

PROPOSED SOCIOECONOMIC  
IMPACT ASSESSMENT OF CANSTEL

DEPARTMENT OF REGIONAL  
ECONOMIC EXPANSION

REVISED JULY 1974

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A preliminary examination of critical economic and market factors by the Department of Regional Economic Expansion has uncovered potential development opportunities for an industrial steel base in Eastern Canada. The core of this industrial base has been identified as a steel mill complex manufacturing semi-finished steel products primarily for export. Initial discussions between the Department and various private sector organizations have supported the forecast that world market demand will exceed available production capacity. Significant supply bottlenecks will likely emerge accompanied by strong upward escalation of steel prices, unless substantial additional plant capacity is established. The scope for steel substitutes does not appear that large given the present state of technology.

The Department has recognized the importance of two types of project appraisal at this stage. The first appraisal is already being undertaken by the STELCO Technical Service Group. Its focus will be on the commercial viability of the scheme in terms of return on capital employed. The second assessment will concentrate on identifying the broader socioeconomic costs and benefits that could be generated for the region and for the nation as a whole.

PRELIMINARY  
ENGINEERING  
FEASIBILITY STUDY

The STELCO Technical Service Group has been assigned to undertake a preliminary engineering feasibility study for a steel mill complex which could be located in one of the following sites identified by the Department:

- Sydney, Nova Scotia
- Gros-Cacouna, Quebec
- Sept-Isles, Quebec
- Come-By-Chance,  
Newfoundland
- Saint John,  
New Brunswick
- Strait of Canso,  
Nova Scotia.

The overall objective of that study is to develop, using known technology, a concept of a production plant and equipment and an assessment of its financial profitability.

Preliminary estimates call for a mill producing between 5 and 12 million tons of semi-finished steel products for export, with total capital investment ranging from \$1.6 to \$3.8 billion. We understand, however, that the technical data on financial investment parameters has revealed only minimal cost differential between the six sites. This marginality will place a greater emphasis on evaluating the socioeconomic advantages and disadvantages of each site.

#### SOCIOECONOMIC IMPACT STUDY

The socioeconomic impact study is designed to evaluate the CANSTEL project in terms of the community in both a macro and micro sense. The process may result in a feasibility appraisal and design approach which differs from the private sector point of view. When viewed in a broad economic context, projects which are not viable or only marginally viable on commercial grounds may appear quite advantageous. In this situation, authorities may reasonably consider granting special concessions for long- or short-term periods, to make the project

commercially attractive. Conversely, a project which may be commercially profitable may not represent an appropriate direction for a nation and its investment resources. It might, for example, generate unacceptable health risks, or present untimely pressure on a delicate balance of payments situation.

The aim of the socioeconomic impact study will be to identify and place in perspective some of the critical implications and alternatives available to government to achieve the greatest possible net social benefit from the CANSTEL project. It will take into account a spectrum of relevant economic and social considerations such as national and regional development strategies, employment, social development, ecology, and land use planning.

The study will pay particular attention to the financial implications of the project. The degree to which government should become financially involved (if at all) is obviously of a critical concern. Indeed public (or private) investment in CANSTEL could obviously mean abandonment or delay of other projects of equal or greater benefit to Canada and/or the region. CANSTEL will therefore be evaluated from a broad socioeconomic viewpoint in terms of the criteria developed by the study team - bearing in mind existing concerns for both a strengthening of the national economy and for sound development of the region in which the project might fall.

The fundamental rationale for federal commitment to and participation in the CANSTEL project is its potential contribution to the social and economic development of Eastern Canada.

DREE REGIONAL  
DEVELOPMENT  
STRATEGY

If deemed viable, and if developed to its fullest potential, the CANSTEL project could dramatically contribute to the Department's main objective of promoting viable economic growth in less developed parts of Canada, particularly those areas with relatively high unemployment. It could stimulate vigorous regional development and, in turn, provide a broad range of social benefits to the region. Costs, however, in any such appraisal must not be lost sight of; they must be objectively exposed.

The project could also represent a bold new direction in terms of relating a modern industrial environment to an area which may have good future prospects but requires a "starter" such as the steel complex to provide an initial impetus.

MARKET  
FORECAST

1. Preliminary marketing information points to a substantial shortfall in semi-finished steel products in the early 1980's.
2. The increased market demand will be encountering a lack of capacity on a world-wide basis to meet the shortfall in supply. (World-wide demand for steel is expected to exceed world-wide steel-making capacity by 75 million tons as early as 1978).

3. A major portion of the demand for basic steel products is likely to come from developing nations; proportionate shares in North America and Western Europe consumption patterns are likely to shrink.
4. The United States steel industry will likely have difficulty in satisfying its appetite for capital to finance expansion. Consequently, a consortium-type arrangement between the private and government sectors may offer potential advantages for the investing partners.

LOCATIONAL  
PREREQUISITES

All four provinces in which the sample sites are located satisfy basic prerequisites for building a steel complex:

- availability of deep-water ports which are open year round
- proximity to iron ore
- availability of power at stable prices in the required quantities
- proximity to potential markets in Latin America, Africa, and the Eastern seaboard of the United States, Western Europe, and Japan



While the project's technical and financial considerations are undoubtedly important factors, they represent only a part of the broad framework in which the CANSTEL project has to be evaluated. An attractive financial return on capital, for example, might be accompanied by an enormous investment in social services, infrastructure, and support services that are not financed by the CANSTEL project. In addition, the government will have to analyze a wide range of policy options and trade-offs to arrive at not only a viable scheme but also optimum participation by the private and government sectors.

The overall objective of the assessment will therefore be to examine the implications of the project within a broad socioeconomic framework and to formulate a range of alternatives for government consideration which are compatible with both the commercial and social concerns. This task can be broken down into six subobjectives:

1. To establish the broad setting for assessment.  
Emphasis will be placed on identifying the interrelationship between commercial and socioeconomic factors. Particular emphasis will be placed on establishing clearly a set of data parameters which will form the basis of assumptions for the socioeconomic review. Global steel investment and market considerations are obviously a critical element. A large part of this data will be obtained from the technical study group, who will have researched the concept of the steel mill complex with such factors clearly taken into account.
2. To assess the broad socioeconomic feasibility of the project from the federal government's perspective and to identify general implications at international, national, regional, and local levels.

3. To apply the major socioeconomic factors in a general assessment of the relative advantages and disadvantages of each site.
4. To assess the broad financial implications involved within the socioeconomic framework.
5. To identify and assess the relationship between the CANSTEL project and major government policies and strategies. This will serve to clarify the potential contribution of the project to regional development and other government policy objectives. Furthermore, it will help to identify, in a general way, possible modifications to existing policies and strategies in order to obtain the optimum possible net benefits from the project.
6. To develop a broad framework in which alternative government options and their implications can be evaluated. The framework will comprise, amongst others, such elements as social environment, economy, finance, ecology, federal/provincial relationships, and foreign trade.

It should be identified here that the socioeconomic impact study will concentrate on the key issues affecting the success of the project. Techniques such as the Candide model, the Statistics Canada econometric model, and other cost/benefit and input/output models which have been developed to make specific assessments will be harnessed to the degree that they can enlighten the overall approach. The provision of such programs and staffing, will be provided by the Department of Regional Economic Expansion should it prove necessary by the study team. In addition, the Department will expedite access to relevant studies/research on projects that may have valuable comparative lessons for this particular appraisal, e.g., James Bay/Churchill Falls, etc.

Our primary purpose will be to formulate a comprehensive and objective socioeconomic evaluation of the project. This will be supported by measurable data so far as feasible; where external factors exist which are not reasonably quantifiable, a judgemental assessment will be made based on our experience and first-hand knowledge of the local and regional community. The assessments will not become submerged in excessive quantitative analysis. Logic will constantly be the major consideration.

#### Major Purpose of the Study

All too often when a study is undertaken, the end results are not in keeping with the client's expectation. To avoid such misunderstandings in the case of this review, it is essential that a statement be included that puts the study in its proper perspective as to what the study is really intended to achieve. Our understanding is that this is a preliminary assessment of the socioeconomic factors. It is being undertaken within a broad framework of investigation which would help to isolate and focus upon some of the more critical considerations in evaluating the next step of the CANSTEL project. The results are intended to indicate specific questions and options that will require further investigation and development beyond the terms of reference of this particular review. In affect, this study should become the basis of establishing the scope and terms of reference leading to a detailed investigation of the socioeconomic implications of CANSTEL, assuming that the findings (taken together with those of the STELCO study) are sufficiently promising to warrant such further work.

In actual fact, ~~this~~ study should flush out factors of major relevance; it is not in any sense a detailed, definitive document -- such work being premature at this early prefeasibility stage of project assessment.

For ease of description, the overall study has been divided into component work programs in line with the six objectives outlined earlier. The details of each work program, including relative weight, are presented in this section.

BROAD SETTING  
FOR ASSESSMENT (10%)

The study will commence with an identification of the basic information parameters necessary for the socioeconomic study based upon the physical and operational concept established for the steel complex. This data will serve as the foundation for:

- identifying the key areas in the interrelationship between commercial and socioeconomic factors for consideration, e.g., the effect of automated process on labour requirements and skills
- interpreting the magnitude and trends of global ferrous markets, and associated investment patterns and its relationship to socioeconomic factors
- establishing the overall parameter and data base for structuring the socioeconomic study
- providing some order of magnitude, priorities, scale and the like to the complex.

In addition, the broad setting will serve as the data base for input into structuring the make-up of the complex as well as identifying possible areas where trade-offs may be effected between commercial and socioeconomic considerations. Where the base data may be ambiguous and directly or indirectly affects the socioeconomic study, they will be so identified so that the issues could be quickly clarified by the Department.

The project team will work closely with the Technical Service Group in establishing the broad setting for the socioeconomic study.

Actual Case  
Studies as  
Examples

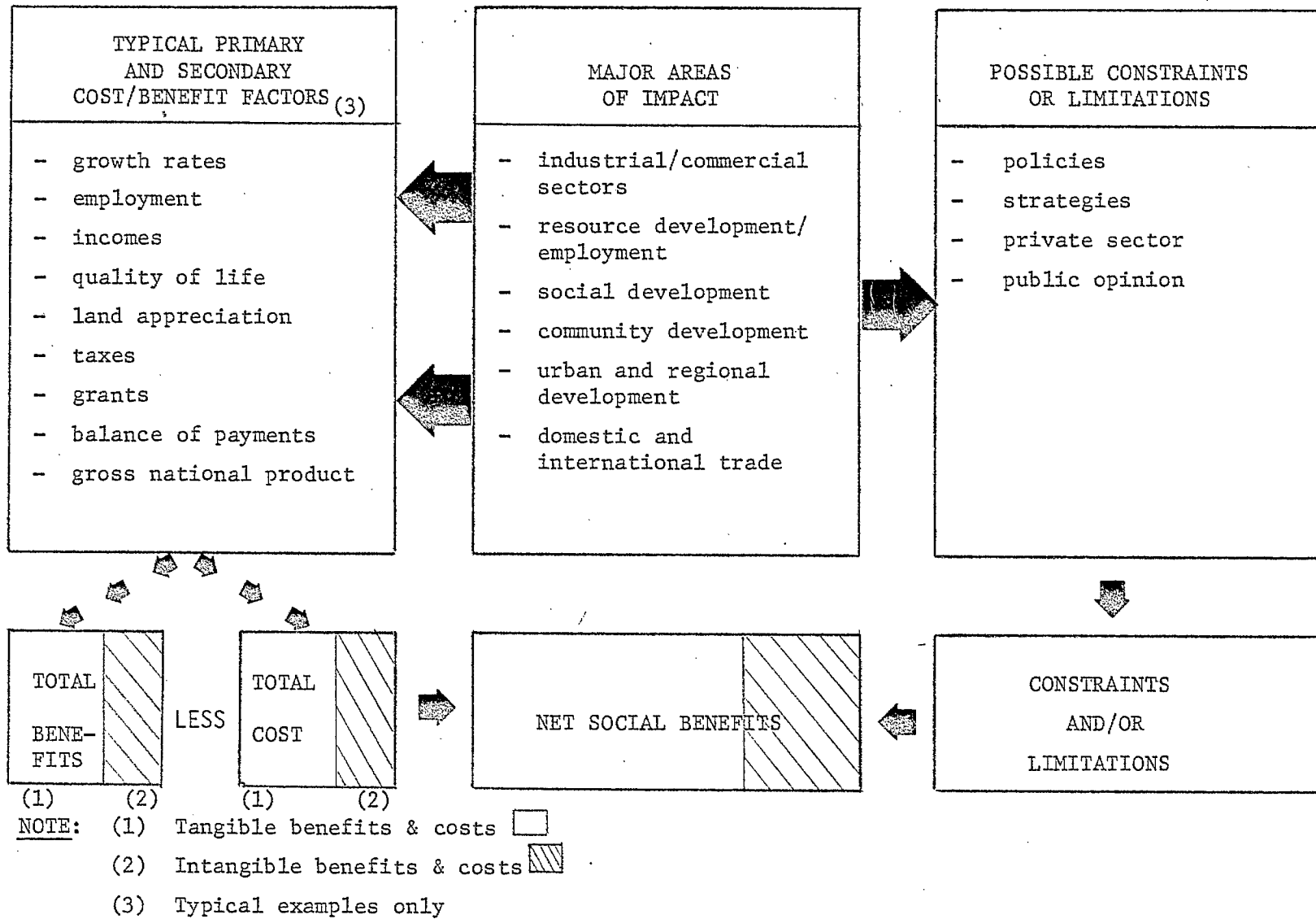
Supplementing the broad setting will be the identification of some of the lessons learnt in other large projects that have some similarity with the CANSTEL project. We will draw on various case studies to illustrate relevant lessons from major scale projects such as Puerto Rico oil refineries, Multiplex, industrial complex planning in Southern Italy and the Columbia River Project.

BROAD ASSESSMENT  
OF SOCIOECONOMIC  
FEASIBILITY (40%)

In order to ensure that the socioeconomic investigation covers the full range of alternatives and high-benefit options, we have distinguished primary factors requiring thorough analysis from secondary factors which will be given less attention at this stage. Above all, our assessment will focus on broad issues and implications rather than mechanistic or stereotyped and too narrowly focused cost-benefit calculation.

FIGURE 1

CONCEPTUAL FRAMEWORK FOR ASSESSING  
SOCIOECONOMIC FEASIBILITY  
OF CANSTEL PROJECT



Major Areas  
Of Impact

As illustrated in Figure 1 opposite, six major areas of impact will be examined and, where practical and useful in our judgment, quantified. In general, the overall benefits and costs will be assessed from a view of:

- the direct impact of the project
- indirect effects, e.g., forward and backward linkages.

1. Industrial/commercial sectors. This subcomponent will identify and assess the relationship of CANSTEL to other major operations such as SIDBEC and SYSCO. Once these relationships are defined, the effects of forward and backward linkages within the primary, secondary, and tertiary industries can be assessed within a broad cost/benefit framework.

In addition, the potential for induced and natural growth and development within the three sectors will be examined from the point of view of positive/negative effects. This can be illustrated by considering the example of the steel complex vis-à-vis the fishing sector. The key question here would be the effect to which higher incomes generated by the steel complex would attract labour from the fishing industry - a possible negative impact on federal fishing objectives and expenditures. The magnitude of prime requirements such as supplies will also be examined in light of possible opportunities for secondary industries being developed in the region.

2. Resource development/employment. Under this subcomponent, such issues as the cost of developing both material and human resources during the construction and production stages and the extent to which these resources are presently employed will be examined.

An attempt will be made to assess the social costs of developing existing resources, particularly human resources. Estimates of target population for the project, i.e., the number of people that will be most

affected in terms of direct and indirect employment opportunities, will be an integral part of our approach. Some of the typical questions to which answers will be sought include:

- total short- and long-term manpower requirements
- size, type, and location of manpower availability and shortfalls
- general mobility of existing manpower
- degree of manpower training or type of retraining programs likely required.

Of equal importance will be the impact that the project will have on the development of alternative energy resources in the area. Possible social costs and implications for the development of hydro-electric, nuclear power, and other forms of energy will have to be taken into consideration.

3. Social development. This subcomponent will focus on those factors which, although more difficult to quantify, pertain to the impact of a major industrial project on human development and the lifestyles of individuals in a region, specifically:

- present and future public attitudes to a major industrial development
- implications of industrial change for the quality of life, customs, and traditions; possible effect of these changes on plant operations, e.g., different regional attitudes may have a significant effect on productivity levels and, in turn, operating costs compared to major urban centres such as Toronto or Montreal



- demands on managerial capability within institutional structures such as schools, hospitals, and local government to effectively respond and cope with the transformation to an industrialized environment
- approach mechanisms to facilitate public involvement, e.g., public participation, industrial relations, and public relations
- possible impact on consumer spending patterns (linking social and economic effects).

4. Community Development. Demographic factors affected by industrial development as well as the ability of the system to provide the necessary infrastructure to support the present and future needs must also be analyzed, specifically:
- development of a demographic profile for the region
  - impact on population concentration and growth in both the immediate future and long-term development during the construction and production stages of the project
  - assessment of the readiness of the community for such a large project in terms of institutional framework
  - implications for existing community development programs at local and provincial levels
  - adequacy of existing social infrastructure, future requirements, e.g., schools, roads, water and sewage, and transportation, and implications for public expenditure requirements
  - assessment of the decision-making process and possible vehicles for government input into that process, particularly in the absence of direct government participation.
5. Urban and Regional Development. This subcomponent will concentrate on assessing the compatibility of the project with land use planning. Where a deep-water port is concerned, the relationship between land and shoreline development will be carefully examined. Environmental considerations in terms of existing government programs and regulations affecting pollution controls will also be assessed. Specific issues for study include:
- existing provincial land use programs as well as federal development strategies, e.g., recreational development programs

- effects of creating a new site as compared to expanding an existing site
  - implications for residential housing and commercial buildings
  - long-term implications for future resources such as agriculture and recreation as well as public opinion on plant location.
6. Domestic and International Trade. This sub-component will receive prime attention. Not only does it bear directly on the success of the project but it will likely provide major benefits in terms of balance of payments through export markets. Some of the topics comprising this sub-component include:
- magnitude of exports and possible contribution to the balance of payments
  - opportunities for export of technology and other related or non-related product lines arising out of the steel complex
  - adequacy of existing transportation and possible concessions on rates.

Primary & Secondary  
Cost/Benefit Factors

Information such as the following will be highlighted during the assessment of socioeconomic feasibility:

- employment generated and income levels
- taxes
- inter-linkage opportunities
- cost of manpower training

- consumer expenditure patterns
- balance of payments
- cost of infrastructure

#### Constraints & Limitations

Part of the assessment of socioeconomic feasibility will be devoted to identifying major constraints or limitations affecting the construction and production stages of the project. Many of these constraints are difficult, if not impossible, to quantify. In this case, a judgement as to likely implications will be made and given an appropriate weight for analysis purposes. At the very least, it will be essential to qualify these constraints as a background to understanding the broad cost/benefit picture. At the same time, approaches to surmounting such limitations will be examined.

#### SITE SELECTION AND REGIONAL IMPLICATIONS (12%)

The purpose of this work program will be to establish a ranking system by which the relative merits of each site can be measured. It will be comprised of basic financial, technical, and socioeconomic criteria, each assigned a specific weight. Close coordination will have to be exercised by the Department to incorporate the technical site factors presently being developed by the Technical Service Group into the ranking system.

In the process, we plan to assess the applicability of site selection methods used for the Ste. Scholastique International Airport. One key area of focus will be the possibility of the government becoming the major land developer - at the same time a viable tool for effecting social and economic changes and a potential revenue generator.

The ranking of each site will be supported by an evaluation of site development within a broad regional framework, e.g., possible detrimental effects of developing the Strait of Canso on the future growth of Sydney.

FINANCIAL, FISCAL AND  
PARTICIPATION IMPLICATIONS (8%)

An integral consideration by the Department will be to assess the total cost and revenue resulting directly or indirectly from the project. This will essentially be developed from inputs received from various groups involved in studying various aspects of the study. Our understanding of the various study components by each of the responsible groups are:

- commercial viability by TSG
- fiscal and participation implications by internal government departments
- financial implications input from the socioeconomic study.

Financial Implications  
From a Socioeconomic  
Viewpoint

Implementation of the project may mean federal involvement in not only providing capital; in the form of incentives or possibly a partnership arrangement with the private sector but it will likely involve a substantial investment into various infrastructures wherever the complex is located. The objectives of this subcomponent therefore will be to identify, in broad terms, (i.e., order of magnitude) the investment requirements and implications for infrastructure that can be anticipated for the final site selected.

Specific areas of the work component will include:

- assessing the implications of the steel complex on government supportive services, e.g., unemployment insurance
- determining the total magnitude of financial requirements by governments, e.g., federal, provincial, municipal, into supporting infrastructure
- assessing the implications such as the financial strains on local and provincial budgets and programs
- assessing the broad implications on federal and provincial relationships, e.g., equalization programs

Relationship  
To TSG Input

The broad financial picture on the steel complex may have a bearing in evaluating alternatives in so far as federal/provincial relationships and the provision of suitable infrastructure is concerned. It is our understanding that data on the financial side of the complex will be supplied by TSG. The main focus of the impact study will, therefore, incorporate the TSG findings into the impact study framework and assess the financing arrangements recommended by the Technical Service Group in the context of its implications for governments and for probable success in light of the overall cost/benefit analysis of the socioeconomic impacts.

Relationship  
to Departmental  
Input

In that the project may have an effect on fiscal policy, it will be necessary to assess long-term budget and revenue operation implications with such departments as the federal and provincial departments of Finance. In addition, the question of foreign ownership and controls will be a key area of consideration. In developing our work program we have excluded this portion of work from our proposal as instructed by officials of the Department of Regional Economic Expansion on the understanding that this component will be done by various federal departments and coordinated through D.R.E.E. Our understanding of the typical areas for review include:

1. Review of suggested form of financing by the TSG for governments consideration.
2. Explore and evaluate alternative ways of obtaining capital, e.g., the possibilities of using institutional financial houses such as insurance companies and/or the private sector as a source of investment.
3. Assess the implications, if any, on money markets and the long-term cost of financing, e.g., the competition for funds may depend on the phasing and completion date of the project.
4. Review and assessment of foreign ownership and control. (The flow of technical know how out of Canada versus possible commitments to purchase minimum output of the plant should be one of the many issues for review, particularly in the light of new legislation presently being drafted by the federal government.)
5. Review and assessment of options available to government for their involvement in the project. Likely options in this regard would include:
  - full government control, e.g., crown corporation
  - partner in a consortium of government/private interests
  - no financial involvement other than in the provision of supporting services and infrastructures as outlined above.



6. Assessment of major risks involved with the project. It is likely that the most critical success factors can be isolated for further review in the feasibility study. The data from the analysis will have a significant influence when considering socioeconomic considerations.

#### GOVERNMENT POLICY IMPLICATIONS (15%)

One of the overriding themes of the socioeconomic impact assessment will be the relationship between the project and government policies and strategies. On one hand, the project will help to achieve certain federal policies, goals, and objectives. On the other hand, there are certain policies which will either negatively or positively affect the future success of the project. This assessment will be an integral part of the work program, carried out in so far as it relates to socioeconomic considerations and is under the direct control of the study team.

#### Departmental Objectives

At the departmental level, it will be necessary to first examine the extent to which CANSTEL will assist in the achievement of DREE's regional objectives of reducing economic imbalance. This

opportunity will also have a spin-off effect on other goals such as:

- a policy and approach to increasing the processing of Canadian resources
- development of Canadian trade policies and objectives
- improvement in federal/provincial relationships
- secondary effects based, in part, on increased provincial and municipal tax revenues.

#### Government Objectives

The following programs at federal and provincial levels will be evaluated in terms of their implications for CANSTEL:

- schemes for the development of manufacturing and product lines, e.g., Department of Industry, Trade and Commerce GATT program
- Canadian International Development Agency programs for the export of related and nonrelated Canadian goods and services
- manpower and immigration policies affecting training, development, and manpower mobility programs
- federal and provincial transportation policies with respect to rail, harbour, water, and highways
- provincial community development and municipal affairs programs
- urban affairs and Central Mortgage and Housing Corporation programs.

DEPARTMENT OF REGIONAL ECONOMIC EXPANSION

FIGURE 2

CONCEPTUAL FRAMEWORK FOR  
PROJECT EVALUATION AND POLICY OPTIONS

COMPONENTS		Range of Options		Range of Options		Range of Options	
SOCIOECONOMIC FEASIBILITY	INDUSTRIAL						
	RESOURCE						
	SOCIAL						
	COMMUNITY						
	URBAN/RURAL						
	FINANCE						
COMMERCIAL FEASIBILITY	ECONOMIC						
	MARKETS						
	INVESTMENT						
TECHNICAL	PARTICIPATION						
	PLANT						
	OPERATIONS						
	TECHNOLOGY						
S I T E S		1	2	3	4	5	6

One of the key areas of consideration will be the possible implications of the project for Canada's foreign aid policies and programs. For example, if financial or technical support can be obtained for underdeveloped countries in promoting the manufacture of finished goods, a guaranteed market for the use of Canadian semi-finished steel products would be created. In this way, both federal foreign aid objectives and export market requirements would be satisfied. Fact-finding in the key area of enquiry will include consultation with the Department of Industry, Trade & Commerce, Canadian Industrial Development Agency, and the Department of External Affairs.

ALTERNATIVE  
GOVERNMENT OPTIONS (15%)

The objective of this work program will be to identify a framework to consider a range of policy options available to the government for further project development and implementation. Specifically the framework will include socioeconomic factors as identified in the work program above. The same framework could also be used by D.R.E.E. to input data from other respective groups pertaining to such items as technical and commercial viability of the project and government fiscal considerations. Again, we stress that the evaluation process will be based on socioeconomic considerations only but will be a useful tool for D.R.E.E. developing a broad overall evaluation of the project.

Figure 2 opposite illustrates a project evaluation grid approach. This concept will be used to correlate policy options and site alternatives.

The approach that will be used in assessing the overall feasibility of the study (from a broad socioeconomic implication point of view) is a concept outlined in our previous discussion paper, namely Project Evaluation Grid method. Essentially, this method adopts a systematic way of isolating key issues and examining the broadest range of alternatives that might be available. In this way, a sound appreciation of the relevant factors are identified and assessed in terms of their strategic implications. A problem with the more traditional experience with techniques such as cost/benefit analysis has been that the larger (often external) issues tend very frequently to become obscured or left out, and the appraisal gets lost in a maze of often quite trivial information.

V- TIME FRAME FOR THE STUDY

We estimate a time frame of a minimum of six and a maximum of nine months for the total project following the approval in writing from the Department of Regional Economic Expansion. At this stage, exact target dates for the completion of the project are extremely difficult to predict with a high degree of accuracy; they will depend on the availability and quality of existing data and information. The study will be critically dependent on efficient input from the STELCO work and the Department of Regional Economic Expansion. We intend to commence the study by preparing a critical path network showing anticipated data for input by various groups. Should any delays develop we would so inform you in writing as well as the implications on the final completion date.

The study itself will consist of two phases: Phase I dealing with an investigation of socioeconomic factors and Phase II dealing with a review of financial considerations and policy options. We believe that this type of approach will allow for maximum input into the development of meaningful and practical options. In keeping with our normal practice, we will submit monthly progress reports on the actual status of the work in relation to the scheduled program and on key issues requiring resolution or clarification by the government.

PHASE I

Phase I, which will be completed in approximately three to four months will culminate in the submission of six (6) copies of a preliminary position paper outlining the initial findings on various aspects of the socio-economic study. These findings will be broad in nature, but they will provide an indication of likely direction arising out of work done to that point in time. Specifically, the paper will include comments on:

- broad setting for assessment
- broad assessment of socioeconomic feasibility (preliminary only)
- site selection and regional implications (preliminary only).

Criteria for site selection will be presented to the Department for review and discussion prior to in-depth site ranking in Phase II. The main purpose of the document will be to determine whether a reevaluation of priorities and direction should be contemplated. For example, at that point in time, certain sites might be rejected for obvious reasons without further and more detailed fact-finding and analysis in the study.

#### PHASE II

Phase II will require from three to five months for refining the ranking of alternative sites, including implications for regional development; the assessment of financial implications and the identification of a framework for assessing various government policy options. It is in this latter stage that we plan again to hold discussions with key federal government departments, provincial officials, and the Technical Service Group to consolidate and firm up our findings to ensure compatibility and overall agreement on the study results.

#### REPORTS

Following the completion of our analysis and conclusion, an oral presentation would be held with the Department to review our findings, conclusions, and recommendations. Views and opinions will be sought on our results.

Our work would then be put into a written draft report and presented to the Department for review. Following any comments in writing, the report would be finalized and 50 copies of the final report submitted to the Department.



## VI - INFORMATION REQUIREMENTS

Upon commencement of the project, we will develop a detailed checklist outlining the data required from various sources. The timely availability of both individuals and documents will obviously help to ensure an early completion date. Although preliminary at this stage, we would wish to have access to the following information:

### 1. Technical Information:

- technical profile of the steel complex
- present and future definition of the physical plant; alternatives examined and reasons for both the choice and the options rejected
- present and future resource requirements
- definition of the operating system.

### 2. Financial Profile:

- estimated long-term operating costs
- basic assumptions on the project viability
- annual production capacities
- labour requirements.

### 3. Government Policies:

- federal departmental goals and objectives, including strategies related to steel mill development
- views and positions by both federal and provincial authorities
- established strategies for regional development.

4. Government Data:

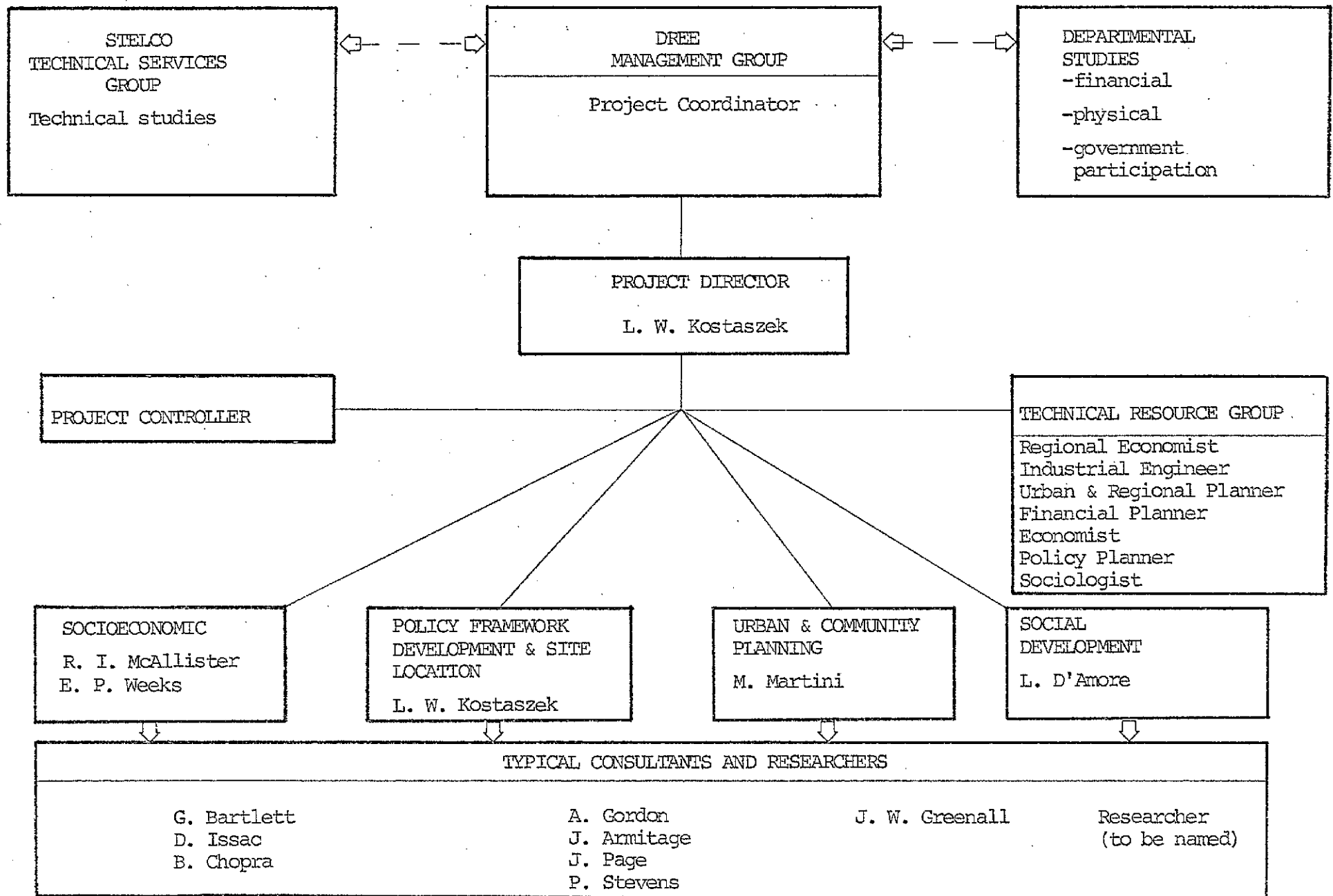
- access to confidential statistical data, e.g., Statistics Canada
- provincial land use plans
- aerial photographs, hydrographic and topographic maps from E.M.R.

5. Federal Computer Systems:

- access to the Candide Model
- access to any input/output models presently available.

FIGURE 3

PROPOSED ORGANIZATIONAL STRUCTURE



The proposed organizational structure shown in Figure 3 opposite consists of two main groups: a technical resource team and a project team.

TECHNICAL  
RESOURCE  
TEAM

The main function of this group will be to act as a forum for testing new ideas and concepts. Its members have technical expertise in various disciplines relevant to the socioeconomic impact study and an intimate knowledge of eastern Canada. Key members of the Technical Resource Team include:

1. E. P. Weeks, M.A., D. Phil (Oxford) - has held a variety of positions in the federal government including chairman of the Canadian Saltfish Corporation, Assistant Deputy Minister - Implementation of D.R.E.E., Executive Director of the Atlantic Development Board. Dr. Weeks has participated in a wide range of large-scale projects with substantial regional development dimensions. He will also spearhead the socio-economic component of the study program.
2. John Bland, B. Arch (McGill), Diploma in Town Planning, was Director of the School of Architecture at McGill University from 1941 to 1972. He is a senior principal in the firm of Bland/LeMoyne/Shine/LaCroix, and has a wide-ranging background of experience in town planning in Canada.
3. Individuals knowledgeable in finance, public administration, and industrial planning within the government and private sectors will be utilized as advisers on an as required basis (to be named).
4. Paul Stephens, B.Sc. Eng., (Columbia) - has engaged in a large number of economic feasibility studies, primarily in the steel-making industry. Over many years as a consultant, Mr. Stephens has built strong relationships with numerous mini-mill operations, designers of steel plants in Canada and the United States, as with many equipment builders and suppliers.

5. Lou D'Amore - experience outlined under project team.
6. Leonard W. Kostaszek - experience outlined under project team.
7. Robert Ian McAllister - experience outlined under project team.

#### PROJECT TEAM

Leonard & Partners Limited strongly supports the utilization of expertise from its network of associates. For this particular assignment, we plan to form a multi-disciplinary project team drawing on the skills of Leonard & Partners Limited, Acres International Limited, and The Economist Intelligence Unit Limited. Key members of the proposed project team include:

1. Leonard W. Kostaszek, P.Eng.(McGill),M.B.A. (Toronto), will be responsible for managing and directing this project. He has a substantial background of relevant consulting history, including several years with the Steel Company of Canada, Chairman of a Royal Commission on Urban Renewal in Newfoundland, Deputy Project Manager for the planning of the Ste. Scholastique International Airport Project, and Project Manager for an operations control center for Expo '67. Mr. Kostaszek has been involved in various feasibility studies for secondary and primary industries (e.g. Newfoundland Steel Company) in the Atlantic region. He will be assigned full time to this project.
2. Ian McAllister, M.A. (Oxford), M.A. (Cambridge), Diploma in Economic Development (Oxford), will assist in the socioeconomic component. As professor of economics at Dalhousie University, and in previous consulting and advisory positions with federal and provincial departments (e.g. federal Department of Finance, Province of Newfoundland), he has participated in assessing a wide variety of development projects - with a particular concern for their regional implications.

3. Louis J. D'Amore, B.Sc. Econ.(Holy Cross College), M.B.A. (Wharton School of Finance) - will be responsible for assessing social development issues arising out of the steel mill complex. He has had over ten years of consulting experience, gaining exposure to a cross-section of industries including construction, steel, aerospace, banking. In recent years he has directed his efforts in the areas of tourism, recreation and social planning.

Several consultants will be responsible for conducting field surveys, meetings, and fact-finding under the direction and supervision of the three key project heads:

1. Geoffrey Bartlett, a graduate in economics from Cambridge, has worked as an economic consultant for some 25 years, in such areas as port - airport studies for the Thames Estuary, a multi-purpose river basin development in Northern Greece, a comprehensive survey on the comparative costs and benefits to the U.K. of pursuing alternative energy policies; he also (1954-57) worked as an economist in the British Treasury.
2. Dawn Issac, B.A., M.Sc.(Michigan), is a consultant with a background in urban and regional planning. She will be helping develop background data for the socioeconomic component of the study.
3. Alec Gordon, a graduate in modern history from Oxford, served as research assistant to Randolph Churchill prior to moving into his present consulting field of industrial market research with the Economist Intelligence Unit. Has a long and diversified experience in industrial market assessment - ranging from project leader of a world-wide study in the steel and coking coal industries - to a study of the effects of the U.K. entry into the E.E.C. on the U.K. steel holding industry. He has worked extensively in both less-developed countries, as Papua, Nigeria, and Liberia, as well as studied markets for products as ferro-molybdenum and molybdc oxide in France, West Germany, and Sweden.

4. John D. Armitage, B.Comm. (Sir George Williams), M.B.A. (Texas), will be involved in key research on both policy and financial matters. He has had a wide-ranging background in the private sector, as well as an association with major government projects such as the Ste. Scholastique Airport Project.
  
5. John Page, B.Sc., M.B.A.(Harvard), will be the policy researcher on the team. His previous experience includes senior-level assignments in marketing and corporate planning systems, management organization, and mergers and acquisitions.

Various research and statistical technicians will be employed to assist the team members.

FIGURE 4  
ESTIMATE OF STUDY COST

TEAM MEMBERS	FUNCTION	Prof. Rates (per diem)	Time Budget (days)	Sub-Total	Total
<b>TECHNICAL RESOURCE TEAM</b>					
Dr. Ernie Weeks	Regional Economist	included below		-	
Paul Stephens	Industrial Eng.	\$300	3	900.00	
J. Bland/M. Martini	Urban & Regional Planners	\$250	5	1,250.00	
(To be named)	Economist (advisor)	\$250	4	1,000.00	
(To be named)	Public Adm. (advisor)	\$250	2	500.00	
L. Kostaszek	Policy Planner	} included below		-	
I. McAllister	Economist			-	
L. D'Amore	Sociologist			-	
(To be named)	Industrial Planner	\$250	5	1,250.00	
SUB-TOTAL				\$ 4,900.00	\$ 4,900.00
<b>PROJECT TEAM</b>					
L. Kostaszek	Project Director/ Policy Planning	\$225	45	10,125.00	
I. McAllister	Economic Advisor	\$225	45	10,125.00	
E. Weeks	Socioeconomic Dtr.	\$250	50	12,500.00	
G. Bartlett/A. Gordon	Economic Analysts	\$190	40	7,600.00	
D. Issac	Statistician	\$150	30	4,500.00	
B. Chopra	Engineer	\$150	10	1,500.00	
J. Armitage/J. Page	Financial Policy	\$200	20	4,000.00	
L. D'Amore	Social/Community	\$225	30	6,750.00	
M. Martini	Urban/Regional	\$250	8	2,000.00	
J. Grenall	Geographer/Planner	\$200	40	8,000.00	
(To be named)	Researcher	\$ 60	50	3,000.00	
SUB-TOTAL				\$70,100.00	\$ 70,100.00
<b>DISBURSEMENTS</b>					
Development				5,000.00	
Travel & Living				14,000.00	
Secretarial and Report Production				6,000.00	
SUB-TOTAL				\$25,000.00	\$ 25,000.00
<b>TOTAL PROFESSIONAL FEES AND DISBURSEMENTS</b>					<b>\$100,000.00</b>



The estimated cost for undertaking a socioeconomic impact study is based on professional time applied to the project. Figure 4 opposite summarizes the per diem rates and an estimate of the time commitment for key project team and technical resource team members. It is difficult to commit the people shown on the page opposite since it will depend upon when approval is obtained by the Department and our commitments at that time. We do, however, guarantee that the project will be staffed by professional people of a comparable calibre as identified in Figure 4. We guarantee that the following people will play a major role in the project:

- Dr. E. P. Weeks
- L. W. Kostaszek
- R. I. McAllister.

We anticipate that the total cost to undertake the socioeconomic impact study will be approximately \$75,000 for professional fees and approximately \$25,000 for out-of-pocket expenses for travel, accommodation, living, and ancillary charges such as report reproduction and the like. (The latter includes development costs for the preparation of the terms of reference and prior development.)

As mentioned earlier, the project is being undertaken by a consortium of three firms: Leonard & Partners Limited, Acres International Limited, and The Economist Intelligence Unit Limited. As prime contractor, Leonard & Partners Limited will assume the role of project management. In keeping with our normal practice, billing will be submitted on a monthly basis. In order to facilitate expenditure controls and the preparation of a monthly status report, we plan to submit invoices at the end of each month on an estimate basis. Actual expenditures will be compared to the estimate and an adjustment carried forward into the following month.

All invoices will be supported by appropriate documentation for both time and out-of-pocket expenses. Further data and information will be available for audit or inspection purposes by government officials.

