

# Community Participation and Emerging Forms of Governance in Economic Development Strategy

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# Introduction<sup>1</sup>

This paper surveys our current state of knowledge about alternative mechanisms for governance at the local and community level to formulate business attraction and economic development strategies, within the context of multilevel governance. It draws upon recent experience in the US and Europe to identify the emerging frontier of best policy practice and describes some specific policy initiatives in Ontario that illustrate the approach. The paper advances the argument that what has been characterized as institutional weaknesses and failures of governance in the past may prove to be sources of strength in the emerging paradigm of the knowledge-based economy. A key role for governments lies in strengthening the governance capacity at the local and community level in order to deploy its enabling powers more effectively to promote a process of social learning among firms and local institutions.

In the past fifteen years of rapid technological change, and concerns over global competition and production, the debate over economic development has shifted. The greater emphasis on the role of innovation reflects a better understanding of its critical role as a driver of economic growth. Region and locality have become important parts of the lexicon, in recognition of how key elements of innovative sectors, namely knowledge creation and learning, are locally influenced and rooted. More recent still, is the emphasis on governance, as opposed to government, which reflects a shift in understanding that rejects the hierarchical approach to industrial restructuring of the past, in favor of a more flexible multilateral process of negotiated economic development. In Europe, the shift has been matched by a growing interest in, and involvement with, economic development policy at the regional, as opposed to just the national or supra-national level. This is matched by a growing fascination with the role of clusters as incubators for dynamic and innovative industries at the regional and local level in North America. This fascination, in turn, has sparked a growing interest at both the state and local level in how local communities organize themselves to attract dynamic and innovative firms to invest in their communities, as well as how to seed the growth of clusters.

As a consequence, approaches to economic development policy have changed dramatically in the past decade in both Europe and the US, as the locus of attention has shifted from the national to the regional and local levels. In the Canadian context, our overwhelming preoccupation with things federal has led to a tendency to overlook the considerable degree of experimentation that has occurred at both the provincial and the local level over the past decade or to view the growing interest in multilevel governance through the conventional lens of 'federal-provincial' relations. Thus the debate in this country has failed to note a subtle, but important shift in the terms with which it is engaged in other countries, especially Europe, but also in the US. The gradual diffusion of these insights has contributed to a new policy paradigm for economic development that, far from calling for more or less state intervention, supports a change in the mode of intervention. Rather than a national top down approach to the design and administration of economic development policy, this new paradigm is regionally and locally focused and depends on the cooperation and collaboration of all levels of government, as well as non-state organizations, for the effective pursuit of its economic objectives. How firms are

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<sup>1</sup> This paper draws upon research conducted jointly with Tijs Creutzberg, whose contribution is gratefully acknowledged.

coordinated externally has become as important as their internal capabilities in explaining economic performance.

The aim of this paper is to elaborate upon this new policy paradigm, summarizing the various theoretical insights upon which it is based. This is followed by a discussion of how policy design and delivery is affected in the emerging knowledge-based economy, giving emphasis to multilevel participation and administration. Finally, the paper looks at what this paradigm means for business attraction strategies. In attracting industry in a knowledge-intensive economy, it is not just the 'hard' institutions, such as universities and R&D centres, that matter, but also the softer, more intangible ones upon which cooperation, collaboration and ultimately, learning depend.

## Innovation in the Knowledge-Based Economy

The rapid pace of technological change over the past decade and a half portends even more dramatic changes yet to come – in new technologies, new products and whole new industries – witness the rapid integration of the computer, telecommunications and multimedia industries and the lightning transformation of the World Wide Web from an elite tool for scientific research into a device for the complete transformation of business processes. Over the past decade, key policy bodies, such as the OECD, and many national governments, have come to view the emerging digital economy as essentially a knowledge-based one.

A consequence of this increasing dependence on the scientific frontier is that no one firm, let alone individual, can any longer be in command of the wide range of technological competencies needed for successful innovation. Indeed as technology has become more complex, firms have come to rely ever more on collaborations as a way of leveraging the escalating risks and costs of R&D in the face of mounting global competition. In addition to the increasing complexity of innovation, the underlying relationships of social learning are tied to research, product development and production. Research consortia, cross-licensing agreements, research contracts, for example, all have become essential forms of cooperation in helping firms access new knowledge, share development costs and associated risks, particularly in the more knowledge intensive sectors such as information technology and biotechnology.

These collaborations – with firms, government agencies, research laboratories, and universities – have thus become a key variable to understanding economic success and consequently, have been an important focus of economic development policy. Their importance suggests that much of the useful knowledge in the innovation process is derived not only internally from within the firm and its employees, but also from its linkages to the market system, from its interactions with suppliers, customers or collaborators. Knowledge accumulation is therefore an intrinsically uneven process, both spatially and temporally. For regional economic development, these knowledge dynamics have significant implications for the design of policy. They help explain the regional emphasis in new economic development initiatives, as well as the recent push by national and subnational governments to involve a wide range of actors in economic development strategies, in order to benefit from their local knowledge in a bid to compete more effectively in global markets.

## Learning through networks of social relationships

If knowledge is the most valuable resource in the modern economy, then learning is the most important social process according to Lundvall's seminal work on innovation systems (1992). Learning here refers to the building of new competencies and the acquisition of new skills, not just gaining access to information. In a world where knowledge and information are both becoming more valuable and increasing at a rapid rate, the greatest threat faced by economic actors is the constant devaluation of their existing stock of knowledge (Lundvall 1998, 408). The capacity to learn is thus essential for maintaining access to, and control over, the rapidly expanding knowledge frontier in the understanding that an existing stock of knowledge assets affords but a fleeting competitive advantage. It is the capability of individuals, firms, regions and nations to learn and adapt to rapidly changing economic circumstances that will determine their future economic success in the global economy (Lundvall and Borrás 1998). Both Freeman (1987) and Lundvall (1992) emphasize the relative importance attached to the patterns of interaction between firms as part of a collective learning process in the acquisition and use of new technical knowledge. This flows from their belief that innovation is increasingly tied to a process of interactive learning and collective entrepreneurship, especially in terms of the relationship between producers and users of new technology.

Institutions are central to the process of learning discussed above. Learning processes are inherently social and interactive, not just individual, and new knowledge is created through processes that are institutionally embedded. Institutions also provide basic functions for the operation of economies. "They provide information, reduce uncertainty, manage conflicts and cooperation, and create incentives and trust. These functions not only give stability and structure to the economy, they are also crucially important for innovation. All innovative activities are riddled with uncertainty and in the modern economy there are many institutions to assist in coping with the technical and financial uncertainties of innovation" (Johnson and Nielsen 1998, xiii-xv).<sup>2</sup>

### Regional innovation systems

The attention paid to innovation as an interactive and learning process reinforces the observation that the development of innovative capabilities is often location-based – it occurs in a specific geographic locale and displays a strong regional component. Given the social nature of learning and innovation, these processes work best when the partners involved are close enough to allow frequent interaction and the easy, effective exchange of information. Recent work has explored how innovative capabilities are sustained through regional communities of firms and supporting networks of institutions that share a common knowledge base and benefit from their shared access to a unique set of skills and resources. At this level, it emphasizes that competitive advantage is no longer limited to the acquisition of codified knowledge and capital that are available world wide; it is more dependent on the institutional and social capital that fosters the acquisition and use of both explicit and tacit knowledge. To a growing extent, both the institutional and the social variables that support this capacity are grounded in regional and local economies (Wolfe 1997).

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<sup>2</sup> For a fuller treatment of these issues, see the discussion in (Wolfe and Gertler 2002).

The constellation of institutions at the regional level that contribute to the innovation process is identified as the *regional innovation system* (Cooke 2004). Central to this idea is the notion of how the institutional and cultural environment of a region either supports or retards the innovation process. This is defined as “the set of economic, political and institutional relationships occurring in a given geographical area which generates a collective learning process leading to the rapid diffusion of knowledge and best practice” (Nauwelaers and Reid 1995, 13; Cooke 2004). The focus on the regional derives from the observation that regions evince distinct differences in terms of their industrial structure, research and technology infrastructure, training and educational institutions, policy supports, broader governance structures and relationships between key actors in the innovation system (Oughton, Landabaso, and Morgan 2002, 101). It also flows from the recognition that regional governments control a radically different array of policy instruments than the senior levels of government with correspondingly different implications for the processes of innovation and economic development. The most dynamic regional levels of government have experimented over the past two decades with a wide range of innovation policies. Differences in economic performance between the relatively more or less successful regions have prompted a corresponding interest in the mix of regional innovation policies and institutions that foster this dynamism.

#### Knowledge and learning in clusters

In addition to the growing interest in the region as a relevant scale for innovation strategy and policy, the economic success of spatially concentrated networks of firms in such places as Palo Alto and Italy’s northeast, local clusters have also captured considerable attention by both academics and policy makers. Michael Porter defines a cluster as “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities” (Porter 1998, 199). They include concentrations of interconnected companies, service providers, suppliers of specialized inputs to the production process, customers, manufacturers of related products and finally governmental and other institutions, such as national laboratories, universities, vocational training institutions, trade associations and collaborative research institutes.

Much of the literature on the economic benefits of clusters stresses the fact that the key advantages are derived from the agglomeration economies afforded by the cluster. These agglomeration economies arise primarily from the ready access afforded to firms by co-locating with key suppliers. While not diminishing the importance of these agglomeration economies, a more recent stream of analysis suggests that the underlying dimension, which confers competitive advantages on the firms located in the cluster, is ready access to a common knowledge base. The central argument in this literature is that the joint production and transmission of new knowledge occurs most effectively among economic actors located close to each other. Proximity to critical sources of knowledge, whether they are found in public or private research institutions or grounded in the core competencies of lead or anchor firms, facilitates the process of acquiring new technical knowledge. Knowledge of this nature is transmitted most effectively through interpersonal contacts and interfirm mobility of skilled workers. From this perspective, “a key feature of successful high-technology clusters is related to the high level of embeddedness of local firms in a very thick network of knowledge sharing, which is supported by close social interactions and by institutions building trust and encouraging informal relations among actors” (Breschi and Malerba 2001, 819).

## The relation between spatial scales

The preceding discussion of innovation systems and clusters raises the critical question of the most effective relationship between the levels of analysis – an issue that bedevils attempts to apply different policy instruments at the appropriate spatial scale. Bunnell and Coe argue for a shift in focus away from forms of analysis that privilege one particular spatial scale as the basis for analyzing and understanding the nature of innovation towards those which emphasize the relationships that exist between and across the different spatial scales. They adopt the concept of ‘nested scales’ from Swyngedouw, but suggest that this should not be conceived in a hierarchical or deterministic sense, but rather as involving effects that can move in multiple directions across the scales (2001, 570).

Thus clusters can be seen as nested within, and impacted upon, other spatial units of analysis, including regional and national innovation systems, and the kind of global pipelines discussed above, each of which adds an important dimension to the process of knowledge creation and diffusion that occurs within the cluster. Various elements of each of these spatial levels of analysis may have significance for the innovation process. For instance the national innovation system, as analyzed by Nelson (1993) or Lundvall (1992) may play a preponderant role in establishing the broad framework for research and innovation policies, in establishing the rules of corporate governance that influence firm behaviour, in setting the rules of operation for the financial systems that determine the availability of different sources of financing for new and established firms, and finally in some settings, for setting the broad framework for the industrial relations, employment and training systems that influence job paths, interfirm mobility and skill levels for the labour force. Levels of regional specialization as encompassed in the concept of regional innovation systems play an important role in affecting cluster performance through the provision of the regional/state/provincial research infrastructure, specialized training systems, the broad education system, policies for physical infrastructure and the investment attraction function (Cooke, Uranga, et al. 1997; Cooke 1998). At the local level, levels of civic associationalism, particularly the business-higher education link, influence cluster development. The local level can also play an important role in the provision of infrastructure, such as roads and communication links, as well as in the governance of the primary and secondary education system.

## Policy Frameworks for the New Paradigm

The emphasis on learning through networks of social relations among firms and institutions is clearly reflected in the relation between innovation systems at the national and regional levels and clusters at the local level. The innovation systems approach reinforces the observation that successful competition in knowledge-intensive industries draws upon a complex set of relationships between groups of interrelated firms and supportive institutions, rather than archetypical autonomous firms. And it provides a conceptual foundation for the answer to a key question facing policy-makers – that of how best to create the conditions to stimulate innovation and competitiveness. Where the focus on the various levels of analysis differs, however, is in the emphasis. The concept of clusters stresses a more spontaneous interdependence of geographically proximate firms, whereas the concept of innovation systems suggests a more planned process with greater emphasis given to regionally-based cooperation among firms, as well as institutions responsible for creating and diffusing knowledge (Isaksen and Hauge, 2002). However, as suggested above, these three levels of analysis and the corresponding policy

approaches are not mutually exclusive; rather they are best viewed in terms of 'nested scales' as all being necessary and relevant for an effective economic development strategy.

In both frameworks, governance mechanisms are central. Indeed, the capacity to foster durable and interactive linkages among a range of actors has not only become a policy goal in itself but also an important component of state power. The government's ability to cooperate and collaborate with a wide range of stakeholders has become essential to the effective exercise of economic power in innovation-based economies (Cooke and Morgan 1998). Yet, recognizing the importance of cooperation is only part of the policy challenge. As with any other economic activity, successful collaboration and cooperation are underpinned by social institutions. Trust, social norms, and loyalty, all aspects of the more general notion of social capital, lie at the core of mutually beneficial and successful cooperation. Economic development policy that seeks to strengthen the density of these associational linkages must include elements directed at not only inter-firm linkages but also the underlying culture of the regional or locality. The reasons for this, and several approaches that incorporate this objective, are discussed below.

### Trust and social capital

The dynamic of institutional relationships underlying more cooperative forms of governance requires a greater capacity for social capital and trust among a wide range of social and economic actors within the region, including erstwhile competitors. Social capital refers to various features of the social organization of a region, such as the presence of shared norms and values that facilitate coordination and cooperation among individuals, firms and sectors for their mutual advantage. The use of the term capital indicates that it involves an asset, while the term social connotes that the particular asset is attained through involvement with a community. The existence of social capital depends upon the ability of people to associate with each other and the extent to which their shared norms and values allow them to subordinate their individual interests to the larger interests of the community. It secures the conditions that enhance the benefits derived from more tangible investments in physical and human capital. Without its supportive functioning, high levels of these more tangible forms of investment may fail to produce the benefits that should potentially flow from them (Putnam 1993, 167–76; Maskell 2000). The networks that constitute social capital in this sense comprise a rich and dense social community in which the business relationships of the local economy are embedded. Social capital tends to be accumulated as an unintended consequence of other activities that people are engaged in; its presence or absence is linked to the vitality of civil society in that region.

Building trust among economic actors in a local or regional economy is a difficult process that requires a constant dialogue between the relevant parties so that interests and perceptions can be better brought into alignment. Trust is one of those rare commodities that can neither be bought, nor imported; it can only be built up painstakingly through a prolonged process of interaction. A growing number of studies identify the existence of trust relations among a network of regional firms as critical for their competitive success, but the factors that contribute to its presence remain difficult to pinpoint. Authors, such as Charles Sabel (1992) and Michael Storper (2002) underscore the critical role played by soft factors, such as talk, in building trust and the kind of long-term relationships that underpin the institutionalized learning economy. Storper suggests that talk and confidence are more likely to succeed when they occur in a setting that is geographically localized and that small, repeated low-cost experiments can help to generate



interactive learning between parties in an environment which has previously been characterized by distrust or antipathy.

### Policy delivery through multilevel governance

The new patterns of industrial organization that have emerged among growth industries in knowledge economy have necessitated not only new policy frameworks, but also new modes of governance to facilitate policy delivery. In knowledge-intensive economies, however, the leading growth firms are often smaller, networked, less hierarchical, producing a variety of products that have been developed from a supply of specialized, and increasingly scientifically based, knowledge. Firms compete not just on price, but on their ability to learn, transforming new knowledge into products to meet new demand in yet-to-be-established markets (Salais and Storper, 1992, 179). The central governance issues have necessarily changed and are concerned primarily with the mobilization of knowledge resources: accessing university research, developing an educated workforce, fostering local learning networks and promoting collaboration. While the term government is associated with the hierarchical approach to industrial restructuring of the past, governance implies a more flexible multilateral process of negotiated economic development whereby national authorities are increasingly in partnerships with regional and local levels of government as well as private sector organizations in an effort to deliver policies.

### Associative Governance

This new type of policy structure of has been captured by two related concepts in the literature, that of 'associative governance' and 'multilevel governance'. Though each term gives a slightly different emphasis to this emerging form of governance structure, their fundamental principles are similar. Associative governance, like multilevel governance, signifies the growing shift from *hierarchical* forms of organization in both public and private institutions to more *heterarchical* ones in which network relations are based on conditions of trust, reciprocity, reputation, openness to learning and an inclusive and empowering disposition. According to a number of authors (Amin 1996), this requires a shift from reliance upon public authorities associated with the state to regulate economic affairs to a greater degree of self-regulation by autonomous groups in the economy and society. This in turn involves the transfer of authority and responsibility of some critical aspects of economic policy to a range of local organizations capable of providing the required services or programs (such as vocational training or technology transfer). It also necessarily involves a more decentralized, open and consultative form of governing. It is closely associated with the process of institutional learning and adaptation within the region (Cooke 1997).

A key challenge for the state operating in this mode is to establish the conditions under which key actors in the innovation systems – firms, associations and public agencies – can engage in a self-organized process of interactive learning. The ability to operate in this mode depends on two major institutional departures from the way in which the Weberian conception of the bureaucratic state traditionally functions. First, it implies the devolution of power in the state system from remote bureaucratic ministries at the national level to local and regional levels of government better positioned to build lasting and interactive relations with firms and business associations in their regions. In addition, it may involve the delegation of certain tasks like enterprise support services from formal government agencies to accredited business associations because the latter possess relevant assets, such as knowledge of, and credibility with, their

members, which the state needs to enlist in order to ensure the effectiveness of its support policies. Devolving power to the lower levels of government creates the opportunity for more meaningful dialogue to take place at the regional level. This is important because dialogue or discussion is central to the process by which parties come to reinterpret themselves and their relationship to other relevant actors within the local economy (Morgan and Nauwelaers 1999, 12–13).

The associative model of governance affords several valuable insights into the process of governance, especially at the level of dynamic local and regional economies. The associative model substitutes for the exclusive role of the public bureaucracy a mix of public and private roles and it emphasizes the context of institutional structures and learning. It involves the devolution of greater degrees of autonomy and responsibility for the policy outcome onto those organizations that will both enjoy the fruits of the policy success or live with the consequences of its failure. According to Amin, the adoption of an associative model does not imply an abandonment of a central role for the state, but rather a rethinking of its role. In an associative model, the relevant level of the state has to become one of the institutions of the collective order, working in relationship with other organizations, rather than operating in its traditional command and control fashion. The state in this model continues to establish the basic rules governing the operation of the economy, but it places much greater emphasis on the devolution of responsibility to a wide range of associative partners through the mechanisms of ‘voice’ and consultation (Amin 1996, 19).

#### Multilevel governance

Multilevel governance is a term pioneered by Gary Marks (1992; 1993) to represent a new model of political architecture where political authority and policy making influences are dispersed across the different levels of the state as well as to non-state actors. In principle it is similar to the concept of associative governance although the latter refers primarily to relations between state and non-state actors at a particular level of the state system or at a particular spatial scale. Where multilevel governance differs is in its greater emphasis on cooperation among different levels of government, rather than on cooperation between the public and private actors. Hooghe and Marks argue that the core of the idea of multilevel governance is that the national level no longer monopolizes policy making and instead engages in collective decision-making with other levels of government and relevant actors, and in so doing, cedes control of the policy making process. Decision-making competencies are therefore shared among all actors with no one level exercising monopoly over another. Accordingly, subnational levels are said to be interconnected to national, and at times, supranational arenas rather than nested within the national state (2001, 4).

In the North American context, where three tiers of government is the norm, the concept of multilevel governance helps us recognize the interdependent nature of their respective roles and jurisdictional responsibilities, as well as the role of informal actors not explicitly recognized in the constitutional division of powers, yet whose active involvement is of increasing importance to achieving successful policy outcomes. Regional and local actors are a necessary source of knowledge in local learning networks, assisting in the process of collective learning that is vital to the success of knowledge-intensive firms.

### Joined-up governance

Equally relevant is a third concept that is closely associated with, and complementary to, the previous two. The conventional bureaucratic structure, especially in a Westminster type of legislative system operating on the principle of individual ministerial responsibility necessitates policy development and implementation within bureaucratic hierarchies where lines of accountability are clearly delineated. This has given rise to the dilemma of 'policy silos' where relevant components of economic development policy are often formulated and implemented within discrete bureaucracies across separate ministries, or even separate divisions within the same ministry. While this policy approach places a high premium on maintaining appropriate lines of accountability, it falls down on the ability to deliver policy in an integrated and coordinated fashion on the ground in specific regions or localities. This traditional hierarchical approach to policy delivery is increasingly viewed as out of touch with, or even inimical to, the more integrated geographic perspective afforded by the systems of innovation or cluster approaches described above.

A valuable alternative to the traditional hierarchical approach is a more horizontal policy process that local level involvement can help foster, leading to what Gaffikin and Morrissey call 'joined-up governance' (2000). By helping break down policy silos that persist in less interconnected governance systems, such joined-up, horizontal governance allows policy to be developed and administered in a more holistic – and ultimately – more successful manner. Key 'exogenous' community level issues like transportation, typically marginalized in economic development strategies despite their integral importance to successful policy outcomes, are included in a joined-up form of governance and thus become endogenous to the policy process. As society becomes more complex and policy issues become ever more interdependent, the need for such a horizontal approach is all the more pressing. Only through an approach provided by 'joined-up governance' is it possible to ensure that the appropriate policy actors and policy instruments, regardless of their particular bureaucratic home, are brought to bear in analyzing and responding to the economic development challenges facing particular regions or communities. Another rationale for including the local level within a multilevel governance framework is to improve coordination among the policies and programs of the different levels of government. The improved communication that results from having all levels present ensures that duplication and program overlap can be minimized.

Multilevel governance involves allocating 'roles and responsibilities in relation to the comparative advantage of each government' (Bradford 2003) and indeed, at most is 'a letting go of competencies that are better administered elsewhere' (Cooke 2001). Municipalities, for example, are best suited for convening the actors necessary for effective partnerships, for undertaking land use and development planning for inclusive urban and metropolitan spaces, and for working with other local authorities. The provincial, federal and supranational levels on the other hand are best positioned either constitutionally or from their respective vantage point, for supplying the resources for critical infrastructure, ensuring a 'cooperation friendly' macro-regulatory framework in which local and regional actors are embedded (Gertler 2002), and for transmitting best practices across the country.

To summarize, associational and multilevel governance are thus two dimensions of a framework for creating a form of governance that can respond effectively to the demands of the knowledge-based economy. They promote a collective process of interactive learning not just within the state but also among firms, associations, and public agencies that is essential to innovation in the

modern knowledge-based economy. Thus for such learning to be effective, the institutions of the state must themselves undergo a process of adaptation. In the context of the forms of associative, multilevel and joined-up governance, such processes of institutional learning must extend across, and include, key actors in both the public and private sectors at all three levels of governance.

In his study on successful cities and communities, Neil Bradford identifies three learning dynamics that appear to be at work. The first is a *civic learning* process that results in recognition among the local organizations, be they private or public sector, of the importance of equity, diversity and interdependence and the need to accommodate these realities in their collaborations. And, rather than merely accepting the need for a fair distribution of resources (equity), diversity in social relationships or a dependence on others to coordinate one's objectives, communities with successful civic learning recognize these local realities as an asset. Equally important, though is the second dynamic of *administrative learning* whereby administrators learn new skills for building relationships, seeking consensus, assessing risk and measuring performance. Such skills help foster a government that is effectively engaged in its essential roles of ensuring balanced representation of social interests, addressing systemic differences in the capacity to participate, convening and organizing meetings, establishing protocols for monitoring progress and maintaining the focus and commitment of social partners. Finally the culmination of successful civic and administrative learning leads to the third dynamic, that of *policy learning*. Here, feedback from the various actors within the multilevel governance process refocuses the policy agenda with street level insights and experiences as well as new goals (2003).

### **Bringing in the community: governance structures in the new paradigm**

The critical issue involves how best to deploy the conceptual framework outlined above to influence the trajectory of growth for a regional or local economy and through what specific mechanisms or policy instruments. Communities and regions, like companies, need to innovate and adapt to remain competitive. As a result, successful regions must be able to identify and cultivate their assets, engage in collaborative processes to plan and implement change, and encourage a regional mindset that fosters growth. These circumstances put new pressures on processes of regional planning.

It is evident from both the relevant literature and the available case studies that not every community succeeds in rising to the challenges outlined above. Often communities suffer from a deficit of social capital, an inability to generate sufficient trust or cooperation among key players to generate the supportive institutional arrangements required to promote growth at the local and community level. This may result in a 'governance' failure, as opposed to a state or market failure, which arises from the inability to bring key players together to develop new institutions and the required supports. It may also result from a lack of policy coordination, especially from the three levels of government, who frequently are not aware of the actions and initiatives being pursued by the others at the local and community level.

### **Foresight and strategic planning at the local and regional level**

One set of techniques that has been developed and applied at the local and regional level in both Europe and North America involves a process of strategic planning or regional foresight exercises. North American communities have tended to place more emphasis on strategic

planning processes and the Europeans have developed a variety of mechanisms to promote regional foresight and regional innovation strategies, but the respective processes share a lot of critical elements in common and will be discussed in an integrated fashion. Both processes stress participative community-based methods and strategic futures techniques. In the European context, foresight is defined as “a systematic, participatory, future intelligence gathering and medium-to-long term vision building process aimed at present-day decisions and mobilizing joint actions” (Gavigan 2001, 3). According to the *FOREN Practical Guide to Regional Foresight*, foresight exercises involve five essential elements:

- structured anticipation and projections of long-term social, economic and technological developments and needs;
- interactive and participative methods of exploratory debate, analysis and study, involving a wide variety of stakeholders, are also characteristic of Foresight (as opposed to many traditional futures studies that tend to be the preserve of experts);
- these interactive approaches involve forging new social networks. Emphasis on the networking role varies across Foresight programs. It is often taken to be equally, if not more, important than the more formal products such as reports and lists of action points;
- the formal products of Foresight go beyond the presentation of scenarios (however stimulating these may be), and beyond the preparation of plans. What is crucial is the elaboration of a guiding strategic vision, to which there can be a shared sense of commitment (achieved, in part, through the networking processes);
- this shared vision is not a utopia. There has to be explicit recognition and explication of the implications for present day decisions and actions (Gavigan 2001: 4).

Regional foresight involves the implementation of this process at a smaller spatial scale where the factor of proximity takes on enhanced significance. One of the most commonly cited rationales for foresight is that of correcting ‘system failures’. The foresight process itself is said to enhance communication between actors within a system, providing a means of coordination and generating commitment to action. Critical to the success of regional foresight exercises is the ability to involve key agents of change and sources of knowledge that can formulate a strategic vision for the region and generate the intelligence needed to chart a new direction to the future. The engagement of key actors and the recruitment of collaborative and entrepreneurial leaders at the local and regional level are essential for a positive outcome to these exercises.

However, it is also important to remember that individual agents at the local scale operate within the framework of existing national and regional policies and institutions. It is impossible to appreciate fully the process of economic development in isolation from the interaction that necessarily occurs between these multiple levels of governance. Hence, one key challenge for those designing regional foresight or strategic planning exercises is to appreciate how the scope for local action by individuals and organizations is shaped or constrained by institutional influences at higher levels of governance.

### Strategic planning as a knowledge sharing exercise

Key contributors to the success of regional foresight exercises are the role of knowledge flows and system-wide learning. Knowledge of other actors' strategies and positioning vis-à-vis a given issue (e.g. through foresight or strategic planning) can reduce uncertainties, thereby enhancing a system's innovative capacity. The potential for system-wide learning, which is also said to enhance a system's capacity for innovating, can be facilitated through the participation of key actors in the foresight process which contributes simultaneously to their understanding of others actors' positions, as well as the overall strengths and weaknesses of the regional or local innovation system. The degree of mutual understanding and trust is facilitated by the *processes* that strengthen interactions between actors so that they become more permanent – such as technology foresight.

Successful strategic planning exercises are concerned with an area's unique local characteristics that support the development of regional industry clusters. These include knowledge economy assets (such as workforce skills, knowledge and research development, creativity, advanced telecommunications infrastructure, quality of place, and financial capital), collaborative institutions and organizations (such as regional development organizations, professional networks, research consortia, and entrepreneurial support networks), and the regional mindset (values and attitudes).<sup>3</sup>

### The role of community leadership

Recent experience in North America indicates that local communities can successfully formulate strategies to improve their prospects for economic development. What is required is the presence of an 'economic community' – places with strong, responsive relationships between the economy and community that afford both firms and the community a sustained advantage. These relationships are mediated by key people and organizations that bring the respective economic, social and civic interests in the community together to collaborate on strategies for the community. According to Doug Henton and his collaborators, "the distinguishing feature of economic communities is not just that they have clusters but that they have mechanisms to engage their clusters and understand what they need from the community" (1997, 7). The scope for individual agents and local politics to influence local and regional outcomes would seem to be considerable, since these relationships are mediated by key people and organizations that play a leadership role in bringing the economic, social and civic interests in the community together to collaborate.

One virtue of an agent-centered approach to the process of cluster development and regional innovation is the emphasis placed on involving key actors at the local level in thinking about how to design effective innovation strategies. Based on their experience with launching community-based economic development initiatives Doug Henton and his colleagues argue that social capital is a critical ingredient in the success of the most dynamic clusters and regional economies. Social

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<sup>3</sup> In addition to the *FOREN Practical Guide to Regional Foresight* prepared for the European Union, the Economic Development Administration of the US Department of Commerce has commissioned several manuals for local economic development agencies, cf (Information Design Associates and ICF Kaiser International 1997; Montana, Reamer, Henton, et al. 2001). Another helpful manual was prepared for the National Governors' Association, cf (National Governors Association 2002).

capital *can* be created and the basis for doing so is the establishment of collaborative networks between various elements of the business and civic communities.

The presence of *collaborative institutions and organizations*, such as cluster organizations, professional networks, research-industry consortia and entrepreneurial support networks, greatly facilitates this environment. These alliances, networks and other relationship-building mechanisms create connections and linkages vital to economic development in a technology-driven world. . . . many regions fortunate enough to have university research assets under use these knowledge economy resources, precisely because relationships have not been established to connect the university and local industry. . . . Relationships matter (Montana, et al. 2001, 10).

The process of strategic planning bears a strong affinity to the regional innovation strategy (RS) exercises, as well as some of the foresight exercises, undertaken in Europe during the past decade (described in greater detail in the next section). The RS exercises point the way towards an inclusive process involving all three levels of governance in the European Union in a coordinated effort, while working outside the bounds of a traditional state structure. The program is also predicated on the notion that strategic planning and foresight exercises can be developed using a bottom-up approach within a framework of multi-level governance (Morgan and Henderson 2002).

### Economic development strategies in the new paradigm

This paradigm shift has dramatic implications for economic development strategies at the local and community level. The economic development literature refers to three waves of business attraction and economic development strategies. The oldest and most traditional approach, which corresponds historically to the Keynesian era from the 1950s to the 1970s, focused on strategies to attract individual firms to a region or locality, frequently by emphasizing the economic value of cheap factor inputs and by affording the target firms direct subsidies or tax reductions of an increasingly generous nature. The practice originated in the southern US states that used offers of low wage, non-union labour, inexpensive land prices and reduced taxes to attract plants from the industrial North. The practice was especially effective during the 1950s and 1960s in expanding the employment base of these states and raising employment and wage levels.

Business attraction policies became more competitive in the later part of the period as northern states, caught in the triple bind of competition from southern and other low wage jurisdictions, declining productivity levels and increased international competition responded with a host of similar policies of their own – including expensive tax abatements, job tax credits, training programs, low interest loans and other government subsidies to lower the cost of business. By the late 1970s virtually all US states had established industrial sales forces in their economic development agencies to attract industrial plants and back office operations into their jurisdiction (Ross and Friedman 1990, 3). While this approach was complemented by the introduction of second wave strategies in the 1980s, states continued to make extensive use of first wave incentives. States continued to reduce taxes, alter their tax codes, establish enterprise zones, and offer concessions for goods in transit, new equipment, job creation and R&D. However, comprehensive reviews of the effectiveness of these incentives in firm location decisions

concluded that they were at best a secondary factor. Business incentives were judged to be more effective when all other variables were considered equal among competing sites within a region or substate area (Burnier 1991, 172).

The second phase of economic development strategies emerged in North America in the early 1990s when a growing number of states and provinces began to focus more of their development efforts on building the educational and technological infrastructure that would provide the knowledge base to build their indigenous firms and attract new investments on the basis of their technological capabilities. In the US, state governors of both political parties began to focus their energies on policies to help adapt their local economies to the conditions of the new competition, including efforts to fill gaps in the capital markets, modernize small and medium-sized enterprises, accelerate the development and transfer of technology from universities to industry, enhance workers' skills and provide entrepreneurs with a higher level of management information. Whether these efforts were termed industrial policy or not, they shared in common the recognition that the conventional dichotomies, such as picking winners or losers, missed the point. The real question, as David Osborne expressed it, was how state governments could

reshape . . . the market so as to ensure that American winners emerge in global competition. Rather than targeting specific industries or products, most states are targeting *processes*: technological innovation, capital formation, new business formation, the commercialization of research, and the adoption of new manufacturing technologies. . . . They are not trying to *plan* economic activity, but to quicken the pace of innovation, to sharpen our ability to bring new ideas to market, to increase the technological sophistication with which we manufacture (Osborne 1990, 10–11).

This second wave resulted in the establishment of over 100 public investment funds and more than 25 public venture capital funds and launched over 200 programs to stimulate technological innovation (Ross and Friedman 1990, 4–5; Osborne 1990). Over the course of the 1980s, states such as North Carolina, Ohio, Pennsylvania and New York, each launched their own science and technology agencies. New York expanded the role of its Science and Technology Foundation, while Pennsylvania created its Ben Franklin Partnership in 1982. The New York foundation sponsored a competition among universities that led to the creation of 10 Centres for Advanced Technology. The centres have been responsible for the awarding of a significant number of patents and the issuing of technology licenses. In the case of Pennsylvania, the Ben Franklin Partnership led to the establishment of university-related advanced technology centres under the Challenge Grant Program for Technological Innovation. Each Advanced Technology Centre was built around a partnership of the universities, private industry and economic development groups (Lambright and Rahm 1991, 50–54; Jones 1991, 63).

In the late 1980s, a growing number of state governments began to perceive the limits to the second wave approach they were adopting. Both first and second wave approaches relied on the same public sector organizational dynamics to meet perceived public policy needs. As the focus changed from chasing smoke stacks to building public infrastructure and filling market gaps, they relied on the same fundamental approach by creating a plethora of new programs administered by discrete branches of individual line departments – often with little coordination or integration across programs and with minimal involvement of by the federal or local levels of government. They relied upon the organization of a group of public servants to act as the providers of a good



or service. Businesses continued to seek advice, guidance or subsidies from a public office (Mattoon 1992, 12). Despite the recent fascination with the 'new public management' and its emphasis on the delivery of 'business services' and the role of citizens as 'customers', the nature of the bureaucratic relationship remains fundamentally the same as in the old industrial and bureaucratic paradigm. As such, the second wave business attraction policies and programs described above, as well as most of the new wave of innovation policies introduced in the 1980s and 1990s are subject to the same shortcomings as more traditional industrial policies and business attraction strategies. They fail to deal adequately with the issues of associative, multilevel and joined-up governance discussed above. Furthermore, they involved little capacity for social or policy learning in the sense described above by Neil Bradford.

In response to these perceived weaknesses, a growing number of officials at the state and local level turned to a new form of organizational design for the formation and delivery of business attraction and economic development strategies. In many respects, the emerging third wave of experimentation launched in the 1990s builds upon the principles of associative governance discussed above. A number of key principles are emerging to guide this new wave of experimentalism. Government resources are committed in response to a real demand identified by the potential beneficiaries of the program. Examples of this approach include manufacturing network initiatives in several US states where groups of private manufacturers have the primary responsibility for defining their sector-specific needs and committing their own resources before the state agrees to participate. Another principle embodied in this approach is that it leverages resources. It incorporates the recognition that the public sector, particularly at one level of government lacks the resources to respond to the full range of policy needs. The commitment of public funds is used to attract the participation of other actors in the private and not-for-profit sector or other levels of the public sector. Thirdly, the third wave approach abandons the presumption of the public sector agency as the monopoly source of knowledge and expertise and the sole supplier of critical inputs to the economic development process. It encourages the participation of other sources of knowledge and suppliers of key inputs. Finally, this approach builds in an element of feedback into the development process that incorporates many of the principles of reflexivity and social learning discussed above (Ross and Friedman 1990, 7–9).

This growing interest in the third wave of approaches to economic development strategy was closely paralleled by a shift in understanding of the factors that ultimately determine inward investment. In the first wave approach of the early postwar period the determinants of investment and business attraction strategies were largely considered in terms of the static factors of price for the key inputs to production – capital, labour, land costs and public taxes. In the second wave, the understanding of the determinants of location decisions affecting attractiveness of particular jurisdictions shifted away from the static factors of low input costs to the dynamic competitiveness factors that influence long-term innovative capacity – hence the emphasis on upgrading the knowledge infrastructure, improving the skill base of the workforce and the absorptive capacity of small and medium-sized enterprises with respect to technology adoption and diffusion. The emerging third wave is marked by a gradual extension and deepening of this understanding associated with the perceived implications of the shift to a more knowledge-based economy. Central to this approach is the view that the primary determinants of investment and location decisions are the quality of the physical, social and knowledge infrastructure of a region or locality.

## **Best Practice: Learning Regions, Innovating Economies**

The transition to a knowledge-based economy, with its consequent implications for policy formation in the context of multilevel governance, has the potential to radically alter the design of economic development strategies. As the preceding discussion indicates, the implications of this shift began to influence the thinking of economic development agencies in the 1990s. A number of guiding principles for best policy practice in economic development and business attraction strategies have been identified and a growing number of policy initiatives incorporating this practice can be found in Europe, the US and Canada. While none of the examples discussed in this section of the paper incorporates all of the elements of the best practice model, collectively they point in the direction of a new and more effective approach to economic development policy.

Most significant is the fact that the emerging model has the potential to overcome some of the key sources of traditional weakness ascribed to Canadian economic development policy, namely the lack of a strong state tradition and the inability to locate responsibility for economic development policy in a strong centralized bureaucratic centre or to forge an internal consensus over the direction of economic development policy. In fact, the insights associated with the new model of associative, multilevel and joined-up governance suggest that the very factors perceived as sources of strength for economic development strategies in the old industrial paradigm of the postwar era no longer hold in the emerging knowledge-based economy. The perceived sources of weakness may prove to be exactly the opposite. Similarly new developments at the regional level in Europe and the local level in North America point the direction in terms of overcoming the traditional source of weakness in Canadian industrial policy – the regionalized nature of the economy and the lack of a strong, centralized state tradition.

### **Regional approaches to economic development and social learning**

Innovative Canadian approaches to economic development have not been acknowledged to the same extent as those in Europe and the US. Yet remarkably there have been a number of novel initiatives at both the federal and provincial levels that demonstrate some of the underlying principles discussed in this paper. These initiatives can serve as guideposts for the direction that future economic development initiatives should take. One current initiative that provides a good illustration of the potential for multilevel governance in the Canadian federation are the Urban Development Agreements in Western Canada between the federal government's economic development agency, Western Economic Diversification (WED), three provincial governments and the municipalities of Winnipeg, Edmonton and Vancouver.

The Winnipeg Development Agreement was a five-year tripartite agreement with a budget of \$75 million and a mandate to implement a number of programs in the areas of community development, labour force development, and strategic and sectoral investments. The Edmonton Economic Development Initiative (EEDI) was signed in 1995 and is unfunded but is designed to streamline program coordination between the three levels of government and to seek out resources to support proposed projects. The process of identifying potential projects is driven by the city and all three partners must agree to projects. An example of a successful project is the Edmonton Capital Region Innovation Centre to promote commercial spin-offs from the local science base by taking advantage of opportunities arising from early stage research and prototype

development. The Centre was facilitated through the EEDI with financial support from the Economic Development department in Edmonton, the province, the Alberta Research Council, the National Research Council and WED. The Vancouver Agreement is for five years running until 2005 and covers a broader range of issues, including health and safety, economic and social development and community capacity building. The Vancouver Agreement uses existing mandates, authorities and programs to fund initiatives (OECD 2002, 161–62). While the overall size and impact of these three agreements is relatively small, their real significance lies in the way that they focus on capacity building and leveraging existing institutional and financial resources in a spirit of multilevel and joined-up governance.

While Ontario lacks the strong presence of a federal development agency throughout the province (FedNor's mandate applies primarily to the North), it has nonetheless developed some interesting experiments in associative and multilevel governance. The prime mover behind a number of these initiatives has been the Urban Economic Development (UED) Branch of the Ministry of Enterprise, Opportunity and Innovation. The Branch originated with the appointment of a Special Adviser on Urban Economic Affairs in May, 1998. The approach adopted by the UED from the outset has been to pursue a more effective strategic alignment of existing resources in the provincial government for supporting research, post-secondary education, urban development and health to promote urban economic development. A key part of its mandate is to build strong linkages between provincial and local economic development organizations in Ontario's urban regions to better align objectives, actions and investments.

The Branch's focus is on the development and implementation of economic strategies and partnerships to advance industry clusters in urban regions. It works with other branches of its own Ministry, as well as other ministries and economic development/business organizations, both provincially and in large urban regions, to increase the capacity and effectiveness of economic development stakeholders to support economic development in Ontario's urban regions. It does so by working with local partners to refine and implement specific economic development initiatives in their communities, in part by developing new, innovative approaches to urban and regional development. Its mandate also includes broadening local partners' awareness of economic development best practices in competing urban regions across Canada, the United States and other OECD countries. UED works with a broad cross-section of stakeholders at the local level that cut across all three levels of government. In this regard, both its mandate and operating approach reflect the basic principles of associative and multilevel governance.

UED has been involved with several recent initiatives across the province that warrant closer attention. In both Ottawa and Toronto the Urban Economic Development Branch launched major cluster studies in partnership with local economic development agencies and community-based groups to chart the competitiveness of the leading clusters in the local economy and their prospects for growth (ICF Consulting 2000a; ICF Consulting 2000b). In both cases, the method of analysis used was similar; however, the broader process in which the visioning or foresight exercise was grounded differed dramatically. In the case of Toronto, the study was done by a US consulting firm in partnership with local consultants and under the direction of the Economic Development and Planning Offices of the City of Toronto. The study fed directly into the formation of the Toronto Economic Development Strategy. The recent OECD review of Territorial Policy and urban initiatives in Canada paints a broadly positive picture of the process, suggesting that it "benefited from the active involvement of business, labour, academic and

community leaders” (OECD 2002, 156). However, interviews with participants in the process paint a less sanguine picture of the degree of community engagement with the Toronto cluster study. In contrast with the experience in Ottawa, there was little in the way of the broader participatory mechanisms to engage key members of the community in the effort, nor did it involve the committed, creative and collaborative leadership described above as essential to the success of such exercises. In part, this approach reflects the traditional absence of a strong cohesive leadership in Toronto committed to the economic success of the entire city-region, as well as the lack of key ‘civic entrepreneurs’ in the economic or political sphere willing to assume leadership of the cluster strategy process. The inability to mobilize creative and collaborative business leaders from the economic sphere and the failure of civic entrepreneurs to emerge from other areas of community life has undermined the ability of the region to take full advantage of its foresight or ‘visioning’ exercise.

The shortcomings revealed by the process associated with the original Toronto cluster study have been overcome in the past year by a new initiative termed the Toronto City Summit and the subsequent formation of the City Summit Alliance. The original City Summit was a one-day event organized in June 2002 on the initiative of the Mayor’s office and with strong participation from a number of community organizations including the United Way and the Canadian Urban Institute. The Summit brought together a diverse group of leaders reflecting the many communities that comprise the urban area to assess the region’s strengths and challenges and frame an agenda to respond to those challenges. Following on the successful conclusion of the Summit a coalition of more than forty civic leaders from the private, labour, voluntary and public sectors came together to form the Toronto City Summit Alliance. The Alliance worked through the following eight months with staff resources committed by a number of organizations to produce its own analysis of the current economic and social situation of the region and formulated its own action plan. The plan, released in April, 2003, sets out a broad agenda for change in a number of areas including physical infrastructure, tourism, the research infrastructure, education and training, immigration and social services. The release of the report was followed up with a second Summit held in June 2003 and the commitment to proceed on a number of key initiatives, including the proposal for a Toronto Region Research Alliance (Toronto City Summit Alliance 2003). What is unique about the City Summit Alliance is that the leadership for it has come almost entirely from the private and voluntary sector, true ‘civic entrepreneurs’, yet the process has included many of the elements of community-based strategic planning discussed above.

The competitive study of Ottawa’s clusters reflected the social makeup of the economic community in the region from the outset. A key factor that differentiates the Ottawa clusters from those in Toronto and other regions in North America is the strength of the local ‘institutions of collaboration’ and the high degree of social capital that they generate. The linchpin of these institutions is OCRI, the Ottawa Centre for Research and Innovation, a not-for-profit organization dedicated to helping the city’s technology community shape its economic future. Founded in 1983 as a collaborative effort among partners from industry, the regional municipality, the local institutions of higher education and federal laboratories, OCRI currently has about 700 members and a budget of \$4.5 million. OCRI sponsors a wide range of corporate programs that involve up to 120 events annually and afford the members of the Ottawa area clusters with a virtually unlimited range of networking opportunities. OCRI is also involved in a dense network of partnerships with many of the federal and provincial organizations discussed above aimed at strengthening the region’s innovation capabilities. These partnerships include

provincial Centres of Excellence, working relationships with the Ottawa-Carleton Manufacturers Network and the Ottawa Photonics Cluster, and joint ventures with the National Research Council's Regional Innovation Centre and Vitesse program.

OCRI was also closely involved with the Economic Generators Initiative in 1999-2000 that was launched under the auspices of The Ottawa Partnership, a group of public and private leaders committed to advancing the local economy. The mandate of TOP "is to provide leadership and advice at a strategic level, on action required to improve and grow Ottawa's economy" (ICF Consulting et al., 2000b, p. i). The membership of TOP includes the chairs of the region's business and economic development agencies, and representatives of its municipal council, the higher education sector, and the business community at large. The TOP leadership decided to undertake a detailed study of the region's 'economic generators' as one of its first priorities and to use the study to prepare a strategic plan for the further development of the key engines driving the local economy. One of the consultants involved in the study commented in a local paper that the level of community involvement was higher than in any comparable study he had done in the US or Canada. More than three hundred individuals participated in the work of the various cluster groups that formed part of the visioning exercise and helped formulate a total of thirty three specific goals intended to promote the growth of the seven key clusters identified as the growth generators for the regional economy.

The exercise also produced a higher-order set of flagship initiatives designed to work across the individual clusters to benefit the regional economy as a whole. The high level of participation in the Economic Generators Initiative engendered great expectations in the region about the results that would follow from the presentation of the report in June 2000. Unfortunately, it was released just as the high tech sector entered a serious downturn. Despite the impact of the recession, The Ottawa Partnership, in cooperation with local economic development agencies and the municipal council, forged ahead with planning for many of the cluster and flagship initiatives outlined in the report. Ten of the thirty-three cluster initiatives have achieved tangible results. New steps have been taken to strengthen the region's photonics and biotechnology clusters with the formation of the Ottawa Biotechnology Incubation Centre (OBIC) and the Ottawa Photonics Research Alliance (OPRA) respectively.

A review and update of the report was released in January 2003 (ICF Consulting 2003). A key goal set out in the updated report was to re-energize the cluster approach developed in the initial Economic Generators Initiative. The objective is to engage the individual clusters identified in the initial report to work together with a range of community partners to strengthen each element of the City's innovation system and to collaborate together on the flagship initiatives designed to strengthen all the clusters. The current report, *Innovation Ottawa*, sets out a strategy for strengthening the links between the region's research infrastructure – especially its post-secondary education sector and national laboratories – and the local sources of enterprise within existing and emerging clusters. The report elaborates a vision of what the region should aspire to become which includes: a leading example in North America of a truly networked and collaborative region that mobilizes its information infrastructure to link every firm and institution; a home to a disproportionately large share of the 'creative class'; an integrated region that successfully brings together the elements of research, development and commercialization; and a dynamic region that generates a diverse and continually evolving set of clusters (ICF Consulting 2003, 3).

One other initiative that the UED has been involved with is the Ontario Competitive City Regions Partnership (OCCR). The Ontario Competitive City Regions (OCCR) Partnership came together in 2000 to work with Ontario's principal urban centres to support the efforts of civic leaders, educators and the private sector to develop strategies for regional growth. The OCCR is a partnership of five government agencies and two academic organizations. Represented are the Office of Urban Economic Development and the Science and Technology Awareness and Innovation Branch at Ontario's Ministry of Enterprise, Opportunity and Innovation, Industry Canada, FEDNOR, Human Resources Development Canada, the Office for Partnerships for Advanced Skills of the Council of Ontario Universities and CON\*NECT of the Association of Applied Arts and Technology of Ontario. The partnership has retained the Canadian Urban Institute to work with communities that wish to organize a symposium of their own.

The OCCR Partnership has piloted several regionally focused symposia across the province in city regions with greater than 100,000 people and at least one university and one college. OCCR Partnership's goal is to promote discussion among stakeholders that will lead to regional action plans and initiatives linking educational assets to economic and human development strategies. The overall goal is to generate additional networks, and strengthen existing linkages, between key pillars in competitive city-regions: universities/colleges; SMEs; venture capitalists/angel investors; local skills/training/educational organizations; municipal/provincial/federal governments; and economic development entities. The specific goals are to facilitate discussion among stakeholders about how they are managing the transition to the new economy and promote a sharing of best practices, thus enabling actions to build the competitiveness of city regions in the knowledge economy. They are also aimed at generating additional, or strengthening existing, linkages between key pillars in competitive city-regions: universities/colleges; SMEs; venture capitalists/angel investors; local skills/training/educational organizations; municipal/provincial/federal governments; and economic development entities.

A total of eight symposia were held in Peterborough, Ottawa, Sudbury, Hamilton, Thunder Bay, York Region Kingston, Guelph, and Mississauga. Each of the symposia exhibited a strongly local flavour. The event in Peterborough was organized by the Economic Development Office of the Peterborough area and focused on the potential to develop an environmental technologies cluster in the region. The event in Sudbury was organized with the participation of FedNor and involved several events that focused on the potential to develop three clusters in the area, mining, life sciences and tourism/retail. The event in Ottawa was organized by OCRI as part of the larger agenda for the region set out by The Ottawa Partnership in its planning and strategy document. The workshop focused on the possibility of implementing Talentworks, one of the key cross-cluster initiatives recommended in the TOP report. The next stage will involve a consultation on the implementation of the strategy. In this case, the OCCR workshop was less a stand alone event, and more a part of the larger process that has unfolded in Ottawa with respect to the community-based strategic planning process launched as a cooperative venture between the City, Ontario's Office for Urban Economic Development and other local actors.

The OCCR Partnership held a meeting in December 2002 to analyze the lessons learned from the symposia organized to date. The participants agreed on a number of common lessons. There was a general consensus that the symposia were useful for triggering interest in the issues of regional economic development in their respective city regions, but that they were insufficient by themselves. There was a strong desire that the initial symposia should be part of an ongoing process that would build upon the new partnerships forged through the initial events. They also

agreed that most of the city regions were at different stages of development and that the next level of activity should take that variation into account. The participants recommended that OCCR continue to work with communities to implement the action plans they had developed and that OCCR should develop a more permanent structure to enable it to work with communities on an ongoing basis.

A more recent initiative launched by the Ontario government, the Biotechnology Clusters Innovation Program (BCIP), warrants consideration in this context. The provincial Minister of Enterprise, Opportunity and Innovation launched Ontario's Biotechnology Strategy on June 7, 2002. As part of that strategy, the government announced a new program initiative: the Biotechnology Cluster Innovation Program (BCIP). The overall goal of Ontario's Biotechnology Strategy was to make Ontario one of the top three biotechnology jurisdictions in North America. The Biotechnology Cluster Innovation Program (BCIP) was a component of that strategy with the goal of accelerating the development of Ontario's biotechnology clusters by supporting the commercialization of infrastructure projects and the diffusion of biotechnology-related innovations into knowledge-based or traditional industry sectors.

The program consisted of two distinct phases. In the first phase, the government supported the development of plans that address the innovation capacity of Ontario's regional biotechnology clusters. The province provided funding up to a maximum of \$200,000 on a matching basis, to regional consortia for the development of a Biotechnology Cluster Innovation Plan. The second phase of the program was designed to support the development of infrastructure such as commercialization centres, research parks and other regional initiatives that promote entrepreneurship and innovation. Eleven regional consortia developed regional innovation profiles and corresponding regional cluster strategies in the first phase of the program. Between late 2003 and early 2005, provincial officials held a series of seminars with representatives of the eleven consortia, as well as separate meetings with the individual groups. Through this extensive consultation process, they developed a number of cross consortia initiatives, as well refined the individual initiatives proposed in the regional cluster strategies.

In the provincial budget of May, 2005, the province launched the follow on phase of the program in the form of a series of 'regional innovation networks'. These are described in a budget document as "multi-stakeholder, regional development organizations established with provincial funding that support partnerships among business, institutions and local governments to promote innovation." The regional innovation networks are mandated to expand beyond their original focus on the life sciences to include other areas of innovation excellence, such as information technology, energy conservation and advanced materials, depending on their local strengths and opportunities. The networks are also described as constituting part of a multilayer commercialization network that includes the province, multiregional groups focused on key technology areas or industrial sectors and the original regional consortia, described above. The constituent parts of the network are to support two complementary sets of activities – those that build on and connect the components of the network and those that contribute to a more effective alignment of existing federal, provincial and local research infrastructure and related innovation assets. The overriding goal is to support the growth of small and medium-sized enterprises across the province in innovation-intensive sectors and clusters and facilitate the transfer of research and knowledge assets to firms that can help commercialize them. Overall, the program displays many of the positive features of bottom-up strategic planning that have been described in the preceding sections.

## Lessons for Policy: Principles, Institutions, Practices

The preceding examples present a clear picture of an emerging paradigm for economic development policy based on the underlying principles of associative, multilevel and joined-up governance. The current challenge for economic development policy is less one of ensuring that the organization of the public bureaucracy 'has got it right', than of ensuring that public sector agencies learn to work in a new and more effective way, embodying the principles of associative, multilevel and joined-up governance. The same recommendation applies to the current mix of policies and programs – provincial and federal – available to support innovation and economic development. The new wave of innovation policies and programs and the second wave of economic development strategies that gained support in the 1980s and 1990s created a dense network of research institutions and technological infrastructure. These initiatives at both the federal and provincial level have strengthened the research capacity of the province and the increased emphasis on research-industry linkages has also improved the knowledge flows within the regional innovation system. On the downside, they have led to a plethora of programs and policies that make it virtually impossible for bureaucrats, let alone private firms, to track them all.

A key challenge for economic development policy in the emerging era is to ensure a better integration and coordination of available programs and policy instruments. As much of the preceding analysis argues, this can best be accomplished at the level of the local and regional economy from the perspective of strategic clusters or local and regional innovation systems. It also requires a greater degree of coordination between all three levels of government and their respective economic development agencies. No one level of government has a monopoly on the policy instruments and approaches necessary for an effective economic development strategy. Multilevel governance is no longer an interesting academic concept of relevance to our European counterparts alone, but has become highly relevant to the challenge of economic development in the Canadian federation. Many of the existing policies and programs have been implemented in a traditional top-down, bureaucratic fashion, administered by individual departments or agencies with little cross-jurisdictional coordination and often little attention paid to the broader implications of the program for cluster development in the local or regional innovation system. One illustration of this dilemma is the Canada Foundation for Innovation, which makes major infrastructural investments in expanding the research capacity of post-secondary institutions and hospitals across the province with little regard to the integration of these important new facilities into the existing or emerging industrial structure or local clusters of those regions. Finally, research and innovation programs must be better aligned with the needs and demands of existing sectoral groups and industry clusters in the dynamic growth regions of the province.

The coordinated approach to economic development policy and strategic planning at the community level advocated in this paper is predicated on the existing set of bureaucratic structures and program mix at all three levels of government. What is required is a more integrated and joined-up approach to policy planning at the 'governance' level, rather than a new round of institutional renovation at the federal, provincial or local level. The approach put forward here is not new. As the discussion in the preceding sections make clear, it has been applied in a number of different contexts in Ontario – the sector strategy development process in the early 1990s, the cluster development process in leading urban centres in the province, the Ontario Competitive City Regions initiative and most recently the Biotechnology Cluster



Innovation Program – all evince elements of the approach to economic development policy envisioned in this paper. The key challenge is to extend the approach to a broader cross-section of provincial economic development policy and to use the resulting planning exercises as a central criterion for allocating existing federal and provincial program dollars. The strategic planning approach to economic development policy is not conceived as a massive new spending program, but rather a new set of criteria to be used in determining the allocation of existing program dollars in the economic development policy envelope. At most, the provincial or federal government might chose to use relatively small amounts of new program funding to stimulate the kind of planning exercises described above, as in the case of the BCIP, but they should also recognize that many existing programs at both the federal and provincial levels currently contain budgetary allocations that can be applied for this purpose (OECD 2002).

Effective economic development policy must not be conceived as the exclusive responsibility of government bureaucracies, but rather, must build on the successful experiments with associative governance, both in this jurisdiction and those of our competitors. There is a growing recognition that economic development policies work most effectively when the direct beneficiaries of those policies and programs play a direct role in both their design and implementation. This involves developing a rolling set of innovation strategies at the cluster, local and regional level to ensure that the existing R&D infrastructure and economic development programs are used to maximum advantage – to assess existing needs and identify gaps in the program array. It is also important to engage in a constant process of monitoring the best policy practice in competitor jurisdictions to ensure that provincial and local governments approach the continuing challenge of economic development in a *reflexive* manner that pursues a path of *social learning*. Recent policy initiatives at this level and a growing interest in, and willingness to cooperate across jurisdictions and between the public and private sectors indicates that we have begun to move along this path. The time has come to build on these initial successes and advance the pace of social learning.

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