average Monthly Employees</u>	<u>Total Paid Hours (000's)</u>	<u>Total Wages & Salaries (\$000's)</u>
<u>Total Number of Employees</u>			
(a) Male Employees:			
Production	989	1,795	4,275
Admin. and Office	179	363	1,641
(b) Female Employees			
Production	431	715	1,097
Admin. and Office	60	119	292
<u>Full-Time Employees</u>			
(a) On-Site Employees			
Production	1,234	2,342	5,071
Admin. and Office	236	479	1,911
(b) Off-Site Employees			
Production	13	25	67
Admin. and Office	3	4	24
<u>Part-Time Employees</u>			
(a) On-Site Employees			
Production	171	143	232
Admin. and Office	0	0	0
(b) Off-Site Employees			
Production	2	0*	0*
Admin. and Office	0	0	0
Total - On-Site	1,641	2,963	7,214
Total - Off-Site	18	N/A	N/A
<u>Grand Total</u>	1,659	2,992	7,305

* Employees are on piece-work; and no data on hours and pay were available.

Table 4.3

Man-Years of Employment Created by Assisted Projects
year ending October 31, 1972

Random Sample

<u>Category</u>	<u>Man-Years of Employment</u>
<u>Total Number of Employees</u>	
(a) Male Employees:	
Production	863
Admin, & Office	174
(b) Female Employees:	
Production	344
Admin. & Office	57
<u>Full-Time Employees</u>	
(a) On-Site Employees	
Production	1,126
Admin. & Office	230
(b) Off-Site Employees	
Production	12
Admin. & Office	2
<u>Part-Time Employees</u>	
(a) On-Site Employees	
Production	69
Admin. & Office	-
(b) Off-Site Employees	
Production	-
Admin. & Office	-
Total On-Site	1,424
Total Off-Site	14
<u>GRAND TOTAL</u>	<u>1,438</u>

The 1,424 man-years of on-site employment associated with the assisted projects amount to 84.5 per cent of the expected additional employment of 1,686⁵. An approximation to DREE's estimate of direct new jobs can be made by first assuming that the full-time on-site employees of Table 4.2 would equal DREE's estimate of full-time employees. The paid hours of part-time on-site employees are then divided by 1,600 (40 weeks of 40 hours) to obtain the full-time job equivalent. The resulting estimate is 1,559 jobs or 92.5 per cent of the expected additional employment of 1,686.

⁵ For the large projects, man-years of on-site employment created by the assisted projects amounted to 56.2 per cent of the expected additional employment estimated at the time of acceptances of the incentive.

4.2.1. Incremental Direct Employment

An assisted project (and the resulting flows of investment, employment and income) is said to be incremental when this project would not have gone ahead without the incentive.

The projects which would have gone ahead without the incentive can be divided into two groups: those in which the size of the assisted project was affected by the incentive and those in which there was no resulting size or employment effect. To calculate the incremental direct employment created in the assisted projects of the random sample, employment created in the assisted projects which would have gone ahead without the incentive and where there was no size effect is subtracted from the total employment created in the assisted projects of the random sample, Tables 4.2 and 4.3. For the projects which would have gone ahead but where there was a size effect, only the portion of employment which would have been created without the incentive is subtracted from the employment figures, Tables 4.2 and 4.3.

Line 3 of Table 4.4 presents the calculations of incremental direct employment. No attempt has been made to bring into this calculation the effect on employment as a result of the offer having an incremental impact on the timing (bringing forward of the project because of the incentive) or the technology aspects of the investment decision. As for the incremental impact on timing, the benefits to the economy are not very adequately measured by crediting the RDIA Program with, for instance, an extra year of employment, assuming the project was brought ahead one year. The benefits of the timing effect are outlined in Chapter 5. Also, to be consistent, projects which had been delayed by the incentive would have to be taken into the calculations. Because no allowances have been made for these two aspects of incrementality the analysis probably underestimates incremental employment.

4.2.2. Incremental Direct Employment Gain

Not all the incremental direct employment created in the assisted projects of the random sample represents employment *gain*. In several cases the employment created in the assisted projects represented not net additional employment but employment saved or replaced. Examples are projects involving a rebuilding after fire or the purchase of the assets of a bankrupt firm; in these cases employment was maintained at previous levels. Some assisted projects actually lost employment after receipt of the incentive grant. In these cases employment recorded cannot be regarded as employment gain but as employment saved.

To determine the incentive grant's contribution to employment *gain*, employment which represented a saving or replacement was subtracted from incremental direct employment.

Table 4.4

Employment Created in Assisted ProjectsRandom Sample

	Employees		Man - Years	
	Number	Per Cent of Expected Additional Employment	Number	Per Cent of Expected Additional Employment
Expected Additional Employment, (as of the Report on Regional Development Incentives).	1686	100.0	-	-
On-Site employment in assisted project, year ending October 31, 1972	1641	97.3	1424	84.5
Incremental On-Site employment in assisted projects year ending October 31, 1972.	1409*	83.6	1206	71.5
Incremental On-Site employment gain in assisted projects, year ending October 31, 1972.	959	56.9	775	46.0
Incremental On-Site employment saving in assisted projects, year ending October 31, 1972.	450	26.7	431	25.6

* Non-incremental on-site employment equals $1641 - 1409 = 232$. To obtain non-incremental on-site employment gain 50 jobs which were classified as employment saving, must be subtracted to give 182.

It can be seen that in the assisted projects of the random sample, 775 man-years of incremental direct employment gain were created. This is 46.0 per cent of the expected additional employment of 1,686. Based on analysis of the random sample, approximately one-half of the published estimates are additional full-time jobs whose creation is attributable to the incentive grant.

The difference between man-years of incremental on-site employment, 1,206, and man-years of incremental on-site employment gain, 775, is 431; this is equivalent to employment in the existing manufacturing base *saved* by the RDIA Program⁶.

4.3 Cost of Employment Creation

Using the data on employment created in the assisted projects, which was developed in section 4.3, the cost of employment creation can be calculated for the assisted projects of the random sample.

Table 4.5 presents estimates of the fixed investment cost of employment creation and the incentive cost of employment creation in the assisted projects of the random sample. The use of eligible capital costs per employee as a measure of the fixed investment cost of employment creation probably understates the actual cost somewhat because certain items of fixed investment, notably movable equipment used off the premises of the facility, is not included in eligible capital costs.

On the basis of the Department's estimate of expected additional employment the fixed investment cost of employment creation amounts to \$8,580. This cost increases by 18.4 per cent to 10,159 when calculated per man-year of on-site employment. Using the Department's estimate of expected additional employment the incentive cost of employment creation amounts to \$3,264 or 38 per cent of the fixed cost of employment creation. However, when the incentive cost of employment creation is calculated per man-year of incremental employment, it increases by 39.8 per cent to \$4,563 and 44.9 per cent of the fixed investment cost per man-year of employment.

It should be noted here that the incentive cost does not represent the full cost to the public account of employment creation. As is shown in 3.6 the assisted projects are heavily financed by federal, provincial, and to a lesser extent municipal, assistance programs.

⁶ In the large projects during the year ending October 31, 1972 incremental on-site employment gain amounted to 52.9 per cent of the expected additional employment.

Table 4.5

Cost of Employment Creation
Assisted Projects of the Random Sample

	Fixed Investment - Cost of Employment Creation ¹	Incentive Cost of Employment Creation ²
Expected Additional Employment to be created by the assisted projects (estimated at time of acceptance of offer).	8,580	3,264
On-Site employment, year ending October 31, 1972.	8,816	3,354
Man-years of on-site employment, year ending May 31, 1972.	10,159	3,865
Incremental On-site * employment, year ending October 31, 1972	-	3,906
Man-years of Incremental on-site employment, year ending October 31, 1972 *	-	4,563

* The fixed investment cost of employment creation has not been calculated separately for incremental projects as it is not relevant to the present analysis.

¹ The fixed investment cost of job creation is calculated by dividing the total of eligible capital costs in the 50 assisted projects (\$14,466,316) by the corresponding amount of employment.

² The incentive cost of employment creation is calculated by dividing the total of incentive to the 50 assisted projects of the random sample (\$5,503,614) by the corresponding amount of employment.

Table 4.6

ANNUAL AVERAGE INCREASE IN MANUFACTURING EMPLOYMENTATLANTIC PROVINCES

Province	Annual Average Increase in Manufacturing Employment			
	1961-69	1969-70	1970-71	1971-72
Newfoundland	306	568	-50	-370
Prince Edward Island	116	92	-185	-40
Nova Scotia	676	-1,417	-54	1,590
New Brunswick	757	-233	759	860
Atlantic Provinces	1,855	-990	-470	2,040

Source: Statistics Canada, Census of Manufacturers and Employment, Earnings and Hours. The annual average increase in manufacturing employment until 1971 is derived from the Census of Manufacturers. The increase for 1972 is based on data from Employment, Earnings and Hours.

Some interesting results are found in comparing the figures on realized employment gains to Statistics Canada information on the annual increases in manufacturing employment. The two sets of figures are not strictly comparable, because Statistics Canada estimates represent net realized additions (employment gains minus employment losses) to manufacturing employment. The Statistics Canada data also includes employees both on and off-site while "expected additional employment" includes only on-site employees. However, analysis of survey results indicates that very few off-site jobs are created in addition to on-site jobs.

By May 31, 1972, 108 RDIA assisted projects in the Atlantic Provinces had entered commercial production and had received the first payment. Expected additional employment associated with the 100 assisted projects from which the random sample was drawn was 3,152; for the eight large projects it was 2,105. Total net realized employment gain, both incremental and non-incremental, can be estimated from Table 4.6 to be 67.7 per cent of expected additional employment in the projects of the random sample; (7) this proportion has been calculated to be 56 per cent for the eight large projects. Although these projects had completed, on the average, about one year of commercial production only, the survey revealed very little evidence of a buildup to the estimates of expected additional employment which are based on averages over the second and third year of commercial production.

Table 4.7

Realized Employment Gain Year Ending October 31, 1972

108 Projects Having Received First Payment by May 31, 1972.

	Expected Additional Employment Estimated at Time Offer Accepted	Realized Employment Gain as a Per Cent of Expected Additional Employment.	Realized Employment Gain - (1) X (2)
	(1)	(2)	(3)
100 Projects	3,152	67.7	2,134
8 Large Projects	2,105	56.0	1,179
Total	5,257		3,313

From Table 4.4, incremental employment gain can be seen to be 959. From the footnote to Table 4.4 non-incremental employment gain is 182. The sum of the two is 67.7 per cent of the expected additional employment of 1686.

Table 4.7 applies these proportions to the figures on expected additional employment, arriving at a net realized employment gain of 3,313, or approximately 1,100 a year. According to Statistics Canada data (Table 4.6)

manufacturing employment increased by 1,520 over the period 1970-72, from inception of the RDIA program, or about 500 a year.

These are very rough estimates. For example several other firms, in addition to the 108, were in commercial production by December 31, 1972. But these give some idea of the contribution to the RDIA Program to the growth of manufacturing employment⁸.

Employment gains in both incremental and non-incremental assisted projects have averaged approximately 1,100 a year over the life of the program. Net additional employment has averaged approximately 500 a year. A total employment gain of 2.2 is thus necessary to achieve a net additional employment of 1.

⁸ To properly assess the contribution of the RDIA Program to the growth of manufacturing employment the Atlantic Development Council has initiated a joint project with Statistics Canada which will trace the growth of manufacturing employment in both the assisted and non-assisted portions of the manufacturing base.

CHAPTER 5

EMPLOYMENT: AREA OF RECRUITMENT, REMUNERATION AND SEASONALITY

A good regional industrial incentives program does not just create jobs. It should create full-time, well-paid employment beneficial to the population of the slow growth regions which the program is designed to help. In this chapter these points are examined with regard to the RDIA assisted projects that comprise the random sample and the group of new projects. In section 5.1 the source of workers employed in the projects is analysed. The following section examines the average remuneration per worker employed in the assisted projects. In section 5.3 the seasonality of the labour demands of the survey respondents is examined.

5.1 Source of Employees in Assisted Projects

At the end of October 1972 the random-sample respondents employed 3,137 on-site workers in their RDIA-assisted projects; the new project respondents employed 2,098 on site workers in assisted projects. These employees were either new recruits or workers already employed in the facility (or by the firm) at the time the offer was accepted by the firm responsible for the project. It is convenient to treat these sources of labour supply separately.

5.1.1. Incumbent Labour Supply

Some of the employment in the assisted projects did not involve the recruitment of new workers by the firm. In the new projects at least 22 people were involved in intra-firm transfers between another facility in the Atlantic Provinces and the assisted project. Such intra-firm transfers seem to have been negligible with the random sample respondents.

Far more significant is the number of jobs that existed in the assisted facility before the receipt of an RDIA offer and which in October 1972 formed part of the employment in the assisted project. Some of these jobs are those of workers already employed before the plant is rebuilt or relocated. Some refer to employees retained after a post-bankruptcy take-over. Others may belong to staff who have been moved to the assisted project when production has declined in another part of the facility.

Question 19 is useful here; it is concerned with the number of employees of a facility at the time an incentive offer was accepted and the number working in the facility, or the assisted project¹, on October 31, 1972. The responses provide an estimate of staff redeployment within assisted facilities: 342 in the random sample projects and 291 for new projects. (Some of the new projects will be taken-over bankruptcies, or plants rebuilt, with some or all of the original staff retained.) If transfers between, rather than within, facilities are added to these totals, then it is clear that existing staff probably fill about 11 per cent of the jobs in the random projects group and 15 per cent of the new projects group.

5.1.2. Employment by Area of Recruitment²

For the purposes of the survey five areas of recruitment were specified as sources of workers employed in the assisted projects: the area within a 50 mile radius of the assisted facility; parts of the province in which the project is located that lie beyond a 50 mile radius of the plant; other Atlantic Provinces; the rest of Canada; and foreign countries. Tables 5.1 and 5.2 show the areas of labour recruitment for the respondents in the random sample and the group of new facilities.

As might be expected virtually all of the production and related workers, plus clerical staff employed in the assisted projects, were recruited in the province in which the project is located and, more particularly, from an area within 50 miles of the project. There is little difference in the proportions for the random sample and new project groups. In the former 99.1 per cent were recruited in the province and 97.6 per cent within 50 miles of the project. For the new project respondents 99.0 per cent were recruited within the province and 96.8 per cent within 50 miles of the project.

The area of recruitment for the managerial and professional workers reveals that, for both survey groups, at least one in every five professional and managerial workers involved in the projects was recruited from outside the Atlantic Provinces, and one in every three from beyond a 50 mile radius of the project.

It is interesting to note that one third of the random sample respondents and slightly more than one third of the new project respondents indicated that they were encountering problems in recruiting labour from the local area. These difficulties were concerned with both the general supply of labour and the availability of suitably skilled workers, which probably helps to explain why a large number of grant recipients are involved in training programs for their employees (Table 5.3).

¹ The two are not necessarily the same, although for a new facility they usually are. For an expansion, however, the expansion part of the facility is the part that is assisted.

² Responses to Question 22(a).

Table 5.1

Area of Recruitment for Workers Employed on October 1972
in Assisted Projects of the Random Sample Respondents¹

OCCUPATIONAL CLASSIFICATION	Actual Number of Employees Employed by the Assisted Project ²	Residence Prior to Present Employment				
		Local Area ³	Rest of Province	Rest of Atlantic Provinces	Rest of Canada	Foreign
MANAGEMENT AND PROFESSIONAL ⁴	243	155	23	12	25	28
OTHER WORKERS ⁵	1,331 ⁶	1,280	20	0	6	5

NOTES: ¹ Based on responses from 45 grant recipients.

² On-site and off-site.

³ Within a radius of 50 miles.

⁴ Includes all executive and supervisory officials, managers, highly skilled professional technical and research employees, and factory supervisors above working foreman level.

⁵ Includes production and related workers plus clerical staff.

⁶ Area of recruitment for 20 workers was not given.

Table 5.2

Area of Recruitment for Workers Employed on October 1972
in Assisted Projects of the New Facility Respondents¹

OCCUPATIONAL CLASSIFICATION	Actual Number of Employees Employed by the Assisted Project ²	Residence Prior to Present Employment				
		Local Area ³	Rest of Province	Rest of Atlantic Provinces	Rest of Canada	Foreign
MANAGEMENT AND PROFESSIONAL ⁴	271	177	28	11	31	24
OTHER WORKERS ⁵	1,813	1,754	39	0	14	6

NOTES: 1 Based on responses from 41 grant recipients.

2 On-site and off-site.

3 Within a radius of 50 miles.

4 Includes all executive and supervisory officials, managers, highly skilled professional, technical and research employees, and factory supervisors above working foreman level.

5 Includes production and related workers plus clerical staff.

Table 5.3

Number of Respondents Undertaking Training Programs
for Employees in the Assisted Projects*

Survey group	Per Cent undertaking training programs	Per Cent providing in-plant training	Per Cent providing other training programs
Random Sample respondents	70.5	61.4	15.9
New project respondents	70.7	65.9	9.8

*NOTE: Based on answers from 44 of the random sample respondents and 41 of the new project respondents.

5.2 Wages and Salaries

Ideally a program of regional development incentives to industry helps to create well-paid employment in less developed regions of the country. If this occurs on a large scale, the new well-paid jobs could make a significant contribution to reducing regional income disparities.

Each of the projects selected for personal interview was asked to provide a breakdown of the employment in the assisted project and the remuneration paid to the workers during the year ending October 31, 1972 or, in the case of projects that had been in commercial production for less than a year, for the period of commercial production ending in October 1972³. The data provided by 46 random sample respondents is presented on an aggregate basis in Table 5.4.

From Table 5.4 it is apparent that on-site full-time employees classified as production and related workers are paid an average annual wage of \$4,109 and that, on a man-year basis⁴, their average wage is \$4,504. This man-year income is approximately \$734 (or 14 per cent) less than the average annual wage (\$5,328 of manufacturing employees in the Atlantic Provinces

³ Question 20.

⁴ For the definition of man-year see Chapter 4.

in 1972)⁵. This suggests that production and related workers in RDIA assisted projects are not as well paid as in the regional manufacturing sector at large. However, on-site full-time salaried workers, although far less numerous than wage earners in the random sample projects, were paid roughly 1.5 per cent more than the average in manufacturing industry in the Atlantic Provinces in 1972. As a matter of interest the data presented in Table 5.4 were used to calculate the incremental projects in the random sample: there is no significant basic change in the general pattern of enumeration per employee and per man-year of employment created.

It might be expected, or at least hoped, that the production and related workers in the assisted new facilities would be paid higher wages than the average annual wage of wage-earners in the manufacturing sector. Unfortunately the opposite is true. The average pay per man-year for on-site full-time production and related workers is \$4,420 (Table 5.5), i.e. \$908 and 17 per cent less than the annual wage of wage-earners in the manufacturing sector in 1972.

A comparison of Tables 5.4 and 5.5, which relate to the random sample and new facility respondents, reveals a somewhat different situation. The female production and related workers in the new facilities are much better paid on average than their counterparts in the random sample firms, which suggests that the female worker receives a lower rate of pay in an existing manufacturing operation than in a new facility. By comparison, male production workers tend to receive slightly less on average in the new projects than in existing facilities that are being modernized or expanded. It is also noticeable that the off-site employees receive much less on average in the new projects than in the random sample projects.

⁵ Derived from Statistics Canada data on Employment, Earnings and Hours for 1972. Workers in the paper and allied industries and primary metal industries were excluded from the calculation of the average annual wage of wage earners in the Atlantic region in order to make the resulting figure more nearly comparable with the income figures derived from the survey.

Table 5.4

Number of Employees, Average Annual Pay per Employee and
per Man-Year Worked during the Period November 1971 -
October 1972 for Random Sample Respondents*

	Production and Related Workers ^{1 3}				Administrative and Office Employees ^{2 3}			
	Average Monthly Employees ⁴	Average Annual Pay per Employee \$	Total Paid Man-Years	Average Pay per Man-Year	Average Monthly Employees	Average Annual Pay per Employee \$	Total Paid Man-Years	Average Pay per Man-Year
<u>Total Employees</u>								
Male employees	989	4,323	863	4,954	179	9,168	175	9,377
Female employees	431	2,545	344	3,189	60	4,867	57	5,123
<u>Total Full-Time Employees⁵</u>								
On-site	1,234	4,109	1,126	4,504	236	8,097	230	8,309
Off-site	13	5,154	12	5,583	3	8,000	2	12,000
<u>Total Part-Time Employees⁶</u>								
On-site	171	1,357	69	3,362	0	0	0	0
Off-site	2	**	**	**	0	0	0	0

NOTES: ¹ Production and related workers include in addition to those engaged in production and assembly, those employed in storing, inspecting, handling, packing, warehousing, maintenance, repair, janitorial services and working foremen.

² Administrative and office employees include all executive and supervisory officials, managers, technical employees and factory supervisors above the working foremen level and clerical staffs.

³ The categories Production and Related and Administrative and Office encompass all employees.

⁴ Average monthly employees were calculated by summing the number of employees receiving pay on the last payday of every month of the indicated period and dividing by the number of months.

⁵ A full-time employee is defined as one who would normally be employed year-round (fifty or more weeks of work per year).

⁶ Off-site employees are employees on the company payroll but who spend the majority of their working time away from the plant's main physical facilities.

* includes information given by 46 random sample respondents

** no information given

Table 5.5

Number of Employees, Average Annual Pay per Employee and
per Man-Year Worked during the Period November 1971 -
October 1972 for All New Facility Respondents

	Production and Related Workers ^{1 3}				Administrative and Office Employees ^{2 3}			
	Average Monthly Employees ⁴	Average Annual Pay per Employee \$	Total Paid Man-Years	Average Pay per Man-Year	Average Monthly Employees	Average Annual Pay per Employee \$	Total Paid Man-Years	Average Pay per Man-Year
<u>Total Employees</u>								
Male Employees	1,257	4,255	1,116	4,793	206	8,947	194	9,500
Female Employees	719	3,269	660	3,562	90	4,911	86	5,140
<u>Total Full-Time Employees⁵</u>								
On-site	1,655	4,206	1,575	4,420	281	7,566	264	8,053
Off-site	60	3,800	53	4,302	12	6,250	12	6,250
<u>Total Part-Time Employees⁶</u>								
On-site	240	1,916	136	3,382	2	3,500	2	3,500
Off-Site	21	2,190	11	4,182	0	-	-	-

- NOTES: ¹ Production and related workers include in addition to those engaged in production and assembly, those employed in storing, inspecting, handling, packing, warehousing, maintenance, repair, janitorial services and working foremen.
- ² Administrative and office employees include all executive and supervisory officials, managers, technical employees and factory supervisors above the working foremen level and clerical staffs.
- ³ The categories Production and Related and Administrative and Office encompass all employees.
- ⁴ Average monthly employees were calculated by summing the number of employees receiving pay on the last payday of every month of the indicated period and dividing by the number of months.
- ⁵ A full-time employee is defined as one who would normally be employed year-round (fifty or more weeks of work per year).
- ⁶ Off-site employees are employees on the company payroll but who spend the majority of their working time away from the plant's physical facilities.

The unfavourable comparison between the remuneration in RDIA-assisted projects and the regional manufacturing sector at large appears to be at least partly related to a difference in the male/female ratios between the regional manufacturing work force and that of the assisted projects. If employees in paper and allied industries and primary metal industries are excluded from the regional manufacturing labour force, about 18.3 per cent of the 1972 regional manufacturing labour force were female workers. This compares with about 28 per cent in the random sample (Table 5.4), 30.4 per cent of the incremental employment in the random sample projects and 36.3 per cent for the new project respondents (Table 5.5). Clearly the proportion of females employed by the RDIA-assisted projects is much higher than in the regional manufacturing sector as a whole. This is not a result of the industrial composition of the assisted projects or a result of the influence of a few large employers of females in the samples. Although the survey evidence is inconclusive, there might be some connection between the improvements in technology in the RDIA-assisted projects and the employment of a higher proportion of females, i.e. improved technology has made it possible for females to perform jobs previously reserved for males.

The relatively high proportion of females employed by the assisted projects is significant in that one of the important effects of a continuation of the present RDIA program may be an increase in the female participation rate in the Atlantic Provinces. This type of effect, possibly with important sociological ramifications, has been experienced in the incentives programs of other countries but does not appear to have been a noticeable effect of the Area Development Agency's incentive program in the Atlantic Provinces.

5.3 Seasonality

In an effort to determine the extent to which the jobs created by the RDIA-assisted projects represent year-round employment, each interviewee was asked whether his firm's demand for labour exhibits a seasonal variation throughout the year⁶. Of the random sample respondents 56.5 per cent indicated that there was a seasonal variation in their labour demand⁷. In more than one out of every five projects, the project was closed for a part of the year (Table 5.6). It is interesting to note that a seasonal variation in labour demand is a feature of 45.2 per cent of the new project respondents and that one in every six of the new projects is closed for part of the year (Table 5.6). The difference between these figures is attributable to the greater representation of the traditional resource-based manufacturing activities in the random sample than in the new project group. The differences suggest that the establishment of the RDIA-assisted new projects is having a small but nonetheless beneficial effect in reducing seasonality of labour demand in the manufacturing sector of the Atlantic Provinces.

⁶ Question 23.

⁷ In some other cases, a variation in labour demand is experienced but it is not of a regular *seasonal* pattern.

Table 5.6

Number of Months that Assisted Projects are Closed

During the Year

Survey Group	Number of months closed					
	0	1	2	3	4	5
Random Sample: Number of Respondents (47)	37	3	2	2	1	2
New Facility: Number of Respondents (42)	35	1	3	0	1	2

APPENDIX

HOW REPRESENTATIVE IS THE RANDOM SAMPLE?

It was indicated in Chapter 1 that the three separate but overlapping groups of projects chosen for personal interview were drawn from the 108 projects in the Atlantic Provinces that had received a first payment at May 31, 1972.

This chapter determines, through a series of statistical checks, how representative the population of 108 projects is of all assisted projects which had accepted grants at May 31, 1972. These checks are also given for the population of 100 projects from which the random sample was drawn. Finally, a statistical profile of the random sample is given.

A.1 The 108 Assisted Projects Having Received First Payment at May 31, 1972

A.1.1. Size

If size is measured in terms of employment per assisted project the 108 firms having received first payment are slightly larger, taken as a whole, than the group of all assisted projects at May 31, 1972. (Tables A.1 and A.2) Provincially, only in Nova Scotia is the average employment of all assisted projects at that date greater than that for those projects having received first payment.

If size is measured as eligible capital costs per assisted project, the average size of all assisted projects at May 31, 1972 is slightly greater than the average for projects having received first payment at that date. Again, however, Nova Scotia shows evidence of a trend towards larger projects. The important point is that the samples of projects were drawn from a population of projects which compares very closely in terms of size of project to the population of all assisted projects at May 31, 1972.

A.1.2. Industry Distribution

Table A.3 compares the industry distribution of assisted projects having received first payment at May 31, 1972, with the industry distribution of all assisted projects at that date.

The three percentage distributions compare very closely indicating that the universe of assisted projects having received first payment is a good representation of the industrial distribution of all assisted projects.

Table A.1

108 ASSISTED PROJECTS: HAVING RECEIVED FIRST PAYMENT
MAY 31, 1972

Province	Number	Eligible Capital Costs	Expected Employment	Incentive	Eligible Capital Costs per Project	Employment per project
		(\$000's)		(\$000's)	(\$000's)	
Newfoundland	8	2,286	340	705	286	42
Prince Edward Island	12	3,377	395	1,286	281	33
Nova Scotia	41	16,268	1,626	5,112	397	40
New Brunswick	47	35,822	2,896	15,717	762	62
Atlantic Provinces	108	57,754	5,257	22,821	535	49

Table A.2*

ALL ASSISTED PROJECTS
MAY 31, 1972

Province	Number	Eligible Capital Costs	Expected Employment	Incentive	Eligible Capital Costs per Project	Employment per project
		(\$000's)		(\$000's)	(\$000's)	
Newfoundland	54	19,467	1,992	7,393	360	37
Prince Edward Island	28	6,176	665	2,186	221	24
Nova Scotia	96	174,742	4,947	36,499	865	52
New Brunswick	107	55,971	4,667	23,758	523	44
Atlantic Provinces	285	256,356	12,271	69,786	569	43

* Eligible capital cost per project for Nova Scotia and the Atlantic Provinces exclude eligible capital costs of \$94,252,000 for three assisted projects at Sydney Steel Corporation.

Table A.3

INDUSTRY DISTRIBUTION
ASSISTED PROJECTS HAVING RECEIVED FIRST PAYMENT
MAY 31, 1972

Major Group	Assisted Projects: Having Received First Payment May 31, 1972		All Assisted Projects May 31, 1972	
	Number	Per Cent of Total	Number	Per Cent of Total
1. Food & Beverage Industries	43	39.8	113	39.6
2. Tobacco Products Industries	3	2.8	4	1.4
3. Rubber & Plastics Products Industries	3	2.8	14	4.9
4. Leather Industries	1	.9	1	.4
5. Textile Industries	1	.9	6	2.1
6. Knitting Mills	-	-	1	.4
7. Clothing Industries	1	.9	5	1.8
8. Wood Industries	18	16.7	40	14.0
9. Furniture & Fixture Industries	4	3.7	12	4.2
10. Paper & Allied Industries	1	.9	2	.7
11. Printing, Publishing & Allied Industry	4	3.7	7	2.5
12. Primary Metal Industries	-	-	4	1.4
13. Metal Fabricating Industries	11	10.2	25	8.8
14. Machinery Industries	5	4.6	11	3.9
15. Transportation Equipment Industry	5	4.6	10	3.5
16. Electrical Products Industries	4	3.7	11	3.9
17. Non-Metallic Mineral Products Industry	-	-	9	3.2
18. Petroleum & Coal Products Industry	1	.9	1	.4
19. Chemical & Chemical Products	-	-	2	.7
20. Misc. Manufacturing Industries	3	2.8	7	2.5
<u>TOTAL</u>	108	100.0	285	100.0

Table A.4

PROVINCIAL DISTRIBUTION

Assisted Projects Having Received First Payment
May 31, 1972

A.1.3 Provincial Distribution

PROVINCE	Assisted Projects Having Received First Payment May 31, 1972		All Assisted Projects May 31, 1972	
	Projects as a per cent of A.P. Total	Expected Employment as a per cent of A.P. Total	Projects as a per cent of A.P. Total	Expected Employment as a per cent of A.P. Total
Newfoundland	7.4	6.5	19.0	16.2
Prince Edward Island	11.1	7.5	9.8	5.4
Nova Scotia	38.0	30.9	33.7	40.3
New Brunswick	43.5	55.1	37.5	38.0
Atlantic Provinces	100.0	100.0	100.0	100.0

Table A.5

DISTRIBUTION by PROVINCE and PROJECT TYPEAssisted Projects Having Received First Payment
May 31, 1972A.1.4. Project Type

PROVINCE	Assisted Projects Having Received First Payment May 31, 1972		All Assisted Projects May 31, 1972	
	New Facilities	New Facilities as percentage of all Projects	New Facilities	New Facilities as percentage of all Projects
Newfoundland	4	50.0	30	55.6
Prince Edward Island	8	66.7	10	35.7
Nova Scotia	15	36.6	34	35.4
New Brunswick	25	53.2	54	50.5
Atlantic Provinces	52	48.2	124	43.5

A.1.3. Provincial Distribution

Table A.4 shows that the provincial distribution of projects having received first payment at May 31, 1972, does not closely correspond to the provincial distribution of all assisted projects at that date¹. In terms of expected employment, Newfoundland and Nova Scotia are under-represented; New Brunswick, and to a lesser extent Prince Edward Island, are over-represented.

A.1.4. Distribution by Project Type

Table A.5 shows that the projects having received first payment at May 31, 1972 are slightly more heavily weighted towards the new facility project type than are all assisted projects at that date. Although a high proportion of new facility project types does not by any means indicate a high proportion of completely new endeavours, it is clear that the samples of projects were drawn from a population of assisted projects which was not as heavily weighted by expansions and modernizations as were all assisted projects at May 31, 1972.

A.2. The Population of 100 Projects from which the Random Sample was Drawn

A.2.1. Size

Comparing Table A.6 with Tables A.1 and A.2 it is evident, as one would expect, that the removal of the eight large firms has decreased the average size of the remaining projects measurably as compared to the size of all assisted projects at May 31, 1972.

Table A.6
100 Assisted Projects
Having Received First Payment
May 31, 1972

Province	Number	Eligible Capital Costs	Expected Employ- ment	Incentive	Eligible Capital Costs per Project	Employment per Project
		(\$000's)		(\$000's)	(\$000's)	
Newfoundland	8	2,286	340	704,587	286	42.5
Prince Edward Island	12	3,377	395	1,286,292	281	32.9
Nova Scotia	40	14,938	1,526	4,596,388	373	38.2
New Brunswick	40	11,611	891	4,247,874	290	22.3
Atlantic Provinces	100	32,212	3,152	10,835,141	322	31.5

¹ See Section A.3.1.

A.2.2. Industry Distribution

The removal of the eight large firms does not, of course, appreciably alter the industry distribution of the 100 projects as compared to the original 108. Comparing Table A.3 to Table A.7, it is apparent that the industry distribution of the 100 remains a good approximation of the industry distribution of all assisted projects, at May 31, 1972.

Table A.7

INDUSTRY DISTRIBUTION

100 ASSISTED PROJECTS HAVING RECEIVED FIRST PAYMENT

at MAY 31, 1972

Major Group	100 Assisted Projects Having Received First Payment - at May 31, 1972	
	Number	Per Cent of Total
1. Food & Beverage Industries	39	39.0
2. Tobacco Products Industries	3	3.0
3. Rubber & Plastics Products Industries	3	3.0
4. Leather Industries	1	1.0
5. Textile Industries	-	-
6. Knitting Mills	-	-
7. Clothing Industries	1	1.0
8. Wood Industries	18	18.0
9. Furniture & Fixture Industries	3	3.0
10. Paper & Allied Industries	1	1.0
11. Printing, Publishing & Allied Industries	4	4.0
12. Primary Metal Industries	-	-
13. Metal Fabricating Industries	11	11.0
14. Machinery Industries	5	5.0
15. Transportation Equipment Industries	4	4.0
16. Electrical Products Industries	4	4.0
17. Non-Metallic Mineral Products Industries	-	-
18. Petroleum & Coal Products Ind.	1	1.0
19. Chemical & Chemical Products	-	-
20. Misc. Manufacturing Industries	2	2.0
<u>TOTAL</u>	100	100.0

A.2.3. Provincial Distribution

Removal of the eight large projects, the bulk of which are located in New Brunswick, means that the provincial distribution of the 100 Projects (Table A.8) is altered somewhat from that of the total 108. Nova Scotia is now over-represented in terms of expected employment while New Brunswick is under-represented. Referring to Table A.4 it is apparent that Newfoundland remains under-represented in terms of expected additional employment while Prince Edward Island remains over-represented².

Table A.8

PROVINCIAL DISTRIBUTION

100 ASSISTED PROJECTS HAVING RECEIVED FIRST PAYMENT

MAY 31, 1972

PROVINCE	100 Assisted Projects Having Received First Payment, May 31, 1972	
	Projects as a percentage of A.P. Total	Expected Employment a percentage of A.P. Total
Newfoundland	8.0	10.8
Prince Edward Island	12.0	12.5
Nova Scotia	40.0	48.4
New Brunswick	40.0	28.3
Atlantic Provinces	100.0	100.0

² See Section A.3.1.

A.2.4. Project Type

Removal of the eight large projects, four of which were new facilities, does not alter the make up of the remaining 100 projects as regards project type. The population of 100 projects from which the random sample was drawn still has a higher proportion of new facilities than does the total of assisted projects at May 31, 1972, comparing Table A.9 to Table A.4.

Table A.9

PROVINCE	Assisted Projects Having Received First Payment, May 31, 1972	
	New Facilities	New Facilities as a percentage of all projects
Newfoundland	4	50.0
Prince Edward Island	8	66.7
Nova Scotia	14	35.0
New Brunswick	22	55.0
Atlantic Provinces	48	48.0

4.3. The Random Sample

4.3.1. Provincial Distribution

As noted in the previous section the provincial distribution of the 100 projects having received first payment at May 31, 1972 did not correspond very closely to the provincial distribution of all assisted projects at that date. Newfoundland in particular was under-represented in the 100 projects. It was indicated in Chapter 1 that the projects on Prince Edward Island and Newfoundland were treated as one group and those in Nova Scotia and New Brunswick were treated as another. A random sample of projects was then drawn from the population in proportion to the number of projects in each group. Table A.10 sets out the provincial distribution of the random sample. Comparing Tables A.10 and A.4 note that Newfoundland remains considerably under-represented³.

³ Initially it was intended to use an unmodified random sample. However, this left Newfoundland unrepresented. Consequently it was decided to stratify the random sample (Chapter 1). This stratified random sample, which improved Newfoundland's representation, forms the basis of this report.

Table A.10
Random Sample of Assisted Projects
Provincial Distribution

Province	Number of Projects	Per cent of Total Projects
Newfoundland	2	3.9
Prince Edward Island	8	15.7
Nova Scotia	18	35.3
New Brunswick	23	45.1
Atlantic Provinces	51	100.0

A.3.2. Project Type

Table A.11 reveals, in comparison to Table A.5 that new facilities are slightly more heavily represented in the random sample than in all assisted projects at May 31, 1972.

Table A.11
Distribution by Province and Project Type
Random Sample of Assisted Projects

Province	New Facilities	New Facilities as a percentage of all projects
Newfoundland	1	50.0
Prince Edward Island	4	50.0
Nova Scotia	5	27.8
New Brunswick	17	73.9
Atlantic Provinces	27	52.9

A.3.3. Size

As would be expected a comparison of Table A.12 with Table A.2 shows that the size of the random sample projects corresponds quite closely to the size of the 100 assisted projects having received first payment at May 31, 1972.

Table A.12

Random Sample of Assisted Projects

Province	Eligible Capital Cost	Expected Employment	Incentive	Eligible Capital Cost Per Project	Employment per Project
	(\$000's)		(\$000's)	(\$000's)	
Newfoundland	305	64	76,200	152	32
Prince Edward Island	1,798	241	731,101	225	30
Nova Scotia	7,091	832	2,359,181	394	46
New Brunswick	5,273	589	731,101	229	26
Atlantic Provinces	14,465	1,726	5,553,514	284	34

A.3.4. Industrial Distribution

Table A.13 outlines the industrial distribution of the 51 projects of the random sample. Comparing Table A.3 with Table A.13, it will be noted that the Wood Industries are over-represented slightly in the random sample as compared to all assisted projects at May 31, 1972.

TABLE A.13

Industry Distribution
Random Sample of Assisted Projects

Major Group	Assisted Projects - Random Sample	
	Number	Percentage of Total Projects
1. Food and Beverage Industries	19	37.2
2. Tobacco Products Industries	2	3.9
3. Rubber and Plastics Products Ind.	-	-
4. Leather Industries	-	-
5. Textile Industries	-	-
6. Knitting Mills	-	-
7. Clothing Industries	1	2.0
8. Wood Industries	11	21.6
9. Furniture & Fixtures Industries	1	2.0
10. Paper & Allied Industries	1	2.0
11. Printing, Publishing & Allied	2	3.9
12. Primary Metal Industries	-	-
13. Metal Fabricating Industries	6	11.8
14. Machinery Industries	3	5.9
15. Transportation Equipment Ind.	2	3.9
16. Electrical Products Industries	3	5.9
17. Non-Metallic Mineral Products Ind.	-	-
18. Petroleum & Coal Products Ind.	-	-
19. Chemical & Chemical Products Ind.	-	-
20. Miscellaneous Manufacturing Ind.	-	-
<u>TOTAL</u>	51	100.0

QUESTIONNAIRE - FIRMS ASSISTED UNDER THE
REGIONAL DEVELOPMENT INCENTIVES ACT

Individual replies will be kept
CONFIDENTIAL

You are not asked to identify
either yourself or your company
on this Questionnaire

Please note that you are asked to answer all questions except that questions 3, 4 and 8 apply only to projects which are new facilities.

SECTION 1 - GENERAL INFORMATION

1. (a) When did the planning for this project begin?¹ Month _____ Year _____
- (b) When was the decision made to undertake this project? Month _____ Year _____
- (c) Date of actual or expected start of commercial production: Month _____ Year _____
2. Does this project represent:
- (a) The formation of a new company, (does not include a new subsidiary of an existing company)? Yes _____ No _____
- (b) The formation of a new subsidiary of an existing company? Yes _____ No _____
- (c) A relocation? Yes _____ No _____
If yes, former location _____
- (d) A rebuilding after fire, storm, damage, etc.? Yes _____ No _____

¹ Note: Project is defined as the modernization or expansion of a facility or the construction of a new facility for which a grant under the Regional Development Incentives Act (RDIA) was accepted.

SECTION II - THE CHOICE OF LOCATION²

- 3.² What factors does your company consider to be of greatest importance, in choosing locations for new plants in your industry? Please list in order of importance.

- (1) _____ (3) _____
- (2) _____ (4) _____

4.² Please check the key factor which first led you to consider an Atlantic Provinces location for this project.

- (a) Previous production experience in the Region. _____
- (b) Business contacts in the Region. _____
- (c) Advertisement by a provincial or municipal agency. _____
- (d) Knowledge of the availability of the RDIA Incentive Grants. _____
- (e) Approached by a provincial or municipal agency. _____
- (f) Approached by the Department of Regional Economic Expansion _____
- (g) Other. _____
(Please specify) _____

5. (a) Did you consider locations outside the Atlantic Provinces for this project? Yes _____ No _____

- (b) If yes, can you specify these locations.
- (1) _____
 - (2) _____
 - (3) _____

6. What were the most important factors influencing you to locate in the Atlantic Provinces? Please list in order of importance.

- (1) _____
- (2) _____
- (3) _____

7. (a) Did you consider alternative centres within the Atlantic Provinces as possible locations for this project? Yes _____ No _____

- (b) If yes, please list these centres.
- (1) _____
 - (2) _____
 - (3) _____

7. (c) What was the most important factor influencing you to locate this project in its present site? _____

- 8.2 (a) Did a provincial or municipal agency in the Atlantic Provinces influence your company's decision to locate this project in its present site? Yes _____ No _____
- If yes, was it:
- (1) A municipal agency? Yes _____ No _____
- (2) A provincial agency? Yes _____ No _____
- (b) Did any federal or provincial government agency ask you to consider locating in one of the following groups of centres?
- (1) St. John's, Nfld., Halifax, Moncton, or Saint John, N.B. Yes _____ No _____
- (2) Corner Brook, Strait of Canso area or Stephenville. Yes _____ No _____
- (c) If you were asked to consider locating in one of the above centres, could you specify with a checkmark () which government agency asked you to do so?
- (1) Federal _____
- (2) Provincial _____

² Questions 3, 4 and 8 apply only to projects which are new facilities.

SECTION III - LOCATIONAL FACTORS

9. (a) Please indicate whether the following factors were considered favourable or unfavourable when your firm made its decision to locate this project in its present site.

<u>Factor</u>	<u>Favourable</u>	<u>Unfavourable</u>	<u>Neutral</u>
<u>I - Transportation</u>			
a. Costs	_____	_____	_____
b. Quality of facilities and services	_____	_____	_____
c. Accessibility to facilities and services	_____	_____	_____
<u>II - Access to Markets</u>			
a. Location for serving local or provincial market	_____	_____	_____
b. Location for serving Atlantic Provinces market	_____	_____	_____
c. Location for serving national market	_____	_____	_____
d. Location for serving an export market, i.e. outside Canada	_____	_____	_____
e. Competition from existing producers	_____	_____	_____
<u>III - Labour</u>			
a. Availability	_____	_____	_____
b. Skills	_____	_____	_____
c. Wage rates	_____	_____	_____
d. Labour relations	_____	_____	_____
<u>IV - Availability of Materials</u>	_____	_____	_____
<u>V - Other Factors</u>			
a. Land costs	_____	_____	_____
b. Site in an industrial park	_____	_____	_____
c. Property taxes	_____	_____	_____
d. Room for expansion	_____	_____	_____
e. Cost of Power	_____	_____	_____
f. Living and working conditions in the:			
(i) local community	_____	_____	_____
(ii) the Atlantic Provinces	_____	_____	_____
g. Existing production facilities	_____	_____	_____

SECTION III - LOCATIONAL FACTORS

9. Favourable Unfavourable Neutral

VI - Availability of Business
Services (e.g. Accounting,
Financial)

COMMENTS: _____

- (b) Would you please check below any financial assistance, (in addition to the RDIA Incentive Grant), received from federal, provincial or municipal sources. Included here are such forms of assistance as loans, loan guarantees, preferential tax rates and concessions on the price of land. Would you rank these sources in order of their importance to the project.

Please rank all sources of assistance received using the numbers 1, 2, 3 ...9 (1 most important, etc.)

<u>Source of Assistance</u>	<u>Received</u>	<u>Rank</u>
(1) <u>Federal</u>		
(a) RDIA Incentive Grant	_____	_____
(b) DREE Loan Guarantee	_____	_____
(c) Other types of Federal aid (e.g. PAIT, PEP)	_____	_____
Please specify _____		

(11) <u>Provincial</u>		
(a) Loan	_____	_____
(b) Loan Guarantee	_____	_____
(c) Other	_____	_____
Please specify _____		

(111) <u>Municipal</u>		
(a) Concession on Property taxes	_____	_____
(b) Concession on industrial park site facilities or services	_____	_____
(c) Other	_____	_____
Please specify _____		

10. Which of the factors in question 9 (a and b) above exerted the greatest influence on your firm's decision to locate this project in its present site? Please list in order of importance. (1) _____
(2) _____

11. How has your opinion of any of the locational qualities of your present site changed from the time when you originally chose the location?

SECTION IV - INFLUENCE OF RDIA ASSISTANCE

12. (a) Date of application for an RDIA Incentive Grant in respect of this project: Month _____ Year _____
(b) Date that the offer of an RDIA Incentive Grant was made to your company. Month _____ Year _____
13. Would you have gone ahead with this project without an RDIA Incentive Grant? Yes _____ No _____
14. Was the date on which construction of this project began:
(a) brought forward by the RDIA Incentive Grant? Yes _____ No _____
(b) delayed by the RDIA Incentive Grant? Yes _____ No _____
15. Was the RDIA Incentive Grant responsible for changing the plans for the size of the assisted project in terms of:
(a) Amount of employment? Yes _____ No _____
If yes, please indicate amount of change. _____ % Increase
_____ % Decrease

SECTION IV - INFLUENCE OF RDIA ASSISTANCE

15. (b) Size of investment (total capital costs excluding working capital)? Yes _____ No _____
If yes, please indicate amount of change by checking one of the following:

Increase (%)				Decrease (%)			
1-25	26-50	51-75	76-100	1-25	26-50	51-75	76-100
_____	_____	_____	_____	_____	_____	_____	_____

- (c) Length of production run(s) for products produced ? Yes _____ No _____
(d) Number of product lines? Yes _____ No _____

COMMENTS: _____

16. Was the RDIA Incentives Grant responsible for:

- (a) Changing the type of manufacturing process used? Yes _____ No _____
(b) Improving the quality of production equipment (e.g. enabling the use of more sophisticated equipment)? Yes _____ No _____
(c) Increasing the degree of mechanization? Yes _____ No _____
(d) Decreasing the degree of mechanization? Yes _____ No _____

COMMENTS: _____

17. (a) Did you know that you could get a special development incentive for locating in the Atlantic Region (i.e. in the Atlantic Provinces an additional incentive amounting to 10 per cent of eligible capital costs plus \$2,000 per job is available)? Yes _____ No _____
(b) Did you receive this special development incentive in the grant offered you? Yes _____ No _____

18. Did the possibility of obtaining the special development incentive play a role in your company's consideration of the Atlantic Provinces as a potential location?

Yes _____ No _____

SECTION V - EMPLOYMENT AND WAGES

19. (a) Total number of On-Site Employees in facility as of date offer accepted? _____
- (b) Total number of On-Site Employees in facility as of October 31, 1972? _____
- (c) Number of On-Site Employees employed by the assisted project as of October 31, 1972? _____

Note: Total number of On-Site Employees in facility is defined as all employees working on-site within the facility in which the project has been carried out. This count includes all those employees employed as a direct result of the project as well as employees working in other parts of the same facility.

20. (a) Information on employment and wages should be based on the additional employment created by the assisted project.
- (b) Please supply information for your last twelve (12) months of commercial production ending on October 31, 1972, if possible. If the assisted project has been in commercial production less than 12 months, please supply information for the total period of commercial production to October 31, 1972. Please check whether information is supplied for:

- (1) The last 12 months of commercial production ending on October 31, 1972?

Yes _____ No _____

OR

- (2) The total period of commercial production?
(Specify: from _____ to October 31, 1972).

Yes _____ No _____

- (3) The following table seeks information on employment and wages, by kind of work and sex.

21. Is the level of employment recorded in the table of question 20 in accordance with your expectations at the time commercial production began?
If no, how does the actual level of employment differ from your expectations at that time?

Yes _____ No _____

22. (a) The following table seeks information on employment by area of recruitment:

EMPLOYMENT CREATED BY THE ASSISTED PROJECT

As of October 31, 1972

OCCUPATIONAL CLASSIFICATION	Actual Number of Employees Employed by the Assisted Project ¹	RESIDENCE PRIOR TO PRESENT EMPLOYMENT				
		Local Area ²	Rest of Province	Rest of Atlantic Provinces	Rest of Canada	Foreign
MANAGEMENT AND PROFESSIONAL ³						
OTHER WORKERS ⁴						

NOTES: ¹ Include all jobs filled by people recruited in Canada and abroad.

² Within a radius of 50 miles.

³ Includes all executive and supervisory officials, managers, highly skilled professional, technical and research employees, and factory supervisors above working foreman levels.

⁴ Includes production and related workers plus clerical staff.

22. (b) Do any of the On-Site employees employed by the assisted project as of October 31, 1972, represent transfers to the assisted project from:

(1) Other parts of the facility in which the assisted project is located?
If yes, how many.

Yes _____ No _____

(2) Other facilities or plants in the Atlantic Provinces operated by your firm?
If yes, how many.

Yes _____ No _____

(c) Is your firm having difficulties recruiting local labour? (i.e. within a radius of 50 miles).

Yes _____ No _____

COMMENTS: _____

23. Does your firm's demand for labour exhibit a seasonal variation through the year?

Yes _____ No _____

If yes, please indicate by circling the appropriate letters:

(a) PEAK MONTHS

J	F	M	A	M	J	J	A	S	O	N	D
---	---	---	---	---	---	---	---	---	---	---	---

(b) SLACK MONTHS

J	F	M	A	M	J	J	A	S	O	N	D
---	---	---	---	---	---	---	---	---	---	---	---

(c) MONTHS WHEN PLANT IS CLOSED

J	F	M	A	M	J	J	A	S	O	N	D
---	---	---	---	---	---	---	---	---	---	---	---

24. Does your firm operate any training programs for its employees?

Yes _____ No _____

If yes, are these programs:

(1) In-plant training programs?

Yes _____ No _____

(2) Other (e.g. under supervision or direction of educational or training institutions.)

Yes _____ No _____