

A DECISION-MAKING MODEL FOR  
INDUSTRIAL DEVELOPMENT

by

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Studies of industrial location decision-making and the construction of decision-making models to date have invariably been couched in behavioural terms.<sup>1</sup> Likewise the majority, if not all of such empirical studies have centred on the industrialist as the decision-maker, on the assumption that, because he has made a location decision, he necessarily knows how best to do so. Little or no attention has been paid to the legislative structures within which industrial location decisions must be made, or to the part played by the elected representatives who are responsible for making such decisions. This paper is an attempt to escape from the behavioural habit by developing a structural model for industrial location and development decision-making at the community level.

To facilitate this attempt, the current legislation as laid down in the Revised Statutes of Ontario will be examined as an example of the existing structures which may be applied to industrial development. The provincial level of government is chosen here since, of the three main levels of government in Canada, it holds the most potential power, with regard to industrialization. It follows then that the model to be formulated will be developed primarily for application in a Canadian context while maintaining applicability wherever the benefits of industrial development are sought.

Industrial development has traditionally meant increased

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1. A partial bibliography of such behavioural studies is included as appendix A.

employment, higher standards of living and both economic and physical growth. Its accomplishment has, and continues to be, based on the philosophy of free entrepreneurship. Such provisions may have been satisfactory in the past, but are they still valid in the 1970's? Can such a philosophy be maintained for another fifty or sixty years? It is extremely doubtful.

Present and future problems of urban areas are both extensively documented and frighteningly prophesized. In the face of such issues, it would be foolish to assume that free entrepreneurship can continue to be the guiding force of industrial development. Questions of over population, open spaces, pollution and the like, where the good of the majority must take priority, cannot be left to the entrepreneur. It falls to government to assume responsibility for developing guidelines within which industrial development can take place to benefit entire communities. To do so, governments will have to produce entirely new industrial development philosophies.

It is suggested here that such a philosophy take the following form: Industrial development within \_\_\_\_\_ shall be pursued in such a manner as to maintain or increase the general standard of living, i.e. level of disposable income, employment level, consumer price level, etc.; and quality of life, i.e. clean air, clean water, open spaces, etc. The model to be presented here will assume the existence of such a philosophy.. However, before presenting a model of a more structured legislative system governing industrial location and

industrial development a quick review of the existing structures for the Province of Ontario will be carried out.

Those legislative bodies which are at present empowered to make decisions affecting industrial location and development in Ontario are shown in figure 1. From this chart, it may be readily seen that jurisdiction over industrial development is divided between the Province and the municipality. The actual jurisdictional chain of existing decision-making bodies is outlined below.

At the Provincial level, there are several Ministries which "may" influence industrial locations. These include the Ministry of the Environment which, through The Conservation Authorities Act, may pass restricting by-laws which would prevent certain types of industry from locating in specific parts of watershed areas. The by-law which is most often utilized under this Act is one prohibiting or regulating the dumping of fill of any kind in any area where the control of flooding, or pollution, or the conservation of land may be affected.<sup>1</sup>

The Ministry of Industry and Tourism, under The Ontario Development Corporation Act, attempts to encourage and assist in the development and diversification of industry within the Province through fiscal, material and technical assistance. It does not hold any jurisdictional power, nor does it provide any coordination of the industrial development within the Province. The functions of the Corpora-

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1. The Conservation Authorities Act, Revised Statutes of Ontario, (RSO) 1970, Chpt. 78, S 27(1)(f).

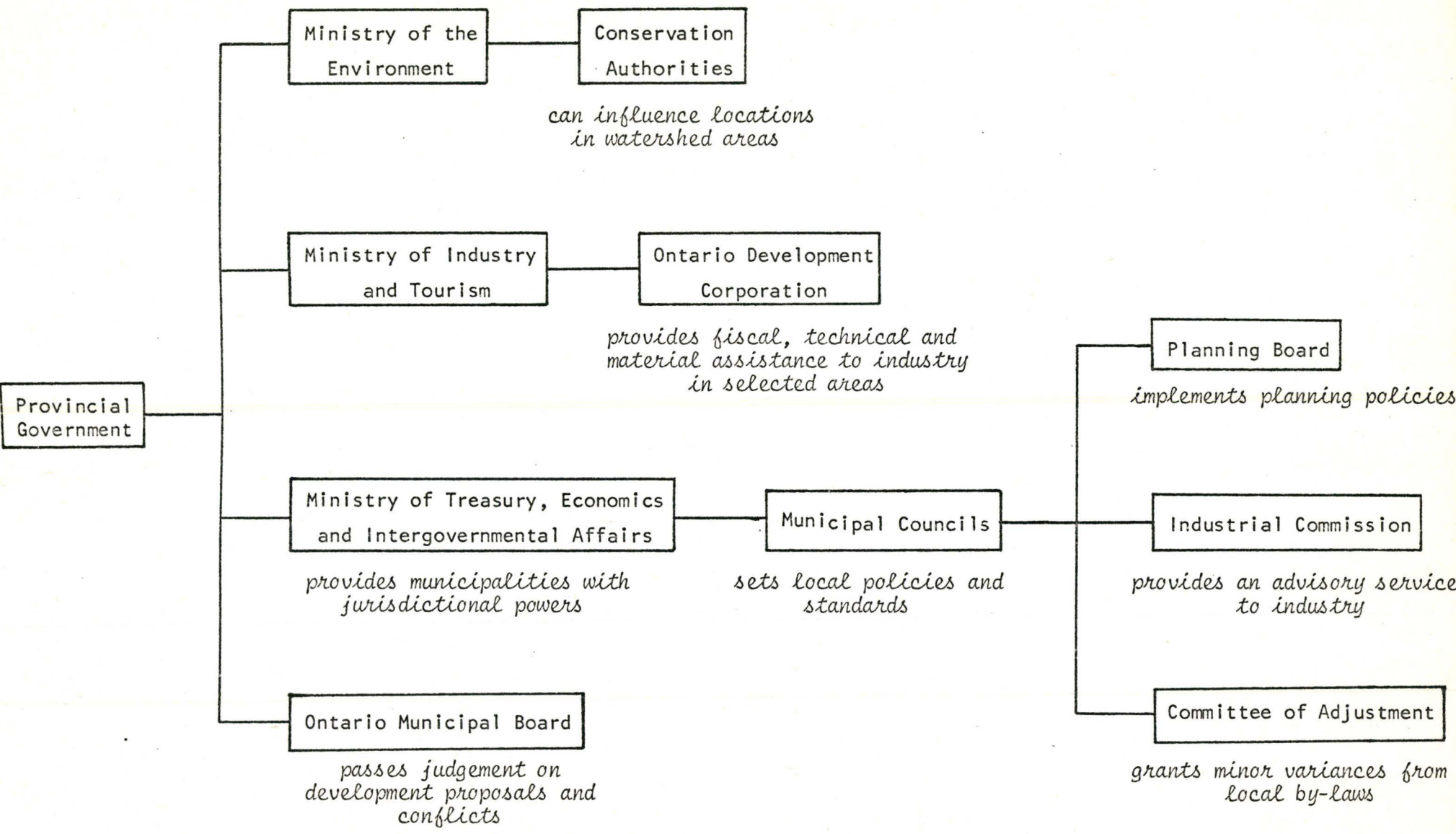


Figure 1. Existing structures affecting industrial development within the Province of Ontario, 1972.

tion are limited to providing assistance where, in the opinion of its Board of Directors, it is conducive to the objectives of the Corporation and, in the case of financial assistance, where it cannot be obtained from other sources.<sup>1</sup>

The agency with the most direct concern in locational considerations is the Ministry of Treasury, Economics and Intergovernmental Affairs. Under the Assistant Deputy Minister for Urban and Regional Affairs, it is involved in both regional development and municipal planning and development. It is this Ministry<sup>2</sup> which, through The Municipal Act, delegates to the municipalities the jurisdictional power to deal with industrial development matters.<sup>3</sup> This transfer of power is in the form of permissive legislation, resulting in a complete lack of Provincial guidelines for the municipalities and, hence, in a number of municipalities having no legislation in this area at all.

Another body at the Provincial level which can strongly affect development decisions is the Ontario Municipal Board, OMB. This Board does not act as an agency of the government, but rather as a tribunal. It possesses ominous powers however, having exclusive

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1. The Ontario Development Corporation Act, RSO 1970, Chpt. 308, S 7.

2. This Ministry was created through the amalgamation of the Department of Municipal Affairs and the Department of Treasury and Economics by the Ontario Government in 1972.

3. The Municipal Act, RSO 1970, Chpt. 284, parts 9 - 12.

Jurisdiction where jurisdiction is conferred on it, and being responsible only to the Lieutenant Governor in Council for its decisions. In the OMB's own view, "the extent and nature of the jurisdiction of the Board could be described as responsibility for the sound growth and development of municipalities within the framework of the statutes with particular regard to economic stability."<sup>1</sup> When one stops to consider that there are no statutory qualifications for membership in the OMB, and that the Board has all the powers of the Supreme Court for conducting its inquiries, it is of little wonder that many people strongly advocate restricting its jurisdictional powers.

There is neither time nor space to conduct a detailed study of the functions and powers of the OMB in this paper. Suffice it to say that the Ontario Municipal Board acts as judge and jury on conflicts related to an ever broader range of community development between or amongst municipalities and/or individuals and/or groups of individuals with regard to municipal affairs.

As noted above, the Province delegates the authority to make decisions on industrial development very quickly and with no coordinating guide-lines, to the various municipalities, counties, townships, regional districts or municipalities, and metropolitan areas. This is done primarily through The Planning Act, The Municipal Act, The Department of Trade and Development Act, The Regional Municipality

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1. 66th. Annual Report of the OMB. Toronto, Dec. 31, 1971, p. 1.



of Niagara Act, The District Municipality of Muskoka Act, The Municipality of Metropolitan Toronto Act,<sup>1</sup> and others, which are constituted almost exclusively of permissive legislation by which lower-level jurisdictions are given the opportunity to control various aspects of their physical, social and economic development. It therefore falls to these lower-level jurisdictional bodies to pass legislation governing such development if they so desire.

The current trend is for a municipal council to appoint a planning board for an approved planning area. The planning board is then compelled under The Planning Act to "investigate and survey the physical, social and economic conditions in relation to the development of the planning area,"<sup>2</sup> to prepare and recommend an official plan for the area to council, and to review the official plan "from time to time"<sup>3</sup> and recommend amendments thereto. Such legislation gives the planning board wide ranging advisory responsibility but no jurisdictional authority, which remains with council.

The Planning Act also permits a council to, by by-law, constitute and appoint a Committee of Adjustment<sup>4</sup> which may authorize

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1. RSO 1970, Chpt. 349, Chpt. 284, Chpt. 123, Chpt. 406, Chpt. 131, and Chpt. 295 respectively.

2. The Planning Act, RSO 1970, Chpt. 349, S 12(1).

3. Ibid. S 12(f).

4. Ibid. S 42 - 43.

minor variances from the provisions of by-laws with respect to land, building or structure, or use thereof, as in its opinion is desirable and in keeping with the general intent of the by-law and official plan if any. Decisions of such committees have the authority of council decisions and may be appealed only to the OMB.

Yet another body which the council of a municipality of 5,000 persons or more may establish under The Municipal Act is an Industrial Commission.<sup>1</sup> Such a commission has no statutory jurisdictional powers. It is established as a strictly advisory body whose purpose is to inform and assist industry to establish and expand within the community. In several instances however, the Industrial Commissioner has become a very influential individual, exercising considerable undeclared power on behalf of the council.

These then are the main links in the jurisdictional chain which may affect industrial development within the Province of Ontario. They do not comprise an exceedingly useful chain; in fact, they might better be referred to as a number of potentially interacting links. The reason for this lies in the type of legislation creating and governing the different bodies. With regard to industrial development considerations, virtually all legislation is permissive and/or negative. This means that there does not exist, at the present time, any kind of structural guide-lines, for the Province or for the Municipalities,

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1. RSO 1970, Chpt. 284, S 395(1).

affecting industrial development and industrial location.

Bear in mind that the Ontario case was chosen merely as an example of the existing structures within which industrial development and industrial location decisions are currently made. It provides a good example since, despite the fact that it is the most industrialized province in Canada, the structures governing decision-making for such development are effectively non-existent. There is very little useful compelling legislation at any level and virtually no positive legislation. Thus the Province of Ontario exemplifies an unstructured system and demonstrates the need for a system more definitely structured.

Regardless of the type of governmental system involved, it is the responsibility of that government which delegates jurisdiction to lower-level bodies -subsequently referred to as the central government- to provide them with development guide-lines in relation to those aspects at least that are inter-jurisdictional in their characteristics and/or potential consequences. This can best be accomplished by legislation being passed which requires the central government to state its own long-term development philosophies and goals. Then, in keeping with those goals, the central government will, under the auspices of a single department, spell out in the legislation the responsibilities and jurisdiction of the municipalities.

Under this one department, which we shall call the Department

of Intergovernmental Affairs, will come all the jurisdiction-granting power of the central government. This means that any act, be it a Planning Act, Municipal Act, Conservation Act, or whatever, which permits a lower-level body to pass a by-law which could influence the location or operation of any industry, will be put into effect by this department. The form that these acts will take will be such that each lower-level jurisdiction will be forced, rather than permitted, by clearly compelling statements, to pass all needed by-laws, thereby indicating its long-range development philosophies and goals. These should be such as to fall under the umbrella of the central government's own intents.<sup>1</sup>

A more exacting alternative would be to incorporate all legislation requiring lower-level bodies to pass by-laws affecting industrialization into one act, e.g. a Planning Act. Such a move would make it easier for local politicians to see their responsibilities and help them to eliminate any incongruencies or contradictions in formulating their development goals. Once again the legislation enacted would be compelling, so that lower-level bodies would be required to make decisions; and positive in nature, where appropriate, to ensure that development is not happenstance.

As far as municipalities are concerned, the Department of Intergovernmental Affairs will also make constitutional provisions

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1. The reader is reminded that what is proffered here is a statutory model, and that several possible obstacles to operationalization do exist.

compelling each lower-level jurisdiction to establish a Planning Department, and Industrial Commission and arrange for the election of a Committee of Adjustment. All of these will, at one time or another, have an effect on each municipality's industrial development. This department will also have numerous other duties to perform which do not affect industrial development. Therefore the result is that yet another body, this one responsible for co-ordinating industrial development throughout the area, is required at the central government level.

This new body, which we shall call the Industrial Development Board, will be created by constitutional provision of the central government. It will be placed at an equivalent level with the Department of Intergovernmental Affairs, which passes jurisdictional authority to lower-level bodies, but it will not have jurisdiction over the same areas. The industrial Development Board will coordinate the industrial development efforts of all lower-level bodies, and will have final say on all such development. The legislation establishing the Board shall be compelling in that it will require the Board to maintain close cooperation with other government bodies at every level concerned with industrial matters. It will thereby provide complete vertical and horizontal integration between and amongst such bodies and ensure that conflicts are effectively eliminated.

Much of the legislation will be positive in nature, i.e. it will denote what shall be done rather than stating what is prohibited. This

type of legislation will help eliminate conflict between and/or amongst lower-level jurisdictions where such conflicts are likely to arise. It will also eliminate the need for vast amounts of detailed negative legislation in the form of zoning and building by-laws, which list all prohibited activities, by providing positively stated by-laws which state what is permitted. Naturally, not all legislation can be of this type, but it would be helpful and useful if employed wherever possible.

The Industrial Development Board will not only provide assistance to industrialists and municipalities, but will also ensure that all the actions of these groups conform with the larger development philosophies and goals of the central government. To this end, it will require that every industrial development scheme, regardless of size, be brought before the Board for approval. Prior to reaching the Board, each proposal will have been passed by a lower-level body. It is therefore necessary that the Board be empowered to over-rule the decisions that would cause conflict with the development goals of the higher-level government.

Such over-ruling would occur only when all other efforts to convince the lower-level body or bodies of the inadequacy of its(their) decision(s) have failed. At the same time, the individual lower-level jurisdiction would be assured that as many of its objections would be dealt with as were economically feasible. The Board will also act as an appeal board to settle matters of conflict between industry and community. In this way, it will be able to ensure the most acceptable

form of settlement to all concerned in each instance.

The Industrial Development Board will obviously be a very important and influential part of the proposed governmental structures. For this reason, it must be assured that its members are both well qualified and responsible individuals. This assurance will result from the central government recruiting persons of proven ability and knowledge in such matters as public administration, administrative decision-making and industrialization at every level. They must also be aware of the effects of industrialization on both industry and the community at large. These people, while being held accountable for carrying out the central government's long-term policies, will not be subject to fluctuations in the makeup of that government. Their appointment will be for a specified period, say two years, and will be renewable.

Next in the governmental hierarchy are the agencies of the local or regional urban levels which we have termed District Legislatures. It is up to these bodies to establish, within the guidelines provided by the central government, the industrial development philosophies and goals of their respective communities. This they will be compelled to do by legislation. Each Legislature will be required to make decisions, in the form of by-laws, which will indicate to all and sundry that District's position with regard to industrial development.

The central government will also make provision for the estab-

lishment of other bodies at the district level to act in matters of development. These additional bodies will include a Planning Department, an Industrial Commission and a Committee of Adjustment. It is intended that their establishment will facilitate the functioning of District Legislatures by reducing the number of duties each legislator may be required to perform and by introducing some expertise in all forms of development at the local level.

These new components will all be directly responsible to the District Legislature with the exception of the Committee of Adjustment. Their exact relationships with the remainder of the hierarchy is best left in abeyance until each body is discussed in turn. Suffice it to say here that their creation will facilitate the efficient functioning of the district, and to reiterate that each legislature will act to ensure the compliance of each body with its, and the central government's, development philosophies and goals.

Despite what many people believe to be a modern trend, planning in urban areas has been a function of municipal government for some time. Unfortunately, it has not been a function of all municipal governments. We believe that present and future circumstances demand that urban and regional planning be carried out in order to facilitate every form of development. Municipalities must, therefore, establish the necessary bodies to ensure that this planned development does occur.



As noted above, the creation of a Planning Department should be a required function of each District Legislature. This department should be composed of professional planners, recruited from the public at large and charged with the responsibility of carrying out the tasks assigned to it in the form of a Planning Act. The Planning Department will function without a Planning Board. The Planning Act, which is an edict of the central government, will retain the major decision-making role for the District Legislature while the Planning Department is left with the more routine decisions under the Act and within the district by-laws. It is felt that this type of division will retain political decision-making for the elected representatives, and administrative decision-making for the experts.

Most communities already have a Committee of Adjustment. It is felt that such a body is a necessary requirement for effective development at the district level and that it should be an integral part of every district government.

The Committee should be elected by the constituents of the district at the same time as the District Legislature, and should consist of three members, none of whom are legislators. These people will then act to authorize any minor variances from the provisions of any by-law passed by the district, so long as these variances are in compliance with the official plan and the oft-mentioned development philosophies and goals.

The jurisdictional powers of the Committee will come from the electorate which selected it, and will be completely separate from the legislature. It will be up to the Committee to exercise its power upon request in unique circumstances which will invariably arise. In such cases the by-laws may be unjust. The Committee will decide to what degree they are unjust and make exemptions from them where appropriate and advisable.

In matters of industrial location, expansion, or operational change, where the industrialist does not achieve satisfaction from the Committee of Adjustment, the next avenue of appeal is to the Industrial Development Board whose decision is final. It is hoped that the type of legislation proposed here will effectively limit the number of such appeals. It is also hoped that the positive nature of the proposed legislation will result in the Board upholding the decision of the Committee in most instances.

What will undoubtedly be the most influential body with regard to industrial development at the district level is what we shall term the Industrial Commission. This Commission, which will be composed of an Industrial Commissioner and a number of supporting staff, will act on behalf of the district in virtually every aspect of industrial development. It will be responsible for the implementation of the district industrial development policy and will be given the jurisdictional power necessary to carry it out.

The Industrial Commissioner is the key figure here. He will work closely with both present and prospective industries to keep them fully informed as to what the community has to offer and to keep abreast of industry's changing needs. This close relationship between industry and community will serve to facilitate development by speeding up information flows to and from the community so that objectionable industries will not waste time finding out that they are not wanted, and the more desirable ones will as quickly be made aware of what the area has to offer.

The importance of the Industrial Commissioner's position is emphasized by the fact that he will work within the legislation provided by the district. His decisions will be made on behalf of the district, and may be appealed only directly to the Industrial Development Board. The type of decisions he will make will be those dealing with specific site requirements of certain industries, or the preferred situation and/or distribution desires of others. He will decide for the district what is desirable or most appropriate from the community's point of view.

Another important duty of the Commissioner will be to ensure a close liaison with the Planning Department, the Industrial Development Board and all other government bodies, at every level, which may be concerned with various aspects of industrial development. The need for complete horizontal and vertical integration should be

obvious. It has been emphasized throughout this model by making the legislation compelling in this regard to every administrative body concerned. Such compelling legislation would be made practical by statutory instrumentation which would require, for example, that every Industrial Commission assign the responsibility of seeing to such integration to one individual. This person would be responsible for notifying the Industrial Development Board of that offices' activities. The Industrial Development Board would then compile and redistribute the information so that all concerned were kept aware of pending developments. With such organization, information flows would be so improved that most intergovernmental conflicts would be eliminated before they had begun.

Once again the choice of the proper individual for the position of Industrial Commissioner is most important. He should be hired, rather than appointed, through a selective competition to ensure that he possesses, in the district's opinion, the requisite qualifications, i.e. honesty, integrity, good education, a proven knowledge of industrial matters, and proven ability to administrate. Once selected, the Commissioner will aid the district in acquiring any additional members of the Commission deemed necessary. The Commission will then function without complications resulting from changes in local government.

The complete structural model is depicted in figure 2. The purpose of constructing this model was to develop a system of government structures within which decisions affecting industrial develop-

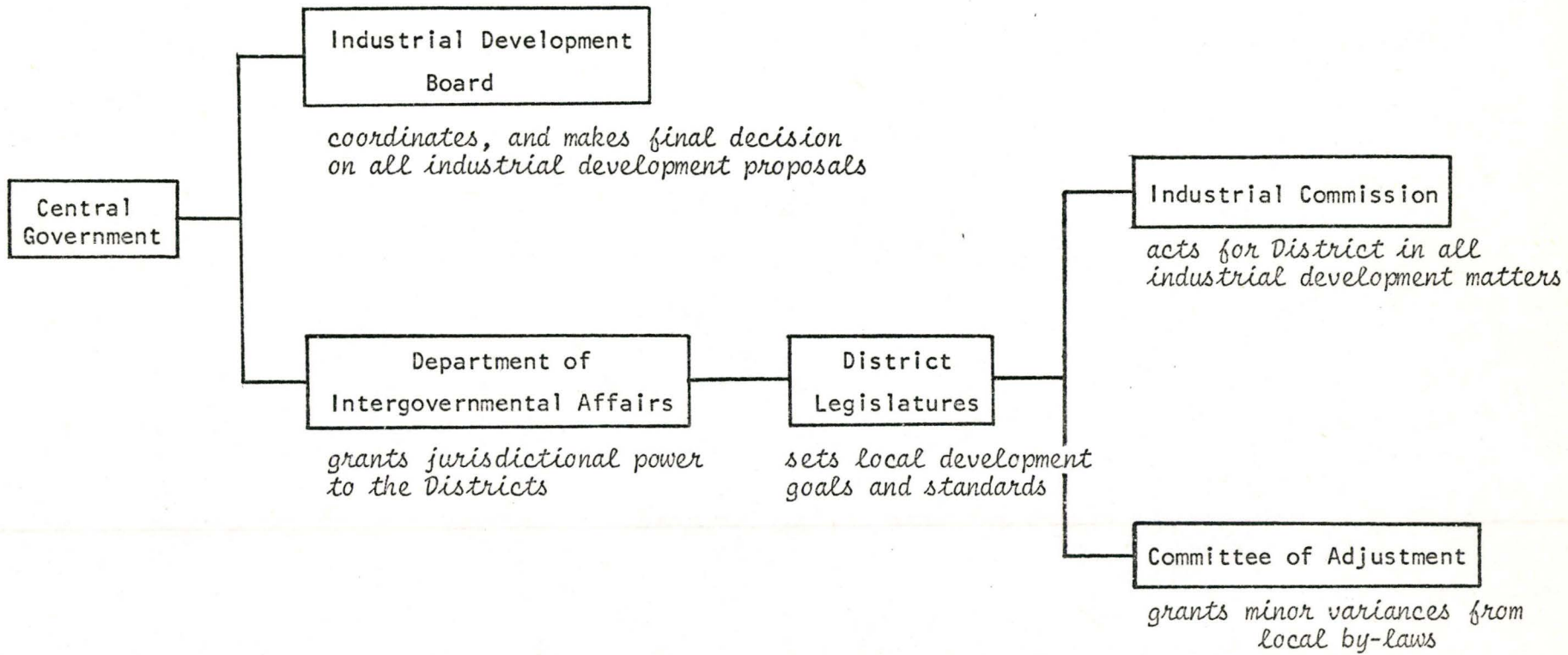


Figure 2. A model of government structures affecting industrial location and development.

ment at the community level would be made easier and more beneficial. This has been accomplished firstly by reducing the number of government agencies with the potential to make such decisions from eight, in the Ontario example, to four; and secondly by making the jurisdiction of those authorities now responsible for decision-making more exact and more powerful. To do so, the constitutional provisions defining the new authorities and their jurisdiction have been, wherever possible, compelling rather than permissive, and positive rather than negative. This was done to ensure that decisions are made and that, collectively, they emanate from a well thought out development policy.

To facilitate the cohesion of these development decisions, each body capable of passing legislation on industrial matters would be required to make a statement of purpose to act as a reminder to its members. Such a prologue would then serve as a constant reminder of the needs, philosophies and goals to which their separate decisions will apply. At the same time, it will serve to ensure conformity of philosophies and goals between levels of government; more specifically, between the central government and the lower-level jurisdictions.

What we have done then is, at the central government or provincial level, to eliminate any jurisdictional power over industrial development from such departments as The Ministry of Industry and Tourism, The Ministry of the Environment, The Ontario Municipal Board,

and The Ministry of Treasury, Economics and Intergovernmental Affairs. In their place are now two bodies: The Department of Intergovernmental Affairs, which is mainly concerned with the transferring of legislative power to the lower-level jurisdictions; and the Industrial Development Board, which serves to coordinate the functions of the federal, central and district governments in all matters of industrial development.

At the district level, we have discontinued the Planning Board as a political body, made the creation of a Planning Department compulsory, strengthened the Industrial Commission, and retained the Committee of Adjustment which is now an elected body. The primary reasons for making these changes are: to try to avoid any overlapping of jurisdiction over industrial development, to concentrate control over industrial development and to allow more expertise in decision-making to develop at the community level.

We have mentioned the federal government only briefly. We believe that, as far as industrial development is concerned, all decisions should be subject to Industrial Development Board approval. This means that relationships between or amongst federal, provincial and lower-level government agencies on industrial development will be coordinated through the Industrial Development Board.

Such an arrangement might be thought to be an attempt to set a precedent, in which case a similar board might serve to coordinate decision-making on commercial and/or business development. Due to the

differences between industrial and other forms of development, e.g. air, noise, and water pollution, it is doubtful, and not suggested here, that such close control over commercial and/or business development will be required.

Some readers may feel that the model presented is too dictatorial to be acceptable. To them may we say that the compulsion involved refers only to the act of decision-making and not to the decisions themselves. Likewise, it requires that complete vertical and horizontal integration occur, but does not in any way influence the outcome of such integration. It is merely a call for legislation worded in such a manner that decisions on the various aspects of industrial development must be made.

The model deals with structures, that is the various government agencies, their responsibilities and jurisdiction. The operationalization of the model would entail the actual creation of the various agencies and the detailed writing of the legislation governing industrial development. This task may best be left to those more adept in legal and political endeavours.



BIBLIOGRAPHY

Revised Statutes of Ontario. vols. 1 - 5, Queens Printer, Toronto, 1970.

66th. Annual Report of the OMB. Queens Printer, Toronto, Dec. 31, 1971.

## Appendix A

- Carrier, R.E., and W.R. Schriver. "Location Theory: An Empirical Model and Selected Findings," Land Economics, 14, p.450, 1968.
- SSHB: Site Selection Handbook. Atlanta, Georgia, Conway Research Inc., 1968.
- Danielsson, A. "The Locational Decision from the Point of View of the Individual Company," Ekonomisk Tidskrift, p.47-87, 1964.
- Drucker, P.F. "The Effective Decision," Harvard Business Review, p.92-98, Jan-Feb, 1967.
- Dykman, J. "Planning and Decision Theory," American Institute of Planners Journal, vol. 27, p. 335-345, 1961.
- Eversley, D.E.C. "Social and Psychological Factors in the Determination of Industrial Location," in Wilson, t. (ed), Papers on Regional Development, Blackwell, Oxford, 1965.
- Leigh, R. "Analysis of Factors Affecting the Location of Industry Within Cities," Canadian Geographer, vol. 13, p. 28-33, 1969.
- McMillan, T.E. "Why Manufacturers Choose Plant Locations Versus Determinants of Plant Location," Land Economics, Aug. 1965.
- Mann, L.D. "Studies in Community Decision Making," American Institute of Planners Journal, vol. 30, p. 58-65, Feb. 1964.
- Spiegelman, R.G. "A Method for Analysing the Location Characteristics of Footloose Industries: A Case Study of the Precision Instrument Industry," Land Economics, vol. 40, p. 79-86, 1964.
- Stafford, H.A. "An Industrial Location Decision Model," Proceedings of the American Association of Geographers, vol. 1, p. 141-145, 1969.
- Tiebout, C. "Location Theory, Empirical Evidence and Economic Revolution," Papers and Proceedings of the Regional Science Association, p. 74-86, 1957.
- Townroe, P.M. Industrial Location Decisions: A Study in Management Behaviour. Centre For Urban and Regional Studies, University of Birmingham, Occasional Paper #15, 1971.
- Wallace, L.T. and V.W. Ruttan. "The Role of the Community as a Factor in Industrial Location," Papers and Proceedings of the Regional Science Association, p. 133-142, 1961.
- Weitzell, E.C. Planning For Rural Industry. U.S. Dept. of Agriculture, Washington, D.C., Apr. 1969.