

**Barriers to Collaborative City-Region Governance: Institutions and Economic  
Governance in ‘Silicon Valley North’**

Dr. Joe Leibovitz  
Department of Urban Studies  
University of Glasgow  
Glasgow, UK G12 8RS

## **Introduction**

Described at once as “Canada’s most unusual metropolitan community” (Andrew 1983, p. 140), as a “company town, the hurly-burly boisterousness of its lumbering past now submerged in the conservative atmosphere engendered by its population of civil service” (Nader 1976, p. 163), and as ‘Silicon Valley North’ due to the “swift rise of its [sic] technology-oriented complex [which] has generated a mixture of satisfaction and wonder” (Steed and DeGenova 1983, p. 263), the political economy of the Ottawa region displays considerable geographic complexities. It also serves as a fascinating reminder of the path-dependent and socially-embedded nature of urban and regional economic change, whereby the contingent nature of local particularities—expressed in the workings of certain local agents, place-based entrepreneurs and institutions—have worked to produce a development trajectory which is spatially unique. This is not to deny the substantial impact that structural forces play in the process of spatial development. Surely these have been as instrumental in the case of Ottawa as elsewhere. However, these structural processes were mediated quite significantly by the particular ensemble, frames of mind and entrepreneurial drive of local actors, thus producing the institutional landscape which is the object of inquiry in this thesis.

## 1. The Political Economy of the Ottawa-Carleton Region

### 1.1. *Economic Change: A Historical Perspective*

Despite the fascinating economic and political change that has characterised the city of Ottawa and its surrounding region since the early 19<sup>th</sup> century settlement of Bytown, forces of social and cultural inertia continue to have salient impact on the configuration of local and regional politics. In his seminal work on the history of the city of Ottawa, Taylor has argued that despite the rapid transformation of Ottawa since 1945, conspicuous forces of continuity in the political economy of the city and its region can still be detected:

“...much remains as it was. Fragmentation, marginality, and corporate oversight are still central. Though the main city is probably less divided than in any time in its history, a new sort of division, always latent, and situated at the regional level, has emerged strongly since the war. Large, territorially-based, self-conscious communities compete with Ottawa proper for both business and influence...large regional governments contend with each other and within themselves...There is a sense of population overweight, and probably the major reason is that there is still no common agenda, and still no community able to set one. It is a metropolis made up of undigested pieces, reluctant or unable to co-operate. The sense of agglomeration of small communities persists” (1986, p. 209).

While these themes of territorial divisiveness, and political, cultural and economic fragmentation will resurface throughout the discussion of institutional change since the 1980s, it is important to outline briefly the main stages in the development of the city. Given the relative lack of historical material on the Ottawa-Carleton *region*, the discussion will deal primarily with the development of the city, although reference will be made to regional issues.

The strategic and commercial importance of the Ottawa River—providing an important route to the interior of the continent—was the initial basis for the development

of settlements near it, initially by native populations, and in the 17<sup>th</sup> century by fur traders, missionaries and explorers. The major industrial development, however, came in the early 19<sup>th</sup> century when the Ottawa Valley became one of the most important sources of timber, although it was not until after the War of 1812 that settlements in the region expanded beyond the initial foundation in Hull, on the north bank of the river. As a result of the desire of the British authorities and their loyalist followers to secure the future of both Upper Canada and Lower Canada as part of the empire in the face of possible American expansion, a policy of encouraging settlement activity along the Ottawa river was put in place. However, it was not until 1826, when the construction of the Rideau Canal commenced under the direction of Colonel By, that a new town was established. The period following the completion of the canal saw the rapid growth of Bytown, as the new town became known, benefiting from the growth of its hinterland, its designation as the Dalhousie District administrative centre, the continued growth in timber exports to Britain, and the beginning of lumber exports to the United States (Nader 1976). Thus, by 1850 Bytown's population stood at just under 8,000, an impressive growth from a population base of only 150 in 1810, and together with Hull "it had become the most important production centre for the square timber industry" (Nader 1976, p. 165).

The second part of the 19<sup>th</sup> century witnessed the growth and transformation of Bytown, which in 1855 was incorporated as the City of Ottawa, due to two main factors. Firstly, the region's forestry industry grew impressively thanks to the export boom to the United States, which was itself amidst rapid urban population growth. This, in return, encouraged American lumber barons to establish sawmills in the Ottawa valley, thus adding to the industrial growth of the region. These developments were also fuelled by technical improvements and innovation, such as the timber slide and later the use of

freight trains, thus increasing production and trade capacities. In addition, the Reciprocity Treaty permitted duty free entry of timber to the United States and contributed further to export growth (Nader 1976).

However, the development trajectory of Ottawa changed most significantly due to a second event, namely its designation by Queen Victoria in 1858 as the capital of the united Province of Canada. Designed to provide a locational compromise between the two principal competitors for capital status, Quebec City and Toronto, Ottawa's location on the border of the two provinces and its relative distance from the United States contributed to the decision in 1867 to choose the city as the capital of the newly created Dominion of Canada.

It was not until the First World War, however, that the civil service and public sector employment began to dominate the economic landscape of the city. Prior to the First World War, as Nader (1976) and Taylor (1986) have documented, the economy of the city remained dominated by industrial development, especially with the mushrooming of pulp and paper plants supported by the hydro-electric power potential of the Chaudière Falls. Increasing demand for social and 'hard' services across the nation, following the First World War, led to a considerable increase in federal government employment. So, while at the time of Confederation federal employment in Ottawa stood at about three hundred, by 1925 it had risen to 10,000 (Nader 1976, p. 168). Federal employment continued to increase even during the Great Depression of the 1930s, thus sheltering Ottawa, in relative terms, from the social and economic devastation that plagued the rest of the country. Thus, between 1931 and 1941 the rate of population growth in Ottawa was amongst the highest in Canada, doubling the national average of growth. Population and economic growth was accelerated even further during and after the Second World War, as federal involvement in social and economic life grew more significant, and in the

post-war period, until the early 1970s, federal employment became the major generator of employment and economic stability in the region.

The growth in civil service employment had important implications for the type of private sector activity which developed in Ottawa. In particular, the federal presence encouraged backward linkages in the form of industries that benefited from close proximity to government offices, such as scientific and research activities, and industries that relied heavily on federal procurement, such as publishing and printing activities.

In addition, Ottawa's status as Canada's capital meant that it became home to the national headquarters of various lobbying and civic action organisations, and industrial and business associations. The development of the latter is especially significant in the context of this research. The presence of organisations such as the Canadian Advanced Technology Association (CATA) has certainly strengthened the institutional platform of the region. Although being a national association, the location of CATA in Ottawa has certainly worked to strengthen the region's image as 'Silicon Valley North', but has also worked to strengthen the political clout of the technology oriented sector *within* the body politic of Ottawa itself. Thus, in many respects, the effortless lobbying of CATA for what would be in its view appropriate national-federal policies (technological and R&D tax concessions, provision of technological infrastructures, adequate training, and so on), had geographically-specific implications, inasmuch as many of the more influential figures within that association represented Ottawa-based technology-oriented firms.

Before we outline the development of the technology-oriented complex in Ottawa, however, it is important to note that the growth and impact of federal government employment has been neither spatially uniform or culturally neutral. As Taylor (1986) has noted, economic growth and the expansion of federal employment

meant that the City of Ottawa started to experience shortage of readily available land for development since the late 1960s, as well as increasing competition from the suburban communities, encouraged by the arrival of major retail chains. Despite considerable redevelopment efforts in the form of the Sparks Street Mall in the city's core during the late 1960s, downtown Ottawa began to lose its commercial dominance to outlying shopping centres. In addition, economic change and the arrival of subsidiaries of national and international corporations have meant that the traditional, independent and 'home-grown' character of the Ottawa business community was changing. As Taylor (1986, p. 176) has noted:

“...the hardy independence of traditional Ottawa business seems to have been put to rout in the post-war period, as the huge market of the civil service and its stable salaries attracted more and more chains. Local autonomy in a range of business proved impossible to maintain...Other indicators that national rationalisation was affecting the city occurred in 1981, when Ottawa was removed from the trans-continental line of VIA rail services and the last Gatineau passenger train ran in October of that year.”

The geography of federal employment in the National Capital Region (NCR) changed significantly in 1969. Until then, the federal government adhered closely to the terms of the British North American Act, which stipulated that “Ottawa shall be the capital”, and thus Hull was generally denied its fair share of federal employment (Taylor 1986, p. 178). However, the politics of Quebec nationalism and its place within Canadian federalism caught up with the Ottawa-Hull region in 1969, when the governments of Canada and Quebec agreed towards integrating the Quebec-side (the Outaouais) in the National Capital Region. The 1969 agreement thus formalised the inclusion of the Outaouais in the NCR and provided for construction of federal office buildings in Hull, despite objections from civic and business leaders in the City of Ottawa. These developments, along with considerable improvement to cross-(provincial) border infrastructure, while contributing to the economic regeneration of the Quebec-side, have

presented Ottawa with yet more challenges related to the future of its city centre. With respect to the Quebec-side, however, as important as the transfer of more than 10,000 public sector jobs from one side of the Ottawa River to the other was, it is widely felt that the Quebec side still lags behind its Ontario counterparts in economic well-being, and that both the federal and provincial governments “have neglected the region’s industrial potential and have done nothing of significance to promote diversification of the regional economy” (Comité Outaouais 1992, p. 11).

In addition, the NCR became to be seen increasingly by the federal government as a symbolic project for Anglo-French co-existence. In its most basic and common form, support for this project was provided for by language policy since the mid 1950s through a series of legislation involving direct and indirect incentives for the strengthening of bi-lingualism, especially in the civil service (for a more detailed discussion, see Taylor 1986, pp. 178-186). In 1971 these efforts were formally institutionalised through making the National Capital Commission (NCC) the “instrument of symbolic bi-lingualism in the capital” (Taylor 1986, p. 178), and more direct action was taken in the mid-1970s to ensure greater representation of francophones in the civil service. The effects of the NCC and the federal government campaign were noticeable in the economic development of Hull, and in the transition of many French speakers to the middle-class and professional occupations of the civil service, resulting in a “breakdown of the ghetto effect that had characterised it for generations” (Taylor 1986, p. 181). However, divisions between the two communities, as noted above, have remained significant in terms of income gaps and residential and occupational differentiation, as Taylor has noted, and in terms of relative lack of co-operation between the Ontario and the Quebec sides of the National Capital region, compounded by the geopolitics of Quebec nationalism (Graham 1992).



## *1.2. Social Relations and Urban Politics*

The economic history of Ottawa had profound implications for the city's political history. Three strands in particular can be observed with respect to the development of urban politics in Ottawa: the persistence of tensions surrounding francophones-anglophones relations; the changing class relations in the city; and the question of local and regional governance.

As mentioned above, language politics continues to feature in the politics of the city and the region, with varying degrees of prominence depending on both internal and external events. Internally, issues such as local government restructuring, the persistent gaps in income between anglophone and francophones, mostly demonstrated by the significantly lower socio-economic position of the City of Vanier, and most recently hospital restructuring, have brought to fore the persistence of powerful polarisation of French and English speakers in Ottawa (Taylor 1986, p. 181). Externally, the Quebec question within the overall framework of the confederation continues to cause periodic concerns over the future of the National Capital Region, despite the strong presence of federalists on the Quebec side of the region.

Secondly, the changing economic function of the city and its region—from lumber trade to lumber-related industry, and then to civil service employment and more recently to a more diversified economic structure—was generally mirrored by changing power structure and class relations. As Andrew has cautioned, however,

“Political change did not follow automatically from socio-economic shifts. Ottawa's municipal politics continued to be dominated by business long after the federal government became the major player in the city” (1983, p. 146).

Most fundamental to the modern political history of Ottawa has been the massive presence of the federal government which contributed to the creation of a significant

middle-class population base, and as Andrew (1983) has argued this meant that the political regime of Ottawa had been largely dominated by middle-class interests. The most immediate manifestation of this political regime has been its traditional consumption orientation, “in which citizens look at local government primarily in terms of the services it will provide to residential neighbourhoods and to residents of the city as a whole” (Andrew 1983, p. 141). In this view, urban politics in Ottawa is clearly not unique, as the provision of services has featured prominently in Canadian urban politics and policy (Magnusson and Sancton 1983).

However, the middle-class orientation of urban politics in Ottawa has meant that the provision of *particular* services has been the subject of political mobilisation. This was exemplified in struggles over neighbourhood planning, which since the early 1970s have been an important part of local politics in the city, reflecting the tensions which socio-economic change has generated. As Andrew (1983) has shown in some considerable detail, the process of planning for inner-city neighbourhoods in the early 1970s was carried out through numerous sub-committees, representing a variety of interests and perspectives, and demonstrating the city’s commitment to active civic engagement in local policy formation. While exhibiting considerable cleavages within the city, this massive planning exercise has left an important imprint on Ottawa’s urban regime in that it contributed to the consolidation of socially-conscientious coalition of politicians, public officials and neighbourhood organisations:

“...the 1970s witnessed an important increase in the organisation and articulation of consumption interests, largely as a result of the creation of neighbourhood-based citizen groups...The neighbourhood planning process served also as an initiation ground for municipal politicians. Through citizen groups, particularly those involved in neighbourhood plans, a whole generation of municipal politicians has attained office. These politicians have tended to be active in the representation of consumption interests, to be concerned with the preservation of residential communities, and to favour public transportation, social housing, better social services..., and better recreational facilities” (Andrew 1983, p. 151).

While fragments within that coalition were especially apparent throughout the 1990s, when it was weakened with the election of several more business-oriented and conservative-minded councillors and mayors, the representation of socially-progressive councillors has remained significant. Increasingly, however, the major political cleavage plays itself out at the *regional* level, where Ottawa City Council finds itself representing the less affluent part of the metropolitan area, and where the perspectives of the more conservative (small as well as ‘capital C’) parts of the region—geographically skewed towards the wealthy west-end communities of Nepean and Kanata—are becoming more vocal. This issue of political ‘territorial integrity’ has indeed become a central ‘flash point’ in the late 1990s, as the debate around the appropriate form of governance in the NCR entered once again into the regional political agenda. It has thus important connections with and implications for the more recent process of institutional change and economic governance which is documented in this thesis, and is further explored in the next section.

All of this does not mean, however, that production interests, pronounced by such bodies as the Ottawa Board of Trade, local chambers of commerce and downtown merchants associations, have not been represented, and indeed influential, within the contours of Ottawa’s urban regime. Indeed the separation of consumption and production interests in urban political analysis, most famously articulated by Saunders’ (1986a) ‘dual theory of politics’, is often artificial and does not correspond to the reality of urban politics, where both spheres of activity are intertwined (see Page and Goldsmith 1987; Pickvance 1994; and Saunders 1986b for criticism and debate surrounding this issue). As Andrew (1983, pp. 152-153) has explained with relation to Ottawa,

“Although there are some clear differences between these two points of view, conflict is not always apparent or highly visible. This is in part because of the prevalence of the non-political view of local politics that tends to play down the importance of political action at the local level. In addition, the opposition

between consumption and production cuts across traditional political divisions and therefore makes these divisions less easily identifiable and less visible...Finally, as there is no fundamental contradiction between consumption and production points of view, disagreement in emphasis or in priorities can exist without involving a clear-cut opposition.”

Within the context of this thesis, however, the analytical emphasis is on production interests, their evolving institutional framework and form of governance, and their relationships with one another. While Andrew’s view, as articulated above, is a powerful one, I wish to argue, firstly, that production interests have not received sufficient attention (as most research on Canadian local politics has tended to focus on consumption interests), and secondly that the institutional formation of those interests throughout the 1990s does signify an important change from the pattern of economic governance observed by Andrew. In fairness, it must be pointed out that many of the processes of economic and political change which underpin this thesis were at a very early stage in the early 1980s, when some of the most significant literature on urban politics in Ottawa was written.

What I wish to argue is that the re-positioning and transformation of the Ottawa Economic Development Corporation since the late 1980s, the emergence of powerful industrial associations such as the Ottawa Centre of Research and Innovation, and the formation of (albeit temporary) partnerships such as the Regional Economic Diversification Opportunity do signify, to some extent, the growing impact which specific production interests—mostly from the region’s technology-oriented complex—have had on the process of ‘regional identity building’. Such a process entailed considerable cultural transformation oriented towards the fostering of entrepreneurial spirit, the strengthening of the region’s innovation milieu, and the provision of adequate infrastructure and policy aimed to support the accumulation requirements of the (broadly defined) high-technology sector. Of course, this process has not been carried out without

internal contradictions, some of which are documented in this thesis, but it does point in my view, to a growing tension between Ottawa's traditional (and place specific) mode of social regulation—predicated on stable public sector economy and its services needs—and that which is required by the emerging actors of the so-called 'new economy'. This is not to play down the forces of inertia and continuity, which are ever apparent in Ottawa as elsewhere, but to suggest that internal tensions and contradictions between emerging forces and 'traditional' ones deserve adequate attention.

The third prominent issue in the development of urban politics in Ottawa relates to the complexities of governing the NCR, spanning as it is over two provinces, and including a host of federal, provincial, regional and local institutions. In the first instance, it might be noted that the presence of the federal government has resulted in a contradictory process regarding governance in the NCR. While by their sheer presence federal institutions have played an active, if sometimes indirect and reluctant, part in Ottawa's rather unique brand of local mode of social regulation through the development of, for example, somewhat unique labour markets, particular infrastructure and built environment, and technological and scientific know-how, those institutions with *explicit* local governance and planning agenda have played an ambiguous, and sometimes controversial, role within the overall complex institutional environment of the region.

Of those federal institutions with direct local and regional planning mandate, the National Capital Commission (NCC) is the most prominent. Established in the late 1950s, the NCC's historical concern with beautification projects have received general praise. As Graham (1992, p. 133) argues with respect to the NCC's achievement until the mid-1980s,

“...previous federal governments had succeeded in creating a capital with some national symbolic value. Geographically, the NCR had developed as a combination of sophisticated urban complex and wilderness—something of a mirror of Canada itself.”

However, the election of the federal Conservative government in 1984 symbolised something of a watershed for the regulation of the NCR. Invested with its financial ‘responsibility’ and ‘global competitiveness’ agenda, the federal government’s approach to the NCR, and the NCC as its main regulatory arm in it, was predicated upon budget cut-backs and the scaling down of the federal role in regional governance, especially with regards to physical and monumental projects. In addition, and equally important, the government saw the NCC’s new and streamlined role primarily in terms of promoting Canada’s ‘strength and unity’ (Graham 1992, p. 135). All of this was supported by the appointment of new characters to the NCC’s leading positions, headed by Jean Pigott, who were put in charge of re-orienting the organisation.

As a result, since the mid 1980s the NCC has seen its capacity to maintain its role as a major player within the Ottawa institutional milieu reduced considerably. In an important way, with more specific ramifications for Ottawa’s experience with institutional-building and regional coalescence, the politics of retrenchment that underlined this process has militated against the NCR’s overall ability to create an environment conducive to strategic economic governance, functioning associative institutions, and collective action:

“While this may suit the federal government’s fiscal agenda and ease the tensions between the NCC and area municipalities to some degree, the danger exists that the NCC’s retreat from its traditional planning function will create a serious void in terms of planning the capital for the longer term future...The potential seriousness of this retreat may be exacerbated by the fact that the NCC appears to have embraced its role as a catalyst for enhancing the symbolic role of the capital without taking on the task of thinking in policy terms about what the role should be in the context of an evolving Canada and the changing international order” (Graham 1992, p. 137).

Thus, just at the time when economic threats—in the form of massive federal cutbacks and layoffs—became more prominent, and political uncertainty persisted, the regulatory

environment provided by the federal government has contributed to institutional dissociation rather than to associative environment, and in many ways fell in line with the overall institutionally-based behaviour which has characterised the region and is documented in further detail in the following sections. As Graham forcibly argues:

“It appears that little, if any, concerted and constructive thinking is occurring within the federal government about the future of the capital under altered constitutional arrangements. Such thinking is important for more than romantic reasons. The National Capital Region contains the fourth largest urban agglomeration in the country. Its population is highly trained and educated. The region itself contains important expertise in areas of science, technology and administration. Much of the activity which goes on in the NCR is ‘cutting edge’, central to the future of Canada. The implications of alternative constitutional arrangements in terms of their potential to dilute this national centre warrant consideration” (Graham 1992, p. 138).

With respect to the role of the two provincial governments in governing the capital, it is perhaps not completely surprising that those roles too have failed to contribute to the development of associationalism. Overall, the NCR has traditionally suffered from neglect by the two provincial governments who believe that the region falls within the domain of the federal government, and needs little economic or political support (Taylor 1996). As Graham notes, “there is little indication that the Ontario government is doing any thinking about the future of the part of the National Capital Region that falls within the province (1992, p. 140). And as an official at the City of Ottawa commented in an interview:

“From the [provincial] side nothing out of Metro Toronto exists. Our perception of the attitude in Toronto is that they think the feds will take care of us, and that we’re rich enough. We’re largely ignored. There have been extremely weak relationships between the regional [council] chair and the province”.

Nevertheless, the Ontario government has been involved quite heavily with a series of studies, commissions and reports regarding the governance of the Ottawa region since the

late 1960s. While these may not have been ‘strategic’ in nature, they nonetheless did bring about changes to the mechanics of governance of the Ontario part of the NCR.

The creation of the Regional Municipality of Ottawa-Carleton (RMOC) in 1969, during the wave of municipal restructuring carried out by the provincial governments of Robarts and Davis, was the starting point for a series of experiments and debates concerning the governance of the political complexity that is the Ottawa region. Designed to achieve economies of scale in services delivery, RMOC was the largest in population size and second largest in area of the regional governments created in Ontario during the 1970s, with a population size of 467,000 and an area of roughly 2,849 square kilometres (Smith 1995). In addition, RMOC was imposed, as a second-tier structure, on sixteen municipalities, although the number was reduced to eleven in 1974.

However, the relatively large number of lower-tier municipalities, some of them, such as Kanata, Nepean and Gloucester have been development-oriented and conscientious about their own identity, meant that the governance of Ottawa-Carleton continued to be characterised by central city-suburban conflicts, and by the complexities associated with the presence of the federal government, the NCC, and the provincial border. Thus, a series of reports and commissions followed since the mid-1970s in an attempt to find the appropriate governing structure for the region.

In 1976 the regional government structure was examined by Henry Mayo. Among the more important recommendations of his reports were the introduction of direct elections to regional council, thus seeking to strengthen a ‘regional’ rather than ‘local’ perspective within RMOC. However, most of Mayo’s recommendations were not implemented and the introduction of a directly elected council had to await a later restructuring effort. A further study by David Bartlett in the late 1980s followed some of Mayo’s perspective in that it concluded that there needs to be a clearer separation of



responsibilities between the lower tiers and the regional structure, arguing that regional government should be responsible for activities with region-wide implications, that economies of scale in service deliveries should be achieved, and that “unless there are good reasons to the contrary, regional administration is appropriate where it is essential to apply uniform policy and practice across the region” (quoted in Smith 1995, p. 176). In addition, like Mayo before him, Bartlett recommended that RMOC move towards a system of directly electing the majority of its councillors, thus strengthening the ‘regional perspective’ in the debate over the governance of the Ottawa region.

Further to that, a commission headed by political scientist Katherine Graham of the University of Carleton in 1988 pointed to the lack of accountability in regional government, primarily due to the lack of directly elected councillors and to the prevalence, as a result, of local parochialism within the decision-making structure of RMOC. To remedy the problem, Graham recommended the establishment of direct election to regional council through a system of single-member regional wards, which would (according to her view) enhance political accountability while ensuring the representation of geographically defined communities (Smith 1995).

The strengthening of the ‘presence’ of RMOC in the overall governance of the region received further endorsement by the commissioner Graeme Kirby in 1992, who was nominated by the NDP provincial government to review the governance of Ottawa-Carleton. The actual consultations that preceded the publication of Kirby’s report revealed the potential bitter cleavages within the Ottawa region. In particular, in considering the relationship between the City of Ottawa and the suburban municipalities, Kirby proposed two alternatives, the first involved keeping the upper-tier structure intact while reducing the number of lower tier municipalities to five, and the second alternative suggested a ‘uni-city’ (one-tier) model for the entire region. Both suggestions were

fiercely opposed by the suburban municipalities, who saw these as threats to their autonomy and as imposition of an ‘Ottawa-centred’ agenda on regional politics. In the end, Kirby’s actual recommendations in 1992 supported the two-tier structure, but also called for amalgamation throughout the region, in particular between Kanata and surrounding local authorities, Gloucester and Cumberland, and Ottawa-Vanier. He also recommended the direct election of regional councillors, which was to follow from the previous round of political restructuring (in 1991, following Graham’s report), in which the direct election of the regional chair was put in place (Ottawa-Carleton Regional Review Commission 1992).

As events unfolded, the reaction to Kirby’s report, especially by the ‘outer’ municipalities was largely negative, again demonstrating the difficulties in reconciling the different outlooks of various communities within the region. For example, as Smith (1995) has documented, the City of Nepean commissioned its own study, aiming to substantiate its claim that it was viable as an independent local authority, and pleading its case to the minister of municipal affairs, in the process undermining Kirby’s report.

In addition, and more directly relevant to this research, Kirby suggested the shifting of several areas of responsibility upwards, to RMOC, among these were economic development. Indeed, Kirby, who later became the chair of the Ottawa Economic Development Corporation, was instrumental in advocating a regional vision for economic governance, one that would ‘overcome’ the territorial fragmentation regarding local economic promotion that had characterised the region. As he commented in an interview:

When I was doing the 1992 review, I looked at how independent each municipality was from an economic development perspective. It was really driven home to me during that exercise that the municipalities are very inter-related. And people accept that on an intellectual basis, but they won’t accept the consequences of it, which mean that you must plan *regionally* for your economy.

Although the issue of economic development was not particularly emphasised in outlining the mandate for the Kirby Commission, his review nonetheless prompted it, at least for a limited time, as a central theme of political debate in the region, perhaps coming to a climax with the establishment of economic development Task Force in 1992, and a comprehensive stakeholders-oriented economic strategy, known as 'Partners for the Future', which was undertaken in 1994. Thus, Kirby's report, the economic development Task Force, and especially the 'Partners for the Future' exercise have served as important institutional 'moments' in the development of economic governance in Ottawa-Carleton in that they provided (rather rare) instances of, firstly, putting 'economic development' in the forefront of the political agenda of the region, and secondly (with specific reference to 'Partners for the Future') coalescence around specific economic development and governance goals, involving an impressive array of institutions, voices and interests throughout the region. Given the direct relevance of this issue to the inquiry of this thesis, it is further discussed in following sections, which deal specifically with the process of institutional change in Ottawa-Carleton.

To return to the theme of governance in general, in 1994 further change to the governing structure of Ottawa-Carleton was introduced with Bill 143, which largely regionalised the provision of services, reduced the number of local councillors, and included direct elections to regional council and the regional chair, thus strengthening the position of RMOC vis-à-vis the lower tier municipalities. Most recently, the local government restructuring agenda undertaken by the Conservative provincial government since 1995 has left important discursive, if not practical, marks on the Ottawa region political milieu. Although the provincial government has been somewhat reluctant to impose a governing solution on the region, following the bitterness surrounding the Toronto amalgamation process, the (implicit) restructuring agenda once again exposed

the perverse territorial divisiveness characterising the region when the different communities found it impossible to generate a ‘home grown’ model of regional governance (Gray and Lewington 1999). As this issue is strongly related to the overall political and economic ‘atmosphere’ in which institutions in the Ottawa region operate, and is thus part of the story of institutional change, it is further explored in the following sections of this thesis which deal more directly with ‘institutional performance’.

In pulling together the different strings in the historical-political and economic geography of the Ottawa region, it might be worth to re-iterate some key elements of continuity. Throughout the course of researching for this thesis, these elements proved to have important bearings on the Ottawa experience with economic governance. Three elements stand-out in particular. Firstly, internal fragmentation, based on political-territorial, social and cultural divisions continue to have considerable impact on the geographic pattern of development in the NCR as a whole, as well as on each of the two sides of the Ottawa River. As Taylor (1986, p. 21) has put it,

“Politics [in Ottawa] was thus the politics of Balkanisation...Consensus was rare, and when it occurred, fragile. It is also hard to say that ‘pluralism’ in Ottawa was stimulating, for much of the time interaction was minimal.”

While considerable efforts have been directed more recently to establish, for example, ‘cross-border’ frameworks for economic co-operation, the legacy of the past does have important implications in constituting ‘layers’ of events upon which contemporary patterns of institutional change occur.

Secondly, relative geographic marginality, as expressed in the distance—both physical and cognitive—between Ottawa and the respective centres of powers in Ontario and Quebec had important implications in the past to the way regional development policy and politics was articulated. As mentioned in the preceding discussion, this perception of marginality continues to hold even in the late 1990s. Curiously,

marginalisation also characterises the relationship between local and regional institutions in Ottawa, and federal agencies, despite the obvious federal ‘presence’, and in spite of the (gradually reduced) role that the NCC plays in governance and urban planning. The federal government has traditionally sought to distance itself from direct involvement in economic governance matters in Ottawa, primarily for fears that this would be interpreted as political favouritism, and because of the sensitivity attached to direct involvement in Quebec jurisdictions. Thus, while this legacy of federal non-involvement in economic governance may have changed in recent years, primarily due to the increasing influence of more ‘enlightened’ views within agencies such as the National Research Council as to the merits of spatial sensitivities in designing economic policy (see the following discussion on institutional change), the perception of most actors is that institutional development, entrepreneurial pro-activism and associative governance among the Ottawa technology-oriented firms, for example, were made possible *despite* the government’s presence rather than because of it. In such a way, the issue of ‘marginality’ has had a contradictory influence on the prospects of developing associative institutions of economic governance in Ottawa.

Contradictory and complex influences also characterised the third element of historical continuity, namely what Taylor (1986) has termed ‘corporate oversight’, that is the historical tendency of Ottawa’s major corporate entities to impose their will on the community, according to their interests, without much regard to such issues as civic engagement and community concerns:

“...Ottawa can be seen as a series of “company towns” with all the problems and limitations that are common to such phenomena. For as much as its citizens recognised that prosperity and growth owed much to the “companies”, there was also great resentment at their peremptory and often high-handed decision-making that ignored or over-rode the wishes of the community. As often as not, the city wasn’t consulted at all. Persistent ambivalence was characteristic: the city chafed, but prospered” (Taylor 1986, p. 21).

There is much value in this perspective, since it brings to the fore one of the main tensions evident in Ottawa with respect to institutional change and economic governance. That tension is between the evidence that within Ottawa, a particular sector—the technology-oriented complex—has displayed throughout its relatively short history considerable characteristics of associationalism, and between the apparent lack of associationalism between the institutions of this sector and other institutions of both state and civil society. In my view, it is insufficient to focus on a particular sector in search of associative patterns because this distracts the concern from the crucial link between economic and social development to a concern with a particular, arguably more successful, segment. In Ottawa, the evidence points to a rather underdeveloped form of associative governance when one considers the quality of civic engagement and collaborative inter-institutional apparatus throughout the region. Cautiously, then, without adopting a historically deterministic approach, it might be suggested that the contingent nature of local development in Ottawa has worked to produce an environment that displays contradictory outcomes inasmuch associative governance is concerned. However, such a claim requires close empirical scrutiny, and is further examined in the following sections, which deal more directly with Ottawa's experience with associative experiments.

## **2. Institutional Change and Economic Governance**

### ***2.1. Economic Development and Governance Issues in Ottawa-Carleton Since the 1980s***

By the mid 1980s, the most prominent economic and urban development issues in the Ottawa region revolved around rapid population growth, and significant increase in the number of households; the continued diversification of the regional economy; and the

continued (and accelerating) consumption of urban land as the developed area expanded, which was also accompanied by increases in the amount of travel undertaken, especially the journey to work, leading to increasing pressures on existing infrastructure.

The need to diversify the economy the National Capital Region (NCR) as a whole became all too apparent by the mid-1980s. Although federal government employment remained significant (see table 1) the federal restraint guidelines since the 1970s resulted in slower growth rates. In addition the relocation of some 11,000 jobs from the central area of the Regional Municipality of Ottawa-Carleton (RMOC) to Hull orchestrated by the federal government posed considerable planning and development challenges, primarily to the economic wealth of the City of Ottawa's downtown area. Thus, by the mid 1980s, RMOC's Urban Development Strategy pointed out that the federal government's desire to achieve a 25:75 ratio in federal employment between the Quebec and Ontario portions of the NCR was likely to result in further relative decline of public sector jobs on the Ontario side.

**Table 1. Employment by Industry in the Ottawa-Hull CMA, 1981-1996**

Industry	1981		1986		1991		1996	
	No.	%	No.	%	No.	%	No.	%
Primary industry	5,250	1.4	5,795	1.3	6,985	1.3	6,185	1.2
Manufacturing	26,325	6.9	31,730	7.0	32,080	6.0	35,125	6.6
Construction	16,930	4.5	27,360	6.0	30,725	5.7	25,460	4.8
Transportation, storage, communication and utility	26,365	6.9	30,385	6.7	37,090	6.9	33,750	6.4
Trade	52,930	13.9	62,795	13.8	75,910	14.2	75,695	14.2
FIRE	21,110	5.6	22,830	5.0	26,275	4.9	25,845	4.9
Government	105,315	27.7	115,590	25.4	128,100	23.9	104,780	19.7
Services	126,005	33.1	157,735	34.7	197,795	37.0	224,650	42.3
Total	380,230	100.0	454,215	100.0	534,975	100.0	531,495	100.0

Source: Statistics Canada, various years.

**Table 2. % Change in Employment by Industry in the Ottawa CMA, Canada and Ontario, 1981-1996**

<b>Industry</b>	<b>1981-86</b>			<b>1986-91</b>		
	<b>Canada</b>	<b>Ontario</b>	<b>Ottawa-</b>	<b>Canada</b>	<b>Ontario</b>	<b>Ottawa-</b>
			<b>Hull CMA</b>			<b>Hull CMA</b>
Primary industry	2.5	-4.5	10.4	0.3	-1.3	20.5
Manufacturing	-3.6	1.3	20.5	-5.1	-11.8	1.1
Construction	-1.0	11.5	61.6	23.0	28.9	12.3
Transportation, storage, communication and utility	1.8	5.1	15.2	8.5	12.2	22.1
Trade	9.3	12.0	18.6	11.6	12.2	20.9
FIRE	8.6	12.8	8.1	17.3	20.2	15.1
Government	6.7	7.7	9.8	14.7	22.7	10.8
Services	17.6	19.1	25.2	19.9	22.7	25.4
All industry	7.3	10.0	19.5	11.6	11.8	17.8

(Cont.)

<b>Industry</b>	<b>1991-96</b>		
	<b>Canada</b>	<b>Ontario</b>	<b>Ottawa-Hull CMA</b>
Primary industry	-7.6	-10.4	-11.5
Manufacturing	-2.1	-2.2	9.5
Construction	-11.9	-19.1	-17.1
Transportation, storage, communication and utility	-1.4	-1.3	-9.0
Trade	1.9	0.7	-0.3
FIRE	-2.8	-3.5	-1.6
Government	-20.1	-26.0	-18.2
Services	10.9	10.3	13.6
All industry	0.7	-0.6	-0.7

Source: Statistics Canada, various years.



**Table 3. Employment by Occupation in the Ottawa-Hull CMA 1991-96**

	1991		1996	
	No.	%	No.	%
Management occupations	65,945	12.3	64,185	12.1
Business, finance and administrative occupations	133,105	24.9	123,035	23.1
Natural and applied sciences and related occupations	43,745	8.2	50,180	9.4
Health occupations	25,050	4.7	26,720	5.0
Occupations in social science, education, government service and religion	46,480	8.7	47,110	8.9
Occupations in art, culture, recreation and sport	19,685	3.7	21,405	4.0
Sales and service occupations	123,840	23.1	131,615	24.8
Trades, transport and equipment operators and related occupations	57,470	10.7	49,450	9.3
Occupations unique to primary industry	7,840	1.5	7,065	1.3
Occupations unique to processing, manufacturing and utilities	11,815	2.2	10,730	2.0
All occupations	534,975	100.0	531,495	100.0

Source: Statistics Canada.

**Table 4. % Change in Employment by Occupation in the Ottawa-Hull CMA, Canada and Ontario, 1991-96**

	Canada	Ontario	Ottawa-Hull
			CMA
Management occupations	-6.8	-6.9	-2.7
Business, finance and administrative occupations	-0.3	-3.2	-7.6
Natural and applied sciences and related occupations	6.3	3.2	14.7
Health occupations	2.2	2.3	6.7
Occupations in social science, education, government service and religion	6.3	4.3	1.4
Occupations in art, culture, recreation and sport	14.5	16.0	8.7
Sales and service occupations	7.1	6.9	6.3
Trades, transport and equipment operators and related occupations	-8.2	-11.3	-14.0
Occupations unique to primary industry	-7.3	-8.2	-9.9
Occupations unique to processing, manufacturing and utilities	2.1	1.3	-9.2
All occupations	0.7	-0.6	-0.7

Source: Statistics Canada.

In addition to these changes, three other sectors comprised the remaining foundations of the regional economy by the mid-1980s (Tables 1 and 2): trade (both wholesale and retail); community and personal services; and a unique combination of certain types of manufacturing and services to business management, largely connected to advanced technology businesses (communications, computers and scientific fields). By the mid-1980s these four economic sectors (including public sector employment) accounted for just under 80% of total employment in the region (see also Tables 3 and 4 for the continuation of these trends during the 1990s).

Equally important have been the dynamics of urban growth associated with economic change since the early 1980s. Briefly, the region and its planning authorities have had to contend with the spatial distribution of employment in four areas: (1) the established central area of the region (in and around the City of Ottawa); (2) the 'inner area' surrounding the central area and enclosed by the Rideau River, the CPR rail line and the Ottawa river; (3) the area outside the inner area, but within the federal greenbelt; and (4) the area outside the greenbelt, including business parks in Kanata and other employment scattered around the outlying rural areas. Such developments posed considerable planning challenges related to the service needs and infrastructure requirements of a growing urban region. As the Regional Development Strategy saw it, "the most costly, and potentially most disruptive, systems of infrastructure are the road and transit network" (RMOC 1985, p. 19). Furthermore, pressure on the road and transit network was likely to grow, given the spatial mismatch between residential patterns and the geography of employment:

"The relationship between the concentration of job opportunities within a given area and the rate at which those jobs are occupied by residents of the area is a weak one...It appears from this analysis that chances are very high that workers...will continue to seek employment over a fairly broad geographic area.

An important role of the regional official plan, therefore, is to foster a public transportation system...and the location of jobs near transit stations or in concentrations well served by road and transit, so as to enhance the convenience of the journey to work” (ROMC 1985, p. 19).

By the early 1990s the contraction of federal government employment was the most pressing economic challenge faced by the region. In particular, the intention of the federal government to make about 15,000 public sector employees redundant in the early 1990s was met with justifiable fears from the policy community in the Ottawa region regarding the severe implications for the economy. Indeed, several pronouncements by both public officials and local business leaders in reaction to the government’s intentions revealed the enormity of the concern for the region’s economy, often describing the projected massive lay-offs as “the end of Ottawa” (interviews with regional officials). As can be seen in table 1 public sector employment in the Ottawa-Hull CMA declined in its share of total employment from 28% in 1981 to just under 20% by 1996. However, the effects of the early 1990s restructuring were particularly devastating, as more than 20,000 jobs in government were lost, representing a loss of more than 18% between 1991 and 1996.

Partly in response to such economic threats and challenges posed by this ‘new regional economy’ the plethora of economic governance institutions in Ottawa-Carleton were reconfigured in order to, firstly, embark on new economic strategies and initiatives (see next sections); secondly, to bring about closer synergy between economic development organisations and associations such as the Ottawa Economic Development Corporation, the Ottawa Centre for Research and Innovations, the Board of Trade, and the Tourism and Convention Authority in order to facilitate greater collaboration and encourage greater involvement of private sector interests in economic governance; and thirdly to strengthen the institutional tissue of the region by adding additional layers to its

already complex institutional fabric in the form of entrepreneurial support initiatives, labour market governance mechanisms, and the Regional Innovation Forum initiated by the National Research Council in the mid-1990s (see discussion below).

Thus, by the mid 1990s the development strategy of RMOC recognised that on one hand, “the reduction in the federal workforce is a major contributor to the projected slow-down in employment growth in the region”, and that on the other hand “the leading sectors for future economic growth in the region are high technology, telecommunications, biotechnology, tourism and business services” (RMOC 1996a, p. 2; see also tables 5 and 6). In turn, this would represent a major shift in focus from the public sector to the private sector in terms of economic governance and strategy-making.

In part, this shift in focus expressed itself in the increasing salience of discourses—espoused by economic governance institutions and prominent figures from industry—related to the virtues of private enterprise and entrepreneurship on one hand, and the imperative of the region to ‘liberate’ itself from the legacy of ‘bureaucratic-minded’ public sector-dominated economy on the other hand. As a result, the perceived need to underwrite a transformation in the regional economic culture became one of the most important goals of the institutional apparatus in the National Capital Region. The following perspective represents a commonly held view of the story of economic and cultural change in Ottawa, and how it might be different from other city regions in Canada:

“In recent years an entrepreneurial culture has evolved in Ottawa-Carleton beside the traditional government-town culture. For example, most of the existing high-tech firms were developed by residents rather than being branch plants. This is a unique situation found in only a few major locations, such as Boston and Silicon Valley in California. The entrepreneurial spirit has now entered government research labs in the region, as they have become more focused on practical research and ties to the private sector. More partnerships between governments at all levels and businesses are being formed. Other initiatives, such as improved business links with the local universities and colleges, more sources of venture

capital, and better support for small and medium enterprises, are further enhancing the business climate in Ottawa-Carleton” (RMOC 1996a, pp. 4-5).

Throughout the 1990s, therefore, the realisation that Ottawa’s economy is embedded within a wider shift towards a ‘new’ knowledge-based economy has played a central role in perceptions and attitudes regarding regional economic renewal and Ottawa’s place within an emerging spatial division of labour:

“Knowledge and information have become one of the most important factors for business and economic development. The amount of knowledge in a region is dependent on the skills and abilities of the local labour force. Those regions with a high proportion of knowledge workers have a significant advantage in attracting future growth. Ottawa-Carleton has a distinct advantage here because compared to other regions, it has a highly educated workforce...The existing high technology firms in this region, and their skilled employees, are of paramount importance in attracting and spawning new businesses. This knowledge must be recognised, enlarged and diversified” (RMOC 1996b).

Of course, claims to successful economic and cultural adaptation should not be taken at their face value, as the process of cultural transformation in the region has been contested, spatially uneven and contradictory. Within the context of this research we might ask in what specific ways have regional institutions supported this cultural transformation? Has this process been carried-out via collaborative efforts between state institutions, partnerships and various interests in ways that might resemble associative governance models, or has it been induced by specific growth coalitions with relatively narrow agendas? And has the impressive institutional plethora of the National Capital Region been successful in bridging the various communities comprising the region? As the discussion below reveals, there have been some considerable difficulties in the ability of regional institutions to indeed *institutionalise* stable and long-term patterns of synergy, collaboration and indeed ‘associationalism’ within their framework of action.

**Table 5. R&D Expenditures and Personnel, 1995: A Comparative Table**

	Ottawa CMA	Toronto CMA	Montreal CMA	Canada
Total R&D expenditure (millions \$)	1,400.9	1,999.0	1,834.00	7,659.00
R&D expenditures per capita (\$)	1,835	469	551	266
Total R&D personnel	11,383	17,616	17,600	72,068
R&D personnel per 1000 people	14.9	4.1	5.3	2.5

Source: Ottawa Economic Development Corporation, Ottawa Facts (1996).

**Table 6. Major Employers in the Ottawa-Carleton Region, 1996.**

No. of Employees	Employer	Business Type
70,000+	Government of Canada	Federal Government
10,000+	Nortel Technology	High technology; telecommunications
4,000+	Carleton University	Education
	University of Ottawa	Education
	Carleton Board of Education	Education
	Ottawa Civic Hospital	Health services
	Regional Municipality of Ottawa-Carleton	Government
	Canada Post	Postal services
3,501 to 4,000	Ottawa Board of Education	Education
2,501 to 3,500	Ottawa General Hospital	Health services
	Bell Canada	Telecommunications
	Algonquin College	Education
	Loblaws	Food retailing
	Newbridge networks	High technology
2,001 to 2,500	Carleton Roman Catholic School Board	Education
	City of Ottawa	Government
	OC Transpo	Public transit
1,501 to 2,000	Digital Equipment	High technology
	Bank of Canada	Central bank
	Canadian Corps of Commissionaires	Security services
	Conseil des écoles francaises	Education
	Government of Ontario	Government
	McDonald's Restaurants	Food services
	Mitel Corporation	High technology

Source: RMO Planning And Development Department, 1996 Employment Survey.

Throughout the 1990s, then, regional economic policy in Ottawa-Carleton emphasised the continued increase in the proportion of knowledge workers through training initiatives and the realignment of educational institutions towards the needs of the high-technology sector. In addition, the preservation, and improvement, of the region's quality of life became a significant policy goal, as it was concluded that quality of life—expressed in such indicators as good schools, green spaces, and adequate infrastructure—was a major factor in the locational decisions of employers and workers in the knowledge-based economy.

Geographically, regional and local authorities have had to contend with the changing distribution of employment throughout the region, and the consequences of uneven development for the wealth of distinctive communities within the region, to the viability of Ottawa's downtown core, and to the uneven pressure on infrastructure that uneven development has brought about. In particular, the regional development strategy recognised that “technological advances are reducing the benefits of a downtown location for many office-based businesses...The growing technology-oriented companies prefer to locate in suburban locations. As a result, the focus of economic activity will continue to shift from being centralised downtown to being dispersed in the suburbs” (RMOC 1996b, p. 4). Such conception led to growing interest in redeveloping Ottawa's core as an entertainment, cultural and tourist attraction, through a variety of initiatives involving Business Improvement Areas, pedestrianised malls, the (on-going) improvement of a convention centre, and other beautification projects.

In addition, there has been apparent tendency of high-technology firms to favour the western part of the city-region, following the ‘anchoring’ presence of firms such as Nortel and Newbridge and institutions such as the Communication Research Centre. On

the other hand, for the eastern communities such as Orleans, which are more dependent on downtown and inner-area jobs than the western communities (RMOC 1996b), the reduction of downtown employment, primarily because of the relative decline of federal employment, has had important economic implications for the wealth of their residents. As the Regional Development Strategy has seen it “any decline in federal employment or flattening of downtown employment will have a greater negative impact on the eastern part of the region than the west (RMOC 1996b, p. 5).

Finally, and of considerable importance for the regional economy, infrastructural issues have remained prominent in the region’s policy agenda. These included the need to service an expanding pattern of commuting throughout the region; the need to provide for the unique infrastructural need of knowledge-based firms, such as high speed communication facilities; and the long awaited improvements to the region’s air links with other parts of North America, and its link to Highway 416 to Toronto, still under construction at the time of writing.

## ***2.2. Institutions, Firms and Territorial Development: The Development of Ottawa’s Technology-Oriented Cluster***

Despite the fact that Ottawa’s high technology cluster is not by any means a dominant sector within the structure of the region’s economy, it has displayed impressive growth in the number of firms and employees (see tables 7 and 8), and perhaps as important, has helped to generate a changing regional image and identity. As Andrew’s citation of the early 1980s optimism and excitement suggests, the emergence of ‘Silicon Valley North’ as a dominant image did go a long way in implying a regional cultural transformation:

“An infectious boom-town atmosphere is gripping Ottawa these days—the kind that has not been felt here since Queen Victoria chose the city as Canada’s capital



more than 100 years ago. Ottawa is no longer a slightly sleepy, one-industry town. Red tape is being smothered in computer age; bureaucrats are watching anxiously as engineers move in next door; traffic on the Queensway flowing both ways in rush hour. High technology—a whole series of new business made possible by computerisation and miniaturised electronics—has come to town” (quoted from the local press, source unspecified, in Andrew 1983, pp. 148-149).

The sense of regional cultural transformation has indeed played a central role in, and has become a key aspect of, the changing institutional milieu of the region. A more detailed discussion of this *selective* ‘invention of a regional culture’ awaits in the following section. At this point, however, it is necessary to briefly consider the chronological development of Ottawa’s technology-oriented cluster.

Although the major impetus for the development of the technology-oriented cluster in Ottawa came during the Second World War and its aftermath, its origins can be traced earlier. In particular, the establishment of the federal National Research Council (NRC), known originally as Honorary Advisory Council, in 1916 paved the way for the development of a research intensive environment, aimed at applied, problem-solving approach to scientific issues which were deemed to be of national importance (Steed and DeGenova 1983).

During the Second World War research activity in and around the NRC intensified with strong government support, as part of the war effort. Thus, it is widely argued that during that period “Ottawa was a hotbed of technological wizardry” (OED 1997, p. 7) due to the wide range of R&D, technological innovation efforts and experiments which took place at the time. In particular, a considerable amount of research was carried out within the NCR on radar, sonar, avionics, nucleonics and even advanced material-oriented research. Following the war, several other federal departments enhanced their in-house research capacity, most of them remaining in the Ottawa region until the 1960s, when a federal decentralisation programme took place.

Importantly, enhanced government-based research capacity also created spin-out effects, as research staff began to adopt more entrepreneurial stance by setting-up independent firms. What needs stressing in this context, however, is that this entrepreneurial behaviour was cushioned by the relatively secured, and stable, market demand which was provided by the government to the newly established firms. Thus, firms such as Electronic Material International, Mechtron Engineering and Northern Radio were established to provide a variety of products and services to the Canadian military. One of the best known examples of firms established after the Second World War, and one which has a unique place within the collective memory and ‘story-telling’ narrative regarding the origins of Ottawa’s technology-oriented cluster, was Computer Devices. Formed in 1948, the firm’s main innovation was the development and commercialisation of a position and homing indicator that was a navigational aid for military aircraft. Later on, the firm served as a basis for an impressive number (about 30 by some accounts, Doyle1996) of spin-off firms, such as Leigh Instruments and Lumonics.

By the end of the Second World War Ottawa has already developed a significant pool of technological and innovation capabilities. Significant to our concern with institutional issues, the development of a ‘technology engine’—that is a critical mass of knowledge-based industry that was able to consolidate the virtues of localisation economies—was strengthened by the presence of an investment engine. To Ottawa’s good fortune, this investment engine materialised in the form of the lumber barons of the so-called ‘old economy’ who became engaged in rather unique relationships with the technically-oriented entrepreneurs of the community, providing early capital for the financing of firms in their early growth stages. Thus, Computer Devices, for example, was established as a result of such a process, when the owner of big lumber mills in the

city financed the early growth of the new firm. The company also benefited from the transfer of technology from another local institution, the National Research Council, which contributed considerably to the process of technological and product innovation that took place within the firm (interviews with federal agencies officials and representatives of technology-oriented firms).

Such an example of firm birth and innovation, involving close links between entrepreneurs, established business elites and local institutions serves as an important lesson of the potential role of intermediary economic development institutions—bridging the state, the market and different fractions of capital—in uncovering and solidifying social capital in a local context. As one prominent member of the Ottawa high-technology community explained:

“It really makes it pretty obvious what you have to do if you want to create a technology industry in the community, and that is to insert yourself. In other words, if you’re the economic development officer of the community you better darn-well insert yourself between the technology engine and the investment engine. Instead of that, we have all the economic development officers running around North America trying to import branch plant, and that’s a stupid strategy. If that strategy worked Atlantic Canada would be wall-to-wall high-tech, wouldn’t it, because they have tried that all their lives.”

This comment is significant. It brings us closer to the ‘centre of gravity’ of this research, *namely the extent to which contemporary institutions in the Ottawa region do serve successfully as the crucial link between different segments of the ‘economic community’, the state and other actors in order to unlock hidden potentials.* The evidence assembled in this research suggests that the performance of Ottawa’s institutional infrastructure leaves something to be desired with respect to its ability to support associative principles. While this contention awaits further discussion in the following section, it is worth mentioning that the comments quoted above are symptomatic and capture rather accurately the view of most high-technology related personnel interviewed in the course

of this research. In particular, these comments have reflected a rather widely shared frustration with both the federal technology policy framework and regionally (or locally)-generated policy initiatives and institutional apparatus.

At the same time, and in fairness to existing institutions, it might be worth noting the particular path-dependent nature of economic evolution which was experienced in Ottawa, as several events, actors, technologies and institutions combined in a specific period of time to produce ‘critical mass’ of research and innovation capabilities, venture capital and firms. As one financial institution representative (and a board member of a local industrial association) commented, the ability of contemporary institutions to replicate the early institutional environment might be quite limited:

“My view is that governments and various quasi-public institutions...their role can be to help to accelerate, or make it difficult, depending on how they operate, [for development to take place], but you’re not going to have, with OED or the Board of Trade, or OCRI, or the regional municipality, any of those by themselves be able to create the environment [for development]. I don’t think that public institutions have the ability to say “what we should do in this region is have a high-tech environment” and make it happen. You have to have a few variables come together and you can say “well, we have here the nucleus of something that might in fact, if we do it right, grow into something significant and bigger”, but it’s a matter of being able to influence rather than to manage things.”

In addition to government-induced research, a second foundation of technological development and firm growth was established with the location of Northern Electric’s (now Nortel) research facilities in the region in 1962. In 1969 these research facilities were consolidated into an impressive complex known then as Bell Northern Research (BNR), and now called Nortel Technologies. Currently, this complex occupies more than 6,000 scientists and engineers who are engaged in a broad range of activities related to communications research, and contribute significantly to the orientation of the Ottawa cluster towards research and development activities (see Steed and DeGenova 1983 for a classification of technology-oriented complexes).

Importantly, with financial support from the federal government Northern Electric established during the 1970s a semi-conductor manufacturing facility, Microsystems International Ltd (MIL). Although the facility later closed, it did spin-out at least thirty firms, perhaps the most well-known of which was Mitel Corporation, a telecommunication equipment manufacturer. Formed by two entrepreneurs, Terry Matthews and Michael Cowpland, Mitel was later acquired by British Telecom during a period of difficult restructuring. However, the two founders established Newbridge Networks (telecommunications hardware manufacturing) and Corel (a software development firm), respectively, currently among Ottawa's flagship firms in terms of employment.

Another (relatively early) influence on the development of 'Silicon Valley North' came in the late 1960s, with the decision of the then Ottawa branch manager of IBM to form his own company, Systems Dimensions Ltd. (Doyle 1996). The firm became the major supplier of the federal government's data processing needs, and later span-out some forty firms, many of them providing non-routine computer work services for the federal government, hospitals and utility companies.

By the middle to late 1990s the technology-oriented complex of Ottawa has shown signs of impressive growth. While the precise measure of 'high technology' is notoriously difficult because the unclear definition of the concept, data based on five relevant Standard Industrial Classification codes indicate that between 1976 and 1996 employment in technology-related occupation increased five-fold (see table 7). Furthermore, in the last decade the technology-oriented sector registered an increase of 83% in employment, translated to some 18,200 jobs (70 percent of which were actually created during the first half of the 1990s).

In addition, as table 5.8. demonstrates, the Ottawa technology-oriented cluster is skewed towards the telecommunications sector in terms of employment and number of establishments, with test and measurement, computer software design, computer hardware production, and defence-related technology firms following as significant 'clusters' within the overall complex). Moreover, the proportions of research and development jobs in the region are significant (table 5). According to the most recent employment survey conducted by the Regional Municipality of Ottawa-Carleton, 16,000 jobs (4% of total employment) were classified as R&D in 1996. Of the technology-oriented jobs, 32 % (just above 14,000) were R&D-related, with the telecommunications industry in particular displaying considerable strength in this area, containing 73 percent of the region's total R&D jobs.

Thus, the growth of the technology-oriented cluster in Ottawa has been enabled by somewhat unique configuration of historical and institutional elements. By the late 1990s this sector has displayed considerable innovative, product development and marketing capacities, primarily through firms such as Newbridge Networks, Corel, Nortel, Cognos, Mitel and JetForm, several of which have secured significant market shares for their product (JetForm, for instance, has an estimated share of 80 percent of the electronic forms market), have been involved in international strategic alliances and acquisitions (Mitel and Newbridge, for example), and have engaged in fierce competition against global high-technology giants (as exemplified by Corel's attempt to bite into Microsoft's dominance with its adoption of WordPerfect and CorelDraw). Thus, many of the firms in Ottawa's technology-oriented sector can be said to engage in quality-based rather than price-based competition, a conclusion also reached by Steed and DeGenova in the early 1980s.

**Table 7 High Technology Employment in Ottawa-Carleton, 1976-1997**

	<b>1976</b>	<b>1981</b>	<b>1986</b>	<b>1991</b>	<b>1996</b>
<b>Sector</b>					
Manufacturing	4,878	6,594	11,675	12,028	16,004
Services	3,267	9,418	10,175	15,297	24,040
<b>Total</b>	<b>8,145</b>	<b>16,012</b>	<b>21,850</b>	<b>27,325</b>	<b>40,044</b>

Source: Regional Municipality of Ottawa-Carleton (1997), *Employment in Ottawa-Carleton: Results of the 1996 Employment Survey*.

Based on: SIC 335-Manufacturing of communication and other electronic equipment

SIC 336-Manufacturing of office, store and business equipment

SIC 391-Manufacturing of scientific and professional equipment

SIC 772-Computer and related services

SIC 775-Scientific and technical services

**Table 8. Technology-Oriented Firms by Type in Ottawa-Carleton, 1996**

<b>Type</b>	<b>Total Employment</b>	<b>% of Total</b>	<b>No. of Establishments</b>	<b>% of Total</b>
Factory automation	182	0.4	11	1.2
Biotechnology	201	0.5	8	0.9
Chemicals	44	0.1	4	0.4
Computer hardware	3,014	6.9	111	12.4
Computing consulting services	1,633	3.7	137	15.3
Defence	2,977	6.8	37	4.1
Energy	669	1.5	16	1.8
Environmental	431	1.0	44	4.9
Manufacturing equipment	2,674	6.1	43	4.8
Market research and development	24	0.1	7	0.8
Advanced materials	71	0.2	3	0.3
Medical	1,042	2.4	11	1.2
Pharmaceuticals	101	0.2	5	0.6
Photonics	404	0.9	18	0.2
Computer software	6,942	15.8	245	27.3
Subassemblies and components	840	1.9	37	4.1
Test and measurement	3,192	7.3	25	2.8
Telecommunications	18,904	43.0	125	14.0
Transportation	591	1.3	9	1.0
<b>Total</b>	<b>43,936</b>	<b>100.0</b>	<b>896</b>	<b>100.0</b>

Source: Regional Municipality of Ottawa-Carleton, (1997), *Employment in Ottawa-Carleton: Results of the 1996 Employment Survey*.

Certainly, the presence of federal research capabilities helped initially to carve a comparative advantage for Ottawa in terms of scientific and technological knowledge, and later on in terms of product development, as the commercialisation of technologies became more common, and demand remained rather stable due to a 'secured' market in the form of government procurement. Equally important, however, is the *social* aspect of Ottawa's high-technology growth. As mentioned earlier, the close linkages between the 'technological entrepreneurs' and the traditional resource industry of the Ottawa Valley resulted in unique marriage between technological know-how and entrepreneurship on one hand, and management know-how and venture capital financing on the other hand. Curiously enough, such early advantages seem to be lacking from the present-day institutional reality of Ottawa, at least according to one prominent member of the technology-oriented complex:

“While the pursuit of profits is still the driving force in the building of the Ottawa region's high-technology industry, angels are not as easy to find today as they were twenty and thirty years ago. Canada's capital gains tax rate is now higher than its dividend tax rate for high-income taxpayers and is the same for all types of capital gains. The people who bankroll high technology firms are not interested in dividends as paybacks because such firms re-invest most of their earnings. Although the start-up rate is still respectable, it is generally recognised that there are many good ideas that are not being funded” (Doyle 1996, p. 7).

By the same token, it is now recognised that the presence of the federal government, and its linkages with the high technology sector, have changed significantly from the early growth period, and that indeed some of the advantages of proximity and 'untraded inter-dependencies' may have been lost due to relocation schemes:

“Government laboratories are still a source of new companies, but not to the extent that they were thirty or forty years ago. One of the reasons is that much of the government technology gets 'spoken for' very early in the evolution by existing companies who do contract research work for the laboratories. While some of it probably does result in some expansion for those companies through the development of new products or services, unfortunately, many of them see



their role as nothing more than problem solvers for government laboratories. Another factor is the shrinking role of government as an incubator is that the government is not a prolific user of technology to the extent that it was thirty or forty years ago. *The laboratories are also more dispersed across the country and the scientists are no longer in daily contact with the angel investors who are in a position to start new companies*" (Doyle 1996, p. 5; emphasis added).

These quotes set much of the tone to the more detailed appraisal of institutional change and economic governance which follows in subsequent sections of this thesis. While this puts a negative spin on the evaluation of institutions and the process of institutionalisation it must be remembered that the major strengths of the Ottawa technology complex, including skilled labour, government research capabilities, localisation economies and high 'scores' across a range of quality of life indicators (educational institutions, quality of services, amenities, and so on), continue to place the region in a rather favourable place within a wider spatial division of labour.

### **2.3. Ottawa's Institutional Plethora**

This section of the thesis traces the actual process of institutional development and change in the Ottawa region since the mid-1980s, with particular emphasis on the Ontario part of the NCR. The purpose here is to set-up the necessary context for the analytical discussion regarding institutions, economic governance and associative behaviour which follows in the next section. The specific purpose of this section is to point to particular '*institutional moments*' in the development of economic governance in the Ottawa-Carleton region: that is to important periods of change in which the complex interplay of political and economic forces operating at various geographic scales worked to produce particular institutional forms in Ottawa. Such a focus brings to the fore the particular path-dependent nature of economic and institutional change in the region, and thus demonstrates that the specific forms of economic governance, and the fate of

experiments with associative principles, were not pre-determined but were influenced to a considerable degree by the activities of certain key actors within the community.

### *Institutional Development and Change*

By the late 1990s, the complex institutional array operating within the National Capital Region provided a fascinating example of the unique political, social and economic geography of the region. Combining different levels of government agencies, quasi-public authorities, one-off, *ad hoc*, and 'permanent' public-private partnerships, voluntary and not-for-profit organisations, and a plethora of industrial associations, spanning different spatial scales in their apparatus, the map of institutions in the Ottawa region is undoubtedly rich and complex. In quantitative terms, this institutional map suggests that the region does possess considerable *potential* to achieve 'institutional thickness', providing considerable opportunity for associative economic governance to take place.

In addition to the Ottawa Economic Development Corporation (OED), which was set-up originally as the Ottawa Industrial Development Commission in the early 1960s (see next section for a more detailed discussion), and the economic development offices of individual municipalities on both sides of the Ottawa River, the region hosts two federal 'research-rich' institutions, the National Research Council (NRC), and the Communication Research Centre (CRC); the Ottawa Board of Trade (OBT) as well as an array of local chambers of commerce in the various municipalities comprising the Ottawa-Carleton Region; the Ottawa Tourism and Convention Authority (OTCA); the Regional Economic Diversification Opportunity (REDO) partnership; the economic development corporation of the Quebec part of the National Capital Region (Société de diversification économique de l'Outaouais); the Eastern Ontario Division of the Ministry

of Economic Development, Trade and Tourism; the federal National Capital Commission (NCC), and a host of collaborative research and development organisations, industrial associations and networking institutions such as the Ottawa Life Sciences Council (OLSC), the Canadian Advanced Technology Association (CATA), and the Ottawa Centre for Research and Innovation (OCRI) and its ‘subsidiaries’ such as New Media North (a partnership of multi-media and cultural industries), ‘Zone 5ive’ (an association of technology marketing firms), OCRInet (a not-for-profit partnership promoting linkages between Ottawa’s technology-oriented industrial complex, government and educational institutions, and the provision of technological infrastructure), the Telecommunications Research Institute of Ontario (TRIO), PRECARN Associates (a consortium of nearly 40 high-technology organisations, R&D institutes, and federal government agencies which promotes collaborative research relating to Canada’s industrial competitiveness), the Optical Processing and Computing Consortium of Canada (OPCOM), PARTNERS (yet another business-education partnership aimed to “foster a superior, cost-effective education system and an internationally successful business community” (OED 1997, p. 36)), and the Industrial Research Assistance Program (IRAP), managed by the NRC to provide for a technology-transfer network for small and medium enterprises.

The institutional fabric of Ottawa is thus rich and complex, cutting across various state and private sector organisations, and spatial scales of governance. Importantly, this institutional fabric does seem to provide a potential (and explicitly intended) platform for ‘thick’ synergy between the state and the market. Theoretically, such synergy forms the backbone of the associative view of economic governance by providing for an ‘idea rich’ innovation milieu, supported by intermediary institutions which are inserted between the state and the market, thus facilitating frequent dialogue, formal and informal

collaboration, the sharing of knowledge and ideas, and the formation of community identity. Indeed, on the face of it members of the region's high-technology community did point to the existence of shared norms, experiences, and 'community feeling', which underpinned the emergence of the technology-oriented cluster in Ottawa. In interviews, the common origins of high-technology firms in federal government research laboratories and in a network of spin-offs companies, such as Mitel, Newbridge Networks and Corel; the relatively small size of the region (and the high technology community); the clustering of the region's technology-oriented complex in the west-end of the region; the relative isolation of the NCR from the provincial 'power centres' in Toronto and Quebec; and the role of institutions such as OCRI in solidifying the technology-oriented complex's identity and visibility, and in facilitating frequent networking and 'talk' between firms have all been mentioned as factors contributing to the solidification of the kind of untraded interdependencies emphasised by Storper (1997) as important ingredients in regional economic success.

As Streeck and Schmitter (1985; quoted in Cooke and Morgan 1998, p. 22) have argued, institutions of associative governance have an important role to play in combining the distinctive assets of the state and capital, and in providing the necessary co-ordinative mechanism that is required in a multi-stakeholders environment:

Institutions of this kind, in addition to mediating between the state and the market, seem to limit the extent to which the two can invade each other's expense. In this way, they seem to inject an element of stability in their respective polities which makes them less subject to changing political fashion. Also, an elaborate intermediary associational structure seems to enlarge a country's repertoire of policy alternatives—its 'requisite variety'—an this may enable such countries to respond to new problems without having to undergo dramatic internal realignments.

In this thesis, however, the focus is on more than just a particular industrial sector. In seeking to analyse the distinctive geography of institutions and economic governance, a

particular emphasis of this research is placed on the process of institutional change, the reasons behind this change and on the experience of experiments with associative governance on a region-wide level. The last point in particular entails an inquiry of the relationships *between* institutions, state agencies, interest groups and associations emphasising my contention that it is simply insufficient to examine one (albeit successful) fraction or industry within a region and claim that this somehow represents the pattern of behaviour throughout the region as a whole. Rather, to uncover critically the functioning of institutions there is a need to broaden the picture, and to consider questions of access to power, representation and the relationship between institutional *presence* and the process of institutionalisation.

Within the particular policy area and institutional plethora revolving around economic governance the activities of the Ottawa Economic Development Corporation (OED) are of particular interest. As an explicit partnership designed to support the growth of local companies, assist in the formation of new businesses, attract inward investment, and (importantly) provide for constant public-private dialogue and a multi-stakeholder forum for reflexive, strategic action OED has provided an interesting example of an experiment designed to provide grass-roots approach to economic governance, based (at least theoretically and rhetorically) on associative principles of ‘strategic anticipation’.

However, as outlined in passing above, the institutional tissue of the region now comprises many other agencies and associations which collectively comprise its system of industrial governance, and—potentially—its institutionalised basis of ‘collective social order’ (Scott 1996b; Storper and Scott 1989). One of the key aspects of this institutional framework has been its support of collaborative research and development. As table 5.5. shows, the Ottawa technology complex is the leading R&D centre in Canada when

measured per capita, both in terms of expenditure and in personnel dedicated to R&D. Leading centres of research and development in the region include the two federal agencies—the Communication Research Centre (CRC) and the National Research Council (NRC)—as well as the two universities, each employing more than 1,000 R&D-dedicated professionals (OED 1997). In addition, it is estimated that \$1 billion a year is spent on R&D by other high-technology institutions. For example, 24 life sciences-related research institutes in Ottawa invest an estimated \$300 million annually in R&D, and the proportion of revenue spent on R&D among many firms exceeds 10 percent.

Perhaps the leading example of a privately-led R&D intensive environment is provided by Nortel, with its 8,000 workers in the region, the great majority of whom are scientists and engineers engaged in a broad range of communications-related research. Since the early 1970s, Nortel has reported persistent expansion of 10% a year in its Ottawa workforce, and in the early 1990s announced its plan to add additional 5,000 communications research positions in its western Ottawa facilities, thus reaffirming its view of the region's comparative advantage in research and development-oriented labour market.

Another example of a privately-led institutional network is that led by Newbridge Networks. During the early 1990s, the firm established its affiliated companies strategy whereby it has provided financial and technological support for new spin-out firms offering specialised products and services that are complementary to Newbridge's services, whilst enabling Newbridge to devote most of its corporate resources to its core activities. Since the early 1990s, this strategy helped to finance fifteen companies in the Ottawa region, and solidified a network of association and collaboration around Newbridge. As an executive of a spin-off company explained, this network of *local*

affiliation provides the benefit of access to a *global* market of communications and technology-oriented business network:

“Certainly, when you are just starting out, having the affiliation with Newbridge gives you instant credibility. It gets you in the door of a Nynex or a British Telecom. Since we are located in the Newbridge campus, customers who are coming to visit Newbridge will tend to come by and visit us as well...It’s tremendous having that magnet.”

*Ottawa’s Federal Agencies: Towards Local embeddedness?*

At the federal level, two agencies in particular have contributed to Ottawa’s particular model of development, although until recently neither of them had an explicit *regional* (or ‘cluster’-oriented) economic development agenda. Firstly, the Communication Research Centre (CRC) has had a significant presence in the region since 1969, when it was created out of the federal Defence Research Board as a civilian research centre. Currently employing more than 200 researchers in the western part of the Ottawa region, the agency is dedicated to applied research and development in communications and related technologies. Its special status encourages it to operate as an arms-length institution, thus enabling it to bridge its missions within the public sphere (primarily related to the support of defence-related research in telecommunications) and its activities as an important resource and catalyst for Canadian firms.

Despite the national outlook of this institution, it is clearly embedded in a regional context, not merely because of its location but importantly because of the involvement of several key local entrepreneurs in its programmes and policies. The most recent examples of such embeddedness have been the appointment of Gerry Turcotte—one of Ottawa’s key civic entrepreneurs, a leading advocate of a networking approach to innovation and technological development, and formally a founding president of the Ottawa-Carleton Research Institute (OCRI)—to lead the CRC and the activities of the CRC’s Innovation Centre, since 1994, in support of small business start-ups and growth.

Secondly, the National Research Council has had historically considerable impact on the creation and development of technology-oriented firms in the region. The contribution of the NCR, by its sheer presence in the region, continues to be a “major strategic asset in the region’s capacity to encourage industrial innovation” (OED 1997, p. 9). Its explicit mandate is to undertake, assist or support scientific and industrial research in different fields of national importance; to investigate standards and methods of measurements; and to work on the standardisation and certification of scientific and technical apparatus and instruments, and of materials used or usable by Canadian industries (NRC 1997). During the 1990s the activities of the NRC amounted to an impressive number of research projects, industrial support programmes, and innovation and networking initiatives, despite significant reduction of resources (to the tune of some \$76.2 million in the early 1990s). Among these projects and activities one could note the NRC’s emphasis on the transferring of technologies from its laboratories to industry for commercialisation via multi-partner initiatives. Thus, during 1995 and 1996 the NRC reported collaborations with over 375 firms, 60 percent of which were considered joint research projects (NRC 1997).

Of particular importance has been the NRC’s Industrial Research Assistance Program (IRAP), which is designed to help Canadian firms to develop and exploit technologies. Based on a national network of Industrial Technology Advisors (ITA’s), the IRAP demonstrates the increasing sensitivity to the role of clusters and spatial proximity in innovation systems and flexible, technology-intensive production complexes. During 1995 and 1996, for example, there were some 245 ITA’s situated in more than 166 locations, and close to 90 cities and communities across Canada. It is estimated that during 1995 and 1996 the IRAP’s contribution to firms amounted to \$59 million for some 3,475 projects that were conducted on a cost-share basis, thus creating



incentives for firms to invest in R&D, while externalising some of the risk associated with the innovation process. In addition, the emphasis of the IRAP has been on small and medium size enterprises that have fewer than 500 employees, based on the rationale that “these firms form the bulk of Canada’s industrial base” (NRC 1997, p. 10).

Indeed, towards the mid and late 1990s, a somewhat refreshed approach to the geographic dimension, and importance, of industrial growth and innovation capacity was apparent within the overall framework of the NRC’s activities, perhaps representing something of a greater awareness toward the spatial embeddedness of firms, technologies and institutions:

“Innovation in Canada has been—and will continue to be—driven by regional and community-based systems. This means that our efforts to strengthen Canada’s system of innovation must recognise the importance of geographic concentration, technology clusters, and more local initiatives” (NRC 1997, p. 1).

An important step toward enhancing the local embeddedness of federal institutions (the NRC in this instance), solidifying the federal role in an evolving *regional* mode of governance, and strengthening the associative economic framework of the Ottawa region, was taken in 1995. In December of that year NRC, the Ottawa Economic Development Corporation, and the Ottawa-Carleton Research Institute (OCRI) announced a strategy and plan to stimulate innovation and entrepreneurship in the National Capital Region, and strengthen NRC’s links to firms, financial institutions, industrial research agencies and other local interests. A key element in this strategy was the convening of a Technology and Innovation Roundtable Forum, as a venue for Ottawa ‘technology leaders’ and other players to meet and discuss local barriers to entrepreneurship and technology development and “to begin a process of knocking them down” (Chhatbar and Darch 1997, p. iv). In a limited sense, then, this might be interpreted as an active

engagement of actors representing different spatial scales of governance (national and regional) in an effort to construct a distinctive regulatory milieu.

It might also represent a growing recognition by both local/regional actors and national agencies such as the NRC that industrial governance does require the *active* nurturing and fostering of ‘relational assets’, ‘untraded inter-dependencies’ (Storper 1997) and the ‘soft institutional infrastructure’ (Cooke and Morgan 1998) which could contribute to the overall performance of a regional system of innovation. It is worth noting, for example, that the activities of the Action Plan for Innovation (coming out of the NRC/OED networking initiative) covered impressive number of areas, including labour market governance and training initiatives, the most celebrated of which has been the *O-Vitesse Program*, a pilot project to ‘fast-track’ training of software engineers, involving Mitel, the NRC, Carleton University, and the University of Ottawa; the encouragement of stronger links between firms; technology forecast roundtables; development of a ‘virtual’ research park; regular meeting between local firms and NRC agencies; the co-ordination of international business visitations in the Ottawa region; more pro-active approach to the mobilisation of venture capital; and new initiatives to commercialise NRC technologies under the new NRC Entrepreneurship Program.

However, in the context of this thesis one key task is to identify the socially and politically embedded nature of a changing mode of local regulation, as reflected in the process of institutional change. This follows on Storper and Scott’s (1989) argument that the institutions of (flexible or other) production complexes are politically constructed, and that these institutions are not free from ideological or normative underpinnings. As they have argued, the *politics of place* plays an important part in the particular shape that local and regional institutions assume:

“By the politics of place we mean to suggest processes of the formation and appropriation of systems of place-bound norms integral to the functioning of any

locale as a centre of economic and social life. These norms emerge in part from the historical geography of each given place and they are also an object of efforts on the part of various groups and factions to shape them actively to serve their interests” (Storper and Scott 1989, p. 34).

Within the evolving institutional landscape related to the Ottawa technology-oriented complex one could indeed identify a number of important political, normative, and even cultural underpinnings. Importantly, these political foundations have originated from a complex intersection of local entrepreneurs, organisational restructuring, and political norms. In addition, (corporate) cultural stances related to the nature of contemporary competition, technology and entrepreneurial drive—an issue which will resurface a number of times throughout the discussion of the Ottawa case study in this thesis—have also featured rather prominently in narratives and actions related to institutional change, as exemplified by the growing involvement of the NRC in regional affairs, and the social construction of a regional system of innovation.

In the first instance, the OED-NRC Task Force, which was established as a result of these initiative, was co-chaired by Michael Darch, one of the region’s innovation milieu’s most prominent figures and a long-time member of different institutions and partnerships such as the Ottawa Economic Development Corporation and the federally-orchestrated Regional Economic Diversification Opportunities partnership (REDO), and Dr. Clive Willis, NCR’s vice-president for research. Its establishment was motivated in large part by restructuring processes affecting the two key partners. While the NRC was required to re-think its approach to the support of industrial innovation and technological support to firms, as part of a broader review of its mandate during the mid-1990s, the Ottawa Economic Development Corporation suffered a period of considerable instability, reflected in troubled relations with regional council and business associations (interviews with NRC, Industry Canada, regional councillors and OED officials). While examination

of the evolution of OED as an associative institution awaits further discussion in the following section, it may be appropriate to note here that OED's feverish search for new 'strategic tasks' and new institutional partners at the time coincided with a growing discontent among a variety of actors regarding the mandated definition and actual practice of economic governance throughout the Ottawa-Carleton region.

Thus, the partnership between the NRC and OED was grounded in struggles around OED's place within the institutional plethora of the region, in OED's attempt to re-carve itself an appropriate space of economic governance that would prove acceptable to other institutions and power bases, and in NRC's growing recognition that its activities needed to become more relevant to geographically-specific circumstances. As the Action Plan for Innovation stated, it was "part of a co-ordinated effort by OED to extend and strengthen linkages with other agencies and institutions" (OED/NRC Task Force 1995, p. 9). Furthermore, the Action Plan contained subtle hints regarding the organisational restructuring pressures which OED, and to an extent NCR, were undergoing at the time:

"OED [sic] is in a period of transition, with a revitalised mission to unite the public and private sectors in order to promote investment and business growth in the region. At the same time and as part of its new vision, NRC is challenging itself to play a lead role in developing a national innovation system strategy by building on its existing regional networks to link with and assist more firms" (OED/NRC Task Force 1995, p. 9).

In addition, while ideas regarding the importance of networking and collaborative institutional environment have clearly 'infiltrated' the action framework of individuals and agencies, the context of local institutional fragmentation and incoherence throughout the National Capital Region in general, and its flagship high-technology complex in particular, was an issue of considerable political concern at the time, and was referred to rather inaudibly in the Plan's discourse:

"An innovative economy demands systematic approaches and strategies that efficiently mobilise and link powerful combinations of people, capital, resources

and ideas. These resources, links and the resulting entrepreneurial activity constitute a ‘System of Innovation...However, [sic] at present, innovative efforts and support for innovation are divided among a number of industrial, university and government institutions in the region. OCEDCO [now called OED] and NRC have joined forces to begin the process of bringing these elements together through an action plan for accelerating the building of a coherent and powerful innovation system in the region” (OED/NRC 1995, p. 5).

Having said that, it should be recognised that the new institutions of the Ottawa innovative milieu, as exemplified in the creation of such bodies as the Ottawa-Carleton Innovation Forum, aimed at “accelerating the building of a coherent and powerful innovation system in the region” (OED/NRC Task Force 1995, p. 5), were given important discursive support from a variety of sources. These discourses themselves represent a considerable range of understandings regarding the process of institutionalisation; what a regional innovation system actually means in terms of institutional responsibilities, and the role of the state and civil society; and what interests fuel the process of institutional development.

“OED and NRC Task Force members recognise that industrial innovation is largely a local phenomenon, frequently centred on clusters of firms...With the lowering of international barriers, a key factor of international competitive advantage is the quality and accessibility of regional and local financial, intellectual, and technical asset. While local innovation systems are emerging across Canada, the National Capital Region has the potential to lead through examples of firms, universities, government laboratories and programs, banks and financial institutions working together in networks and collaborative activities and through new approaches to encouraging those links” (OED/NRC Task Force 1995, p. 7).

At least discursively, such narratives demonstrate that actors do understand the importance of ‘networking’ and ‘collaboration’ as key concepts around which to build institutional mechanisms of economic governance that would support the NCR as a regional innovation system.

As well, the process of institutional change triggered by the NRC/OED initiative did, in important ways, signify the unwillingness of actors to await (technological and

other) changes passively. Rather, as a member of the Innovation Forum remarked regional pro-activism, induced by key civic entrepreneurs and expressed through institutional change, has reflected a desire to anticipate and even to drive change, to the extent that this is possible:

“Innovation is the art of creating something new or the act of changing that which exists into something different. We live in a world of change...The only question you need to consider seriously is whether you want to be dragged along by change or whether you wish to drive change; do you want to ride the wave or be caught in the undertow?” (Senior executive, high technology firm).

And as another senior high technology firm argued when addressing the Regional Innovation Roundtable, the notion of ‘local embeddedness’ seems to have taken some very material form in the Ottawa region:

“With technology advancements being generated so quickly, no one, not even Nortel, can keep track of all the trends single-handedly. That’s why building relationships with other centres of technical expertise is so crucial to our industry’s future success. Take universities, for example...most companies, including ours, maintain extensive intern and co-op programs that can help identify promising candidates for future full-time employment. Some of these firms—like us—also fund technology-related chairs at universities, and invite professors to spend sabbaticals in a working lab...but I think there’s also a need for local high-tech businesses to form joint ventures and partnerships. These links could supplement the existing relationships, and help promote co-operative technology development and new market access...Other cities [sic] have the same aspirations of high-tech supremacy as we do. If we’re to give the National Capital Region its best chance for future success in this industry, we’ll have to forge stronger links among ourselves” (President of Nortel Technology, addressing the Regional Innovation Forum in April, 1997).

Given those comments, one could cautiously recall Amin’s (1999, p. 373) argument regarding the important role that strategic anticipation through reflexive institutional apparatus could play in regional economic governance:

“Importantly, but rarely addressed by the policy community, the capacity to change lies central in the ability of actor networks to develop an external gaze and sustain a culture of strategic management and co-ordination in order to foster opportunities and secure rapid response. The key factor is the ability to evolve in order to adopt”.

It should also be noted that the Regional Innovation Forum in Ottawa-Carleton, and the strategic plan created by the various institutions involved in economic governance, demonstrated the growing cross-regional and cross-national process of learning which seem to characterise the activities of the region's main actors:

“If we look at some of the best [‘high-tech regions’], like the Silicon Valley in California, Research Triangle in North Carolina, and the Boston Area, perhaps we can get some clue. Silicon Valley was probably the most spontaneous, with the Research Triangle and Boston being driven somewhat more by incentives. In each case, there is located nearby one or more world class universities...For the Ottawa-Carleton region it is perhaps even more important to provide a pool of well-educated technical people to fuel an almost insatiable demand from our high-tech companies...Certainly, the NRC has been great help to [Mitel] in the area of processes related to the manufacture of semiconductors, and I applaud the move of the NRC to be even more responsive to the private sector than it had been in the past” (John Millard, President of Mitel Corporation, addressing the Inaugural Technology Forecast Roundtable, April 1996).

However, without taking the comments quoted above lightly, it is important to identify the normative and political underpinnings that surround the very process of institutional change. These underpinnings have important implications on the representation of interests in and through associative institutions, and on the qualitative character of institutional performance. Thus, for example, one could note that despite the discourses of collective action and associationalism espoused by many within the framework of the Regional Innovation Forum, the overall attitude has remained suspicious towards the role of the state as an active agent within the overall framework of economic governance. Consider, for example, the following (and somewhat contradictory) remarks by a federal government official, who had participated in the Forum's deliberations:

“It is a pleasure to be here in that Government has a key role to play in the economy generally, in high-technology in particular, and in the local high-tech economy most particularly of all. But it is a different role than the one we are accustomed to. The role of Government is evolving from a doer to a facilitator...The type of government Canada needs is leaner, more effective, more flexible and more cost effective government. This new role requires co-operation and support between the Government and local communities” (Marcel Massé

President of the Treasury Board, addressing the Regional Innovation Forum, April 1997).

Even more pronounced was the reaction to the overall apparatus of the Innovation Forum by one of the more important high-technology associations, the Canadian Advanced Technology Association (CATA). Although CATA would have been a natural, and indeed a central institutional partner within the Forum's activities and the other strategies formulated by the NRC and OED, it has chosen to take a very limited role in this experiment. The primary reason, as conveyed by a senior CATA official during an interview was the supposed "heavy hand" of government which was associated with the Innovation Forum, having originated from national and regional state agencies (NRC and OED). Such "heavy" government presence—despite the apparent discursive gestures to 'government as a facilitator' made by state officials (see above quote)—was deemed unacceptable to an institution which has espoused anti-government attitude throughout its existence:

"We did not take a serious part in the NRC initiative, and I can't describe our relationship with OED as very close in any meaningful way...the reason for all of this is they all represent government...The Regional Innovation Forum is government-led, and we're not interested in government involvement. In my mind, any forum which has government in it is useless" (senior official, CATA).

Thus, despite the apparent (and at least partially justified) excitement surrounding the establishment of the Regional Innovation Forum and other federal-regional frameworks for collaboration, and in spite of their contribution to greater dialogue between a variety of institutions, their potential to emerge as sustained associative governance mechanisms might be limited. In the first instance, as discussed above, cracks began to appear in the collaborative framework for dialogue when groups such as CATA and others within the technology-oriented cluster voiced their opinion that government should remain, at best, a minor partner, thus undermining NRC and OED's leadership in the forum. Secondly,



the opposition to state involvement is contradictory because of the central role that government (especially federal research laboratories and agencies) has played in the development of the Ottawa high-technology cluster, and the continued importance of public institutions to the viability of the Ottawa economy in such areas as education and training, and infrastructure.

What the experience of institutional development represents in this particular case is the difficulty associated with developing associative economic governance in political economies in which collaboration is not historically entrenched, and is furthermore undermined by norms and attitudes which militate against bridging state institutions and civil society. The process of institutional change documented here also demonstrates, however, the difficulty in interpreting the evidence coming out of tracing the yet unfinished episode of experimentation with associationalism. To further explore the process of institutional change in the region, the discussion now turns to examining the role of a central regional institution, The Ottawa Economic Development Corporation, within the overall framework of industrial governance in the region.

#### *The Ottawa Economic Development Corporation as an Associative Institution?*

A central regional institution in terms of its explicit associative goals regarding economic governance is the Ottawa Economic Development Corporation. Established originally by the City of Ottawa in 1962 as The Commercial and Industrial Development Corporation (CIDC), its story is in many respects reflective of the development of, and barriers to, associative experiments in the Ottawa-Carleton Region<sup>1</sup>. The history of CIDC/OED is also one which tells the story of the relationship between economic change

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<sup>1</sup> This section draws on material gathered from Ottawa City Council minutes, RMO's Economic Development Committee minutes, and the annual reports of CIDC and OED from 1962 to 1995.

and political dynamics in Ottawa in terms of the profile of private sector involvement in economic governance.

CIDC was born out of a joint initiative of city officials and local firms to attract new business to the region. Its first general manager, who would serve more than 13 years on the job, was John Rook-Green, a former real estate sales person. The first priority of CIDC was to make land available for development purposes through site preparation and servicing, assessment of needs and marketing. However, when the Regional Municipality of Ottawa Carleton was incorporated in 1968, the organisation found itself caught-up in the politics of regionalization. With the process of regional planning in the making, Regional council refused to allow CIDC any industrial development initiatives until its first master plan for land-use was created and approved by the provincial government. Such a delay practically paralysed the operation of CIDC as a land development and selling institution until the early 1970s, much to the dismay of the local real estate industry and the local business community.

Another area of contention emerging in the early 1970s was the relationship of CIDC with NCC, particularly with respect to land development policy. It did not take long for CIDC to find itself at odds with the region's largest landowner at the time, the federal government. NCC land policy had been traditionally based on leasing rather than selling of land to industry. This policy, in CIDC's view, hampered efforts to attract new industry to the region, as firms were reluctant to set operations on leased land, knowing they would not be able to capitalise on the appreciation of land value.

CIDC's focus on the development, servicing and selling of land through the early years of its operation reflected wider issues with the Ottawa-Carleton polity. In particular, such a focus reflected traditional form of urban politics, centred around the issue of land development, and characterised by the relatively privileged position of the

development industry in the urban policy process. CIDC's apparatus as an arms-length institution was therefore clearly not unique, given the propensity of property development issues to constitute a central part in Canadian urban politics, and it was closely reminiscent of a traditional 'growth coalition', expressed in the pattern of private sector interest representation within it, and its rather narrow pre-occupation with land development issues.

However, the first signs that CIDC's role and mandate may be changing came about in the mid-1970s, within a general context of economic recession, but one that had particular implications for the future of the Ottawa economy. In particular, a key issue in the late 1970s was the relocation of some 15,000 federal government employees from Ottawa to Hull, leaving the city centre with a potential office vacancy of four million square feet. This move, politically orchestrated by the federal government to contribute to the economic development of the Quebec part of the NCR, left the business community of Ottawa and the municipal government concerned about the future of the city's downtown. One outcome of that process was the insistent lobbying to transform federal land ownership in downtown Ottawa into subdivided land for redevelopment, and the encouragement of partnership between the federal government and the private sector for redevelopment purposes.

Such circumstances contributed to growing expectations regarding CIDC's ability to bring state actors and private sector capabilities into a more strategic economic function as opposed to the narrow agenda of property development. Therefore, the significant restructuring in the geography of public sector employment in the region served as a catalyst for political and institutional realignment on the Ontario side of the NCR in at least two very significant ways. Firstly, among political and industrial leaders a greater recognition of the necessity to diversify the local economy and to reduce its

dependence on the federal government emerged. This recognition paved the way for both the City of Ottawa and RMOC to seek greater role for themselves in the formation of economic initiatives and in establishing stronger economic development policy capacity through emphasis on diversification and sector-specific initiatives. This, in a sense, preceded and laid the social infrastructure for the next, and in many ways stronger, wave of institutional change which came about in the mid to late 1980s.

Secondly, this economic threat also brought about a greater impetus for change in what might be termed the 'institutional and regulatory milieu' of the Ontario side of the Ottawa region. This saw both the City and the regional government seeking to incorporate the private sector into new, or restructured, institutional arrangements that would foster workable public-private partnership in conjunction with the relaxation of planning controls in order to promote a regeneration process in the city's central core. This was accompanied by attempts, rather unsuccessful, to re-engage local governments in the region in a dialogue regarding the formation of a more coherent regional industrial strategy. The continued traditional rivalry between municipalities in the region meant that such a task could only enjoy modest success. In addition, CIDC re-articulated its goals and mandate to seek greater partnership with the regional industrial community and to solicit industrial activity for the region in a more aggressive way. While the merits of such a strategy to the actual attraction of new businesses remains controversial at best, the emphasis here on institutional realignment and closer public-private partnership seemed to have left a somewhat stronger, if limited, legacy of more pronounced private sector involvement in economic governance via the creation of 'spaces of engagement' in and through a renewed institutional framework. As a local industrial leader commented at the time, when addressing one of CIDC's deliberations:

“You [the Ottawa region] are already a winner. In other regions such organisations [as CIDC] don’t exist or are primitive...This city is in a very envious position” (The Ottawa Citizen, May 4, 1978).

The mobilisation of business interests through CIDC’s activities proved, however, to be problematic and contested. This was primarily an outcome of ill-conceived and battered relationship between CIDC and other business organisations in the region, primarily the Ottawa Board of Trade and chambers of commerce throughout the region. Seeking to establish a greater role in economic governance through increasing private sector support, CIDC progressively enlarged its membership numbers, a process that was met with resentment by other business organisations. By 1978 CIDC had more than 300 members and was able to rival other groups as being the ‘voice of business’ and the champion of economic development in the region. When in 1978 CIDC attempted to establish its leadership in downtown redevelopment policy as a result of the relocation of 15,000 federal employees, it was soon frustrated by the lack of inter-institutional co-operation. This led its chairman to declare that he was appalled by “the self centred reaction of some of the city’s business groups to an appeal for a united effort.” He further claimed that,

“two or three organisations seem more interested in their autonomy than the future of the Ottawa economy...You know the autonomy of business organisations is very jealously guarded and the desire to co-operate has been limited” (Green 1978, p. 30.)

The lack of co-operation, and at times outright rivalry and conflict, between the quantitatively expanding institutional milieu of Ottawa would come during the 1980s and 1990s to epitomise inter-institutional relations in the region. In its most basic form, this inter-institutional conflict would involve competition for (primarily regional) government grants and attention, and for membership. More fundamentally, however, rivalry would represent different territorial power bases, worldviews and interests emanating from the diverging outlooks of distinctive fractions of capital (high technology, downtown

merchants, property development interests and so on). It would also bring to the fore the increasingly politicised nature of economic governance in the Ottawa region against the background of economic restructuring, and the diminishing capacity to generate region-wide system of common industrial agenda and to develop collective 'industrial atmosphere' (Amin and Thrift 1995a, p. 14), an issue which is further examined in the following section.

In addition, during the late 1970s the CIDC stood at the centre of attempts to create a coalition of interests in support of industrial development in the region, again reiterating its primary role as a property development agency. In 1978 this activity peaked with the convening of a seminar on industrial development sponsored by CIDC, and attended by 50 delegates from the "industrial park scene", among them representatives of Minto Construction Ltd., Admiral Engineering and Construction Ltd., the City of Ottawa and the NCC. This represented the approach at the time that industrial development was strongly tied to real-estate/property based regeneration.

However, the development of this purpose-oriented spatial coalition continued to be hampered during the early 1980s by the overall lack of co-ordination between various actors, and especially the lack of co-operation between the regional municipality and local governments in the formation of industrial park policy. The dependency on the local tax base continued to induce local government in the region to view each other as competitors rather than collaborators. In addition, the presence of the NCC in the development game in the region continued to be a source of concern. Not only did NCC's activities present a threat to municipal local autonomy, and met with resentment by them, but the particular regulatory stance of the NCC—insisting that land would be leased rather than sold—added to what was already a confusing and complex regulatory framework for urban development, at least in the eyes of industrial development interests.

As a result of this contested process of coalescence around industrial policy, whatever consensus could be generated was centred on issues which were relatively 'easy sell' to various interests. These included recommendations for greater integration of transportation modes in the region, with a particular emphasis on improvements to the Ottawa Airport, and the construction of a major highway to connect the Ottawa region more directly with Toronto and Montreal. In addition, greater efforts would be directed towards raising the profile of the region in Europe, and the revitalisation of traditional industrial sectors, which had been in decline since the late 1960s.

By the Mid 1980s CIDC and economic development policy in the region has moved away from emphasis on property-based LEDP to a sector-oriented 'bootstrap' approach. This shift reflected increasing dissatisfaction, in the context of the early 1980s recession, with an economic strategy that was based on traditional tools of land development, selling and servicing, but lacked industrial focus. It also reflected a greater realisation of the potential of some of the region's key assets, hitherto overlooked. These assets included first and foremost the federal government's research-oriented institutions such as the NCR and CRC which since the early 1950s served as a basis for spin-offs of high technology and research and development companies, as well as privately owned companies such as Bell Northern Research, Microsystems International Company and Computer Devices. By the early 1980s, a 'second wave' of high technology firms such as Orcatech, Siltronics, Lumonics and Senstar—most of them export oriented and "making significant sales penetration into key markets in the US" (CIDC 1985, p. 10)—has established itself.

The potential to capitalise on the presence of those firms and institutions, and to nurture the development of the high-technology sector and related industries thus became the key priority in CIDC's activities as it attempted to establish closer links to the

region's major research-rich environment, the National Research Council. As an NRC official, Dr. William Coderre, argued at the time:

“We'd love to say that the NRC facilities are used equally across Canada but proximity means so much. There really is easy access, especially in Ottawa-Carleton... We've invested a lot of time and money in the Ottawa-Carleton region and we'd like to provide even more assistance” (CIDC 1983, p. 12-13)

This shift in economic development priorities also found its parallel in a change in personalities within CIDC, and importantly a 'change of guards' with respect to Ottawa's business elites, as the traditional, real estate-related 'movers,' represented by the Board of Trade and emphasising downtown Ottawa as the major economic development priority, were in a sense challenged by a new coalition of technology-related firms, some personalities from Ottawa's educational institutions, and a number of regional council members. This emerging coalition had also a different spatial outlook and tended to emphasise the growth suburbs of Nepean and Kanata at the west-end of the region as the new hotbeds for economic development.

*Expanding the Institutional Network: the Re-emergence of High Technology Actors*

By the mid-1980s, then, a number of structural factors (economic recession, the growth of new technologies, political decentralisation and so on) coincided with local specificities (the presence of particular personalities and civic entrepreneurs from both the public and private sectors, for example) to produce a process of institutional change that would make an important imprint on the region's system of industrial governance. In its most pronounced form, this process led to the development of the Ottawa-Carleton Research Institute (now called the Ottawa Centre for Research and Innovation; OCRI) as a focal site from which to generate 'new' regional identity. Since then, OCRI has been instrumental in projecting the region's success in establishing a thriving technology-



oriented complex, and providing a forum for greater networking between firms, educational institutions and other organisations.

The drive towards the formal establishment of this institution began in 1983, when a few board members of CIDC, a group of university officials from Carleton University, the University of Ottawa and Algonquin College teamed-up with a number of individuals from Ottawa's high technology community, and decided to establish a high technology research institute in the region, focusing primarily on the fields of micro-electronics, communications and computers (interviews with former OCRI officials). From its inception, OCRI rapidly became one of the region's key economic development agencies, having established itself as an important medium for public-private partnership oriented toward the technology sector. Here, and cautiously, the notion of a changing mode of social regulation may be particularly adequate in two senses. First, institutional development in this case reflected a growing perceptive need for local pro-activity in order to solidify Ottawa's place in an emerging so-called 'new' spatial division of labour, in which the region sought to establish itself as a 'recognised' technology complex alongside the likes of Silicon Valley and the Boston district.

Second, and related, the notion here of a pro-active agency, combining resources from the public sector and industry to tackle a potential weakness in the governance of a regional labour market (the lack of 'reflexivity', as defined by particular business interests, in university programmes), is of particular interest. This is because the shortage of adequate skills for particular industrial sectors would be socially constructed by discourses and practices as the key obstacle in the region's quest for a world-wide status as a technology district. As such, the realignment of public and private institutions can be seen, at least partially, as a local regulatory experiment with respect to the

governance of labour markets. As the Dean of Carleton University's commented at the time,

“As we see it our problem is one for the continued health of the whole Ottawa area high-tech operation—what's going to be needed is a lot more industry-university co-operation. [The institute] will give us in one spot the mechanism for the synergy that we need” (CIDC 1983, P. 17).

An important role in institutional change and the emergence of ‘new actors’ was played by ‘story telling’: narratives and discourses emphasising the resilience, entrepreneurial drive and the collaborative nature of the advanced technology sector in Ottawa, and its role in re-defining regional identity:

“The past twelve months have presented new challenges to the region's high technology firms. Small and large firms alike have sailed through rough waters and are now embarking on new ventures and new expansions which will enhance the region's reputation as a world class centre in the coming years” (CIDC 1983, p. 12).

And as the president and general manager of CIDC at the time proclaimed:

“Camaraderie among the high tech industry is a unique feature of Ottawa-Carleton. Importantly, this camaraderie encompasses a community which understands and supports high technology...By working together, the firms here overcome problems and nurture new future success stories” (Marshall 1983, p. 2).

The growth of OCRI as an institutional foci for actors from the Ottawa technology-oriented complex and several key personalities from the region's educational institutions, and was rather impressive and swift. It was also an example of the region's ability to extend its network of existing institutions, since OCRI was, in a sense, “born in CIDC's offices” (interview with former CIDC official). In time, OCRI developed its own identity, both in spatial terms (identified with the region's west-end) and in its substantive-representative terms (echoing the interests of the technology-oriented fraction within the region's business class), and this in turn would lead to some considerable

inter-institutional frictions which are further explored in the following section of this thesis.

By 1993 OCRI has completed its ten years of operation. Throughout those ten years, OCRI has evolved from a two-person operation, largely funded by RMOC, to ‘a significant force within the region’ with 14 staff members (RMOC Report Annual 1993), and mostly financed by its members. In addition, examples of OCRI’s success in ‘thickening’ the institutional network of the Ottawa-Carleton region are numerous, and include:

- **OCRI<sub>net</sub>**, a networking project to connect the major ‘research nodes’ of the region into an integrated fibre optic network, which was established in early 1993, and ‘catapulted the region into the reality of being Telecommunications Valley North’ (OCRI Annual Report, 1993). The development of this project took 3 years and significant volunteer work given OCRI’s limited financial resources.
- **OPCOME/OCRI**. This project saw the establishment of a consortium of the Optical Processing and Computing Consortium of Canada with OCRI. Involving officials and industrial representatives from the local and the federal levels, the consortium’s aim was to provide for a dialogue and collective action between the private and the public sector regarding innovation and commercialisation of technology in optics-related industry in the Ottawa region.
- **OCRI Technology Transfer Centre (TTC)**. In 1993 OCRI completed successfully its lobbying efforts to assigning a senior technology transfer officer to its operation. The main goals of the Centre is to nurture research technology from its ‘birth’ in a university or research institute laboratory into a successful business. The development of the TTC could be interpreted as part of Ottawa-Carleton’s emerging innovation milieu. It initially consisted of ten institutions dedicated to the

advancement of technology opportunities in Ottawa-Carleton in the fields of science and engineering, medicine and pharmacy, and agriculture. Recognising the significant amount of research done in the region (estimated at \$2 billion a year) by federal laboratories, universities and companies with large R&D budgets, the TTC has sought to transfer technology to either newly-set companies, or by licensing technology to existing firms. This institution, in itself a ‘spin-off’ of OCRI, also demonstrates the importance of localised social relations in the innovation process, and the institutional-infrastructure underpinning of a specific spatial pattern of technological development. As a TTC executive argued:

“We’re committed to increase, enhance and improve communication and the ‘hit rate’ of opportunities in a regional context. Our goal is to ensure that as many technologies are being exploited as regionally as possible”.

- **The OCRI Research Management Board (RMB).** The RMB has been part of OCRI since its inception. It acts as reaffirming research direction, acting as a sounding board and an advisory group. In time, the RMB has evolved into a body that acts as a vehicle for the provision of information on OCRI activities to its members. Its board of directors does signify something of a wide-ranged ‘technologically oriented spatial coalition’, with representation from Ottawa’s three major educational institutions, representatives from financial institutions, the CRC, leading information technology firms and Bell Northern Research. The specific role of the RMB is to act as an advisory council to OCRI on strengthening ties with the local research community covered by the OCRI mandate; develop initiatives of direct interest to members; and identify opportunities for joint research among the members.

Thus, throughout the 1990s OCRI has established itself as an important institution in the region via its networking strategy and various networking ‘events’ which have facilitated discussions and forged community identity. In addition, OCRI’s activities could be interpreted as attempting to insert itself as an institution which bridges markets and public institutions in one particular area: the governance of the Ottawa labour market in an attempt to redress the concern of high technology firms regarding skills shortage. Within the framework of this particular venture, the inclusion of some prominent personalities from the universities and colleges in the activities of OCRI and other technology-oriented associations (such as the Ottawa Life Sciences Council; OLSC) was indeed judged by many players to have contributed to the region’s emerging regulatory environment.

Furthermore, there has been a growing sense that institutions such as Carleton University and the University of Ottawa have indeed responded to the cry-out of the technology-oriented ‘social bloc’ regarding the problem of skill shortage in the region, and restructured their academic programmes in a way that would be more in tune with the demands of firms. Interestingly, this growing sense has reflected the success that initiatives such as the Innovation Roundtable have had in putting the technology ‘social bloc’s’ labour market governance agenda on the map, and has been confirmed by players from the private sector and academic institutions:

“In the last few years the private sector has been involved in establishing training initiatives that would correspond to the gaps identified in the regional labour markets...I have seen enormous growth in short courses related to information technologies, and places like the Toronto Schools of Business and The Information Training Institute, their volume of business sky-rocketed...The university level programme—*OVITES*—has been a highly successful model: the universities are happy, the students are happy, and the companies are happy. So certainly, at various levels moving from short courses to year-long courses, there has been reaction and adoption to the labour force requirements (Senior executive, high technology firm, and a senior board member of OED).

“The business community [sic] is right: universities are quite late in the game. Some of the argument of the high tech people is that Ottawa and Carleton universities have got to get their act together, and then [they’ll] be going to put big bucks into them...So it’s absolutely true that the universities in the last little while have reorganised to give higher priority to the needs of firms. Carleton has completely reorganised and they have their focus redefined along Public Affairs and Management, and high-tech and engineering themes, and the whole Public Affairs [programme] is very much oriented to ‘entrepreneurial public sector’ kind of think” (Senior staff member, University of Ottawa).

### *A New ‘Regional Culture’?*

At another level, related to the governance of labour markets, and an important part of the efforts made by institutions such as OCRI and the Ottawa Economic Development Corporation (CIDC’s successor), has been the emphasis on cultural change as a means to creating the appropriate ‘industrial atmosphere’ in the region. Although the concepts of ‘culture’ and ‘cultural change’ in this context of economic governance is perhaps (deliberately?) vaguely defined, it has been widely understood by institutionally-based players in the NCR to include a transition from public-sector ‘mode of thinking’ (on a variety of levels) to an entrepreneurial mind-set, which is allegedly more in line with successful development of a high technology cluster. Although this emphasis on cultural transformation is largely unspecified in terms of how this might contribute to regional economic success, the discourses and practices surrounding this issue may be interesting given recent discussions in economic geography around the role of ‘culture’ in regional economic change (Gertler 1997; Keating 1997).

In the context of this discussion of a changing ‘economic culture’, what this thesis seeks to contribute is a greater understanding of the concrete forms through which ‘culture’ is induced by particular institutions and institutional practices. In part, given the focus of this thesis on the actual experience and *meaning* of institutional development, the discussion intends to somewhat demystify the notion of ‘culture’. It does so by showing how cultures of economies can in fact be orchestrated by a variety of

institutional practices ranging from proactive, and perhaps 'reflexive', actions of certain actors to discourses which help to induce a particular industrial atmosphere.

In this context we can note a number of examples of the structuration of cultural change via experiments which were undertaken throughout the 1990s in the region. In the first instance, both OED and OCRI have undertaken the rather ambitious task of inducing regional cultural change through a proactive approach that included both practices and discourses revolving around the virtues of entrepreneurship, 'self-help', and small firm formation. It should be also noted, however, that such practices and discourses have been politically contested because they were orchestrated during a period of massive restructuring of federal government employment in which there was little constructive dialogue between labour and capital (see below).

It would seem from the outset, therefore, that the overall 'strategic' purpose of economic governance institutions in Ottawa has been directed to image-oriented cultural change. These efforts have been induced by political factors (see below), and have worked simultaneously at two spatial scales. One has aimed at changing the image of the region both in relation to the 'outside world', thus establishing the Ottawa technology oriented complex as a 'legitimate' technology district among others in North America, and placing the region on the map of potential investors. The second spatial sphere of activity with regards to cultural and image-oriented change has been internal: the formation of so called entrepreneurial and dynamic industrial atmosphere which was to replace an 'out-dated' and 'static' mode of public sector-dominated economy. As such, at the most fundamental level, institutional capabilities have been mobilised in Ottawa to create a new regulatory milieu aimed at selling a regional success story to both 'outsiders' (as potential business collaborators) and 'insiders' (in an effort to buy-in

broad consensus as to development goals, the need for specific mechanisms of labour market governance, encourage investment in particular types of infrastructure, etc.).

Consider, for example, the remarks of a senior official at the Ottawa Economic Development Corporation:

“Our key challenge now is still to get the image of Ottawa across as a key region for the advanced technology industry. And you have to put this in a global perspective. First you have to educate people in Ottawa to think along those lines. And you’ve got to let people in the rest of Canada know that Ottawa is no longer simply the ‘capital of Canada’. It is the Advanced Technology Capital of Canada. And then you have to work on getting Ottawa on the radar screen internationally. When we go to the United States, when we go to Asia or to Europe we still have to promote Ottawa, and to get this message across as Canada’s technology capital, not just as our Capital. So that’s a big issue that’s going to be an on-going challenge, because as we compete on the global market we are competing with other cities which have tremendous amount to offer, and they all promote themselves in the same ways.

The economic transition of the region is thus perceived as entailing a cultural change. Certainly, the discourse of policy-makers and business elites involved in economic governance has been one of making a clear distinction between the obsolete ways of public sector-dominated ‘frame of mind’, ostensibly characterised by non-competitive and complacent economic behaviour, and the aggressive-minded and entrepreneurial vigour imperatives of the ‘new economy.’ However, the actual transition towards the perils of the so-called new reality has been problematic. As a former public sector employee, who established a consulting firm, commented:

“One of the questions that are put forward is the difficulty in transition to private sector in that you can’t just take a laid-off public sector worker and put them in the high-tech industry, partly because of the fundamental difference in business culture between the two. One is a hierarchical bureaucratic system as opposed to a much more free reeling and flat hierarchy. So one of the major challenges of the region’s institutions is to support a cultural change in terms of the work environment.”

Further to that, the inducement of an appropriate industrial atmosphere, one that would be in line with the disposition of a ‘science culture’ has been stressed in the apparatus of



OCRI, which established itself as an agent of cultural change via various schemes of labour market governance. The most recent of these initiatives has been its merging with the Ottawa-Carleton Learning Foundation, an agency dedicated to the enhancement of science education. As interviews with OCRI officials revealed, perceptions regarding the nature of a ‘science culture’ and the appropriate ‘frame of mind’ that is required in order to fuel Ottawa’s economic space featured highly in the association’s agenda:

“I consider first and foremost that OCRI is *not* an economic development agency. Economic development is definitely a by-product of what OCRI does. OCRI’s main job is to set the environment: *we are trying to change a government town into a technology centre*. We want people, when they think of Ottawa, to think about the technology industry rather than the government” (senior official 1, OCRI).

“The Japanese, for example, got technology with them all the time, whereas our young people have not been encouraged in that way. As a result, we’re still working in this country on a model that’s a 1960s model. We’re turning out all kinds of social workers and humanities-type people at a time when there’s no market for that. In Ottawa [on the other hand] we’ve got the highest concentration of computers and internets at homes of any city in Canada: *that’s part of a culture*. In other words, the community uses the technology, and young people...what we want is that when they go to school we will train them to work in the *Ottawa environment*...So a very important task, as I see it, is that we are working on a culture. And if you’re going to work on a culture, you have to start right back at kindergarten. So we’re into education way more than any other group in this town” (senior official 2, OCRI).

And as another OCRI official stated:

“What happened in Ottawa in the past was...[we had] this frame of mind that if you grew-up here you’d go into the government, and you’d have a ‘comfy’ job for life, hidden away in the corner, and in thirty-five years you’d get retirement, and oh, what a life...Well, government got too fat and started laying-off people, and all of a sudden all of this security and nonsense that was fed to these young people just was not right...So we built a community on government, and government couldn’t sustain it.”

“It also was a community with a government-backed, functionary-type culture, there was no entrepreneurship in it at all. So you don’t teach that to students. You never tell them about the fact that they can have the freedom to be what they want to be: that they can open their own business; that they can take a project and build a business out of it. So I think that what happened is that we now have a city here, the capital, that we just totally turned around. This is now an exciting place to live. Most capitals are not exciting place to live.”

Furthermore, one could note the efforts made by several institutional actors to marry the culture of (free) enterprise with the culture of networking. As part of these efforts, the role of institutions such as OCRI, OED and the Life Sciences Council in inducing both the virtues of entrepreneurialism and the benefits of collective action should be noted. In such a way, economic governance institutions in the region have established themselves as important mediators between different segments of the industrial community.

Furthermore, these intermediary institutions have had a considerable role to play in soothing the inherent tension between rogue individualism usually associated with the 'cult of enterprise' and the process of collective learning which has been increasingly recognised by actors as instrumental to the region's positioning within a wider political economy:

“At the heart of community building is a new style of civic leadership, which...uses the spirit of enterprise to restore the spirit of community. Civic entrepreneurs are characterised by their entrepreneurial traits as risk takers, and as people of conviction, vision and energy. They are also networkers, educators, facilitators, and catalysts for civic change. They interface between business, government, and society at large and they demonstrated a collaborative style that expresses a philosophy of inclusion and that empowers others to take action. They are a pivotal link between the economy and the community and are often led by technology entrepreneurs who have grasped the connection between collaboration and innovation” (OCRI 1998, p. 1).

Of course, there may be considerable exaggeration in these views on the extent that entrepreneurship and networking have co-existed in Ottawa. Nor is the issue of inclusive economic governance unproblematic. Both of those issues are further outlined in the following section of the thesis, but it may be worth noting in fairness that the institutional development of Ottawa does exhibit some tendency towards patterns of associationalism when we consider, for example, the role of forums such as the Regional Innovation Roundtable, and the Technology Executives Breakfast in “seeking out shared understandings” (OCRI 1998, p. 1).

Another way through which a change in industrial atmosphere has been induced is the organisation of high profile regional economic development conference since the mid-1990s. In particular, a few conferences around the theme of ‘Ottawa the Science City’ organised by some of the region’s key civic entrepreneurs, and to which several noted speakers were invited, have been judged by a range of actors to have contributed to changing the image of the region and to boosting internal confidence in the virtues of entrepreneurialism. In addition, such events were judged to contribute yet another institutional layer through which the virtues of ‘talk’ as a way to solidify community identity and share knowledge was consolidated. As one of the key personalities behind the organisation of Ottawa’s Technopolis Conference revealed the conferences were not only about ‘learning’ at the level of the firm, but also about regional ‘learning’ in a broader sense:

“When I became the president of OED...I said that I wanted this place to be a well-known high-technology cluster...but there was very little information that says: ‘this is what you must have in order to be able to succeed in one of these sectors.’ So I thought if we could pull people like me maybe we could learn something. *It was an attempt to put Ottawa on the map.* We felt that we could get a focus of the world on this conference, and while they were looking on the conference they noticed that Ottawa was quite a powerful high-tech centre. And one of the things that our industry said was that not enough people know of the strength of Ottawa’s high-tech sector.”

As one observer of the ‘Ottawa scene’ at the time commented, however, the agenda of spilling over the interests of the high-technology sector to the overall wealth of the region was not entirely successful:

“One of the hidden agendas in the high technology conference was trying to get the Ottawa-Carleton region to see itself as a high-tech region and to think about how it could develop itself. I don’t think it worked to that extent, and I think one of the conclusions is that the business community has very narrowly constructed its own interests.

In such a way, then, the evidence from the role of institutions in building associative atmosphere throughout different segment of the (economic and otherwise) community, as opposed to one industrial sector, and on region-wide scale, as opposed to the Kanata/west-end technology cluster, is quite mixed. While the historical and path-dependent nature of Ottawa's economic transformation has left an important legacy of associationalism within the industrial milieu of the technology-oriented cluster, the evidence tends to show that associationalism has not diffused substantially to different sectors and different communities throughout the region (see below).

Following on that, cultural change was indeed encouraged by institutions and institutional practices. In this, the role of the state has been instrumental in underwriting an atmosphere of free enterprise/'privatism' and, paradoxically, anti-statism. One of the prime examples of such a process came with the establishment in 1995 of the Regional Economic Diversification Opportunities Programme, a three-year 'partnership' designed to facilitate the region's transformation from a public sector-based economy to one "dominated by private enterprise" (REDO official). Ignoring for the moment the exaggerated nature of such a claim, since the Ottawa economy is still very strongly connected to federal employment, the practices surrounding the establishment and operation of REDO are quite revealing of the considerable obstacles to inclusive associative governance which exist in the region.

REDO was established in 1995 in order to ease the transition of public sector employees to private sector employment after the federal government announced its intention to shed about 20,000 jobs in the region. With complete funding from the federal government (to the tune of \$2.25 million for its three year mandate), REDO was intended to be a partnership between government, private sector representatives and labour. In reality, government played only a minor role—primarily through providing

funding packages for training—while business representatives were chosen in a highly politicised process from a group of well-known supporters of the federal Liberal Party and its deficit-cutting agenda. As a REDO board member revealed,

“the outshoot of that was that the business people supported the agenda of deficit reduction, but they also realised that there would be an impact on Ottawa and requested assistance from the federal government to adjust.”

Within REDO’s activities, particular emphasis was given to ‘education’ regarding the virtues of entrepreneurialism and self-help. As one REDO member argued:

“The idea here is that there is a shift toward small businesses, so we wanted to make people aware of opportunities....and there was a high degree of success in turning public sector employees into entrepreneurs.

In addition, in quite a remarkable fashion, REDO staff actively engaged government workers, in government offices, in discussions regarding the benefits of privatisation and contracting-out of services, despite the fact that such practices would likely end-up in public sector job losses. Even more remarkable was REDO’s effort to convince federal employers to consider the privatisation of their own jobs or units, and how this might affect their job opportunities. On the other hand, REDO board understood its agenda to also include educating private sector firms about the growing opportunities that sub-contracting and privatisation might have for them. In such ways, the spirit of privatisation was actively solidified by a publicly funded, but privately-run, partnership.

However, it was not long before outright conflict erupted between the business-led agenda of REDO and labour representatives (primarily from the Public Sector Alliance of Canada; PSAC) on its board. Blaming REDO for being a meaningless partnership and a “facelift institution” (interview with PSAC officials), PSAC representatives withdrew from participating in it, thus effectively diluting its ‘associative’

stance. A REDO board member was quite explicit in admitting the single mindedness of its agenda:

“All of [the input] came from the private sector. We received the money from HRDC with very few strings attached, and all the decision-making is done by private sector, the same as in the Ottawa Development Corporation.

And as another board member commented the conflicting perspectives of participants in the partnerships, and an atmosphere of mutual suspicion militated against the possibility of associative governance:

“The union people thought, for some reason, that REDO was going to an employment agency...that it was going to find jobs for people. But REDO was not about creating jobs, but creating a *bridge* between different segments of the community. Unfortunately, PSAC is PSAC: I wasn't surprised by their retreat from REDO. In the end, I don't think that government downsizing was that significant, as so the whole experiment was somehow redundant”

However, the notion conveyed by the private sector that government redundancies were not particularly significant was not shared by labour representatives, who viewed the lay-offs of some 20,000 workers in cataclysmic terms. In addition, the reliance of private provision of training as part of REDO's activities was also viewed with great suspicion by PSAC, who argued essentially that REDO provided public funding for private consultants rather than investing in the up-grading of skills. A PSAC member summarised the view of labour on the whole REDO experiment in the following words:

“REDO was supposed to be an 'industrial adjustment committee', and to help in creating jobs. In the end the only jobs it helped to create were the five or six positions of REDO's staff”.

Thus, one of the more explicit attempts to create a community-based associative institution that would combine the different perspectives of government, capital and labour became bogged-down by conflict and mutual distrust. In such a way, neither labour nor the private sector were able to develop a long-lasting network of collaboration

that would last beyond REDO's three year mandate, despite the fact that this was one of the more important goals of the partnership. It could be argued that the role of the state in this instance has been particularly unhelpful in providing institutional support for collaboration. The primary reason for this was that from the outset, the federal government chose a 'hollowed-out' agenda in its operation: it set out an agenda of job redundancies, articulated a discourse of 'industrial adjustment' and 'localism', but chose to underwrite an atmosphere of 'privatise' in which the private sector defined the agenda of REDO and labour interests were expected to fall in line. Under such circumstances, the prospects of developing sustainable associative institutions were not favourable.

Given this context of institutionally-induced cultural change, the thesis now turns to examine more specifically the very experience of associationalism as it has materialised in and through the operation of Ottawa's institutions of economic governance.

### **3. Institutions as Social Capital?**

In what ways can we talk about the institutional plethora of Ottawa as constituting or supporting the formation of 'social capital'? In more specific terms, does the institutional apparatus of 'Silicon Valley North' resemble the 'social economy' model so ardently extolled by the European-based literature, or does it come closer to the well-worn model of pro-growth 'urban regime' or 'growth coalition'?

I would, of course, caution against any simplistic and schematic typology of models and conceptual frameworks. Reality is more complex than theoretical formulations would suggest, and the empirical world only rarely fits-in neatly within any one theoretical construct. What I wish to achieve, however, is an analysis of the particular *experience* with institutional change related to the governance of urban and

regional economies, as exemplified in this case study. The critical tracing of such an experience might provide for an interesting *critical* appraisal of one particular issue which has been neglected in the literature on institutions and industrial governance, namely the actual relationship between institutional *presence* and institutional *performance*. Such a relationship has often been assumed rather than critically scrutinised, resulting in somewhat celebratory undertones regarding the role of institutions and associationalism in regional change. As the discussion that follows reveals, institutions of associative economic governance need to be analysed within a framework that highlights their embeddedness in a wider political and economic context. In addition, their relationship to issues of representation, inclusiveness and civic engagement requires further critical enquiry if we are to achieve a more careful account of economic governance in particular regions. Furthermore, the political and even ideological grounding behind the very process of institutional change and changing institutional strategy requires close attention because the institutional apparatus is not politically or ideologically neutral. Moreover, the geographic foundation of the process of institution-building—in essence the contradictions of ‘economic regionalism’—needs to be highlighted in order to arrive at a better understanding of what regional economic governance actually means.

Regarding the above comments, two issues in particular stand-out in assessing the experience of ‘Silicon Valley North’ with institutional development. These revolve around (1) issues of civic engagement and democratic governance; and (2) institutional strategy, institutional (in)stability and inter-institutional relations.



### ***3.1. Institutions, Civic Engagement and Democratic Economic Governance***

To what extent, then, have the institutions of economic governance in Ottawa been successful in creating a platform for broad civic engagement in discussions on the economic future of the region? A few issues in particular require attention in that regard. In the first instance, we have already mentioned the (somewhat over-exaggerated) rhetoric on the transition of the region from public-sector dominated economy to one dominated by entrepreneurial firms. In essence, this rhetoric has generated considerable excitement about the region's economic future as a 'high technology centre' and contributed to the social construction of the region in an effort to "create a distinct image at home and beyond" (Papadopoulos 1997, p. 14).

Given that rhetoric and given the explicit aim of organisations such as OED and REDO to link together various parts of the community, the involvement of labour interests—particularly those representing federal government employees—in managing the transition might have proved essential for a 'social economy' model to emerge in the region. However, as the REDO experiment demonstrated all too vividly, the gap and mistrust between different elements roughly divided along the labour/capital fault line proved insurmountable. What is important to stress, however, is that the particular way in which associative experiments played themselves out was not 'incidental'. Rather, the approach towards labour of those involved in economic governance institutions was strongly underwritten by local, regional and federal state institutions. Thus, for example, the proliferation of a particular economic governance model in the Ottawa region, one which has been predicated upon a 'partnership' model in which the 'regional' state created a framework for private sector leadership, has been justified in terms of efficiency and flexibility gained by isolating, and in effect *dissociating*, the economic

governance arena from undesired influences. As a senior public official in RMOC claimed:

“I think the minute you get the bureaucracy involved in economic planning, you get a lot of very fine reports, very large staff, very large budgets, and mountains and mountains of interesting studies at very high costs. What you don't get is economic development. It's not like putting band aids on. You can't go out and have an economic development plan and execute it without the private sector. The trouble with the 'government can do everything approach' is that after a while people say "yeah, let them do it." But it fails because everybody is not into it. And they try to argue that public consultation will solve the problem, but public consultation brings a few very small percentage participation out to anything...and they're all interest groups, and to some extent every time there's public consultation you see the same groups of people, and they're not the general run of the public. So public consultation has not been successful because of these limitations”.

And as another prominent member of the Ottawa Life Science Council argued, the involvement of the state in underwriting an *exclusionary* approach to regional economic governance has been critical:

“The major advantage that the partnership model of this region has is that we have the political and bureaucratic support, but at the same time, since our organisations are led by the private sector, we are not hung-up by political debates. It removes it from the body politic that always hampers and creates problems”.

Thus, what has evolved in the Ottawa region is an institutional model in which the approach to labour organisations and labour interests has been informal, at best, and outright exclusionary at worst. Of particular interest might be the construction of such an approach as 'beneficial' to the economic well-being of the regions, precisely *because* of its past association with unionised civil service and the desire of its current industrial leaders to emphasise the non-unionised nature of the high technology sector:

“The sectors that we deal with are not very unionised. The public [unions] side is quite removed, and they don't participate in regional [economic discussions] discussions...They have chosen not to participate in the process, and what we don't want to do is to fan any flames between them and the employers we're dealing with. So there is some interaction but not any open participation. To be honest, our game is growth and if we're doing our job and there is growth then

we're happy. What we're trying to do is explain to them [labour organisations] the nature of current economic change and its impact on the labour market, so they're better prepared" (Senior official, Ottawa Life Sciences Council)

"Labour unions play no role in economic development discussions in the region. Ottawa has, in the private sector, probably the lowest percentage of unionised workers of any major Canadian centre, and that we view as a substantial advantage for the situation. In particular, advanced technology companies don't have unionised labour force. If stronger labour representation means more unionisation, more collective agreements, and more strikes and disruptions then it's not an asset" (Senior official, OCRI).

A second issue surrounding the performance of institutions as vehicles for associationalism came to the fore of the economic development agenda in the mid-1980s in the shape of a debate on the merits of including *community* economic development (CED) in the agenda of institutions such as the Ottawa Economic Development Corporation, and as part of a general concern of a few regional councillors with social justice and inner-city poverty issues. By the early 1990s such concerns were given considerable support from the provincial NDP government. As a former councillor argued "Ottawa was the flagship of the provincial government's agenda, and we had a very prominent CED 'business' going for a while".

However, the abrupt replacement of priorities brought about with the election of the Conservative government in 1995 resulted in the rapid collapse of this provincial-regional partnership initiative, and as a community activist remarked in an interview "the entire CED operation in this community went bankrupt". In response to the crisis of CED in particular and regional social planning in general, a growing number of actors, including community activists, but also public officials and certain business representatives, began to suggest that the Ottawa Economic Development Corporation might be the ideal institutional vehicle for the re-organisation of community-based initiatives.

The beginning of OED's involvement in CED initiatives since 1996 thus presented an opportunity for the economic governance system in Ottawa-Carleton to broaden its 'spaces of engagement' by articulating the perspectives of sectors traditionally not associated with the image of 'Silicon Valley North'. In short, the possible inclusion of community-based approaches to economic planning presented, perhaps for the first time in OED's history, an opportunity to develop a truly (community-wide) associative institution.

However, such proposals met with, at best, cautious responses from OED's leadership, as a CED activist within OED remarked, "it has been one of the greatest battles that we've had to get over the confused and negative perception that the business community had about CED." In particular, despite the opportunity to broaden the community base of its economic strategy, and to move beyond the narrow articulation of business interests, most actors involved in OED viewed the inclusion of so-called 'special interests' with suspicion. In the first instance, the inclusion of a 'social orientation' in the agenda of Ottawa's institutional fabric seemed to contradict the civic-boosterism ethos of key players in the region's system of industrial governance. Secondly, as OED official commented, a feeling of mutual suspicion between different segments of society undermined progress towards an associative model of governance:

"OED was very reluctant to get involved [in CED initiatives]. OED represents the business community. There were certain segments of the business community that did not think we should get involved in such activities. So there was a whole polarisation in that period—the right versus the left, business versus social issues—and the more strident the CED groups became, the more resistant the business community came to listen to this."

And as another senior official at the Ottawa Economic Development Corporation argued, differences as to the *perception* of what community involvement in economic governance

might actually *mean* have been rather considerable, and the problem of *representation* (of communities, interests and perspectives) has become particularly acute:

We're clearly in the CED business, from the vantage point that if you're able to strip your personal prejudice out of the discussion, and who was involved in it...those were normally social activists, predominantly female and in large part minorities and disadvantaged groups, and they were there for an expressed purpose of social cause...and when you walk into the room to have that discussion you bring in a lot of personal prejudice and assumptions that can make the discussion very painful. But when you strip the rhetoric out, they were really individuals and communities aspiring to be in business, who were facing the same problems as individuals, self employed home-based businesses in terms of mentorship, financing, banking, product development and marketing. So OED is [sic] in that business, and we serve those clients through the Entrepreneurship Centre."

At a deeper level, the involvement of OED in community economic development has reflected a growing perception in the region that dealing with 'welfare' and 'social assistance' issues needs to adhere to the imperatives of the regional labour market. In particular, community economic development and regional welfare policy were subject to the increasingly dominant perspective that the treatment of unemployment and social exclusion be done in a way that would support the labour market imperatives of the technology-oriented complex. In such a way, the economic governance institutions of Ottawa-Carleton, and in particular REDO, OED and OCRI, were to address a particular regulatory problem: the perceived mismatch between the demand for particular (technology-oriented) skills and the qualities of labour supply. Such perception was then translated to a strategy of 'selective social assistance' by which regional institutions such as the Entrepreneurship Centre offered selective support for those among the region's unemployed deemed fit to re-enter the active labour market via their 'entrepreneurial potential' or fitness into technology-oriented training schemes.

In addition, training schemes to develop would-be entrepreneurs included in reality subsidised labour for firms via volunteer schemes, because the dependency on

private sector ‘mentorship, advice and support meant that institutions such as OED had to demonstrate that such schemes would be beneficial to participating firms. In such ways, the approach to ‘community’ economic development, rather than taking-on associative character, assumed a selective, enterprise-oriented experiment in labour market governance. The following comment from a OED official is reflective in that regard:

“What we said from the very beginning was that if we were going to put a programme in place that would truly help people that were facing barriers, then we have to do a number of things. And the first thing was to look at the whole population [and determine] who were those who were facing barriers. And there were...key thing that we said from the very beginning, with the help of very knowledgeable people from the business community who agreed to sit on the committee and support the OED work. Second, our strategic objective is to develop a volunteer programme, for two reasons. One reason is that people who cannot get employed find that volunteer work is the only way they can get the first step into the labour force. This is something that gets recognised by the business community, so there was this whole educational component to this.

What we said was that OED can play a role as an economic development corporation in CED work, but it can’t do everything, and it’s role (if it wanted to be effective) was to provide tools and the vehicles that would enable people to get into the labour force, when they’re ready to do it. And I think that this is a critical point that needs to be better understood because often the expectation is that CED will help anybody. The reality is that may have been true ten or twenty years ago...but in the mid-1990s in urban Canada the fact is you can’t afford to do it. You’ve got to be able to take people that can contribute economically. And I think there is an obligation for an institution like ours to make sure that if somebody starts a business they’re capable of doing it, that there is something in place to do it, or if they are quite capable of being employed, if they’re facing a barrier to employment that we become the instigator that would bridge that gap.”

And as a former senior official at the Regional Municipality commented, the state’s role in framing the approach towards civic engagement in economic governance has been instrumental:

“We’ve never forgotten the less successful elements in our society: it’s why the Entrepreneurship Centre would provide the example of winners and provides mentors to people. It’s not capturing a big enough percentage of them. There are an awful lot of them who you wonder whether they are keen to get into it. You can take the horse to the water but you can’t make them drink.”

These remarks thus demonstrate the selectivity in OED's approach to community-based economic development, and points to a very problematic process of transferring 'responsibility' from the state to quasi-voluntary associations with respect to dealing with welfare, training and social assistance. Indeed, as a regional council member admitted, the increasing framing of welfare and social issues as problems of 'private enterprise' and 'entrepreneurial development', along with the effective removal of the politics of economic governance from public debate, have resurfaced as issues of concern, at least in some political quarters:

“Only recently there's been some thinking about linking economic development with broader social issues with OED's recent study on Ottawa's hidden labour force. Any links between, say, the social services department of the regional government, and economic development [institutions] have been weak ones. They are both to blame for that. I think that the view on OED is that it's best to have an organisation that is led by the private sector: 'Our role is to give them money, and it's their role to lead.' And I think that in terms of public accountability for those funds, and in terms of trying to meet broader public objectives, we need a bigger stake in that. I think the way we do that is by exerting an agenda.”

Likewise, another councillor admitted to the relationship between the particular role adopted by the state with respect to economic governance and the institutional characteristics of civic engagement in the process:

“The minimal representation of, say, labour unions or social activists is institutional. That's a direct outflow of the structural composition of the region and its institutions. If economic development policy were being done here [at the regional municipality], then we have a public process here, and those groups know how to participate here. That's not the case, and so instead we have economic development led by an organisation with members, and those members tend to be private sector companies, and as a result it reflects that.”

Thus, the evidence emerging from Ottawa-Carleton as to the potential of institutions and associations to generate meaningful patterns of broad civic engagement in economic governance is somewhat discouraging. Indeed, a fundamental contradiction seems to emerge between the short-term outlook generated by an emphasis on visible 'economic

success' and civic boosterism, and the long-term approach needed in order to engage different segments of civil society in meaningful dialogue regarding the best ways to address economic transition. The following comments illustrate this point effectively:

“I think that there will always be that tension between the need to represent the region in a certain way and the social perspective. It's hard to avoid, particularly in an organisation which is driven by political interests. And there are very strong economic interests driving it, and the economic generator for our regions are those businesses that export. But I think that there is a maturity that's coming to the organisation as well...we're beginning to understand that [economic success] only happens with responsibility. And I don't think for a moment that this particular programme [CED] will ever consume a large portion of OED's budget, but I do think it's going to get more and more focused resources and specialised support. The reality is that we're the only economic development corporation in the region...and the danger is that we will end-up marginalising ourselves from the business community. So you're caught on the horns of the dilemma” (senior official, OED).

These last remarks thus bring into question the success of the Ottawa-Carleton region in creating civil society-wide platform for associative governance. Instead, the picture resembles more the characteristics of pro-growth policy networks, or a loosely structured growth coalition. This, in turn echoes Amin's concern that the institutionalist and associative paradigm might be misinterpreted or misused in such a way as to rationalise an industrial governance system centred around established elites:

“The added challenge for the regions...is to find ways of developing a pluralist and interactive public sphere that draws in both the state and a considerably enlarged sphere of non-state institutions. It would be an error if regional institutional reform became a matter of simply substituting government by the central state with a regional corporatism that relies on a small elite drawn from the regional government offices, local authorities, development agencies, the business leadership, and perhaps even mayors wielding extraordinary powers” (Amin, 1999, p. 373).



### ***3.2. Institutional (in)Stability, Inter-institutional Relations and Barriers to Associative Governance***

A second troublesome element in the institutional composition of the Ottawa-Carleton region relates to the very experience of *institutionalisation* of key interests in the operation of associative organisations. Here, then, a crucial element in associative governance is being assessed, namely the relationship between institutional presence and institutional ‘performance’ in terms of associative behaviour. The task of uncovering the social relations underpinning the institutional support system within the overall framework of economic governance is made important by the fact that most studies using the associative and ‘new-institutionalism’ paradigm seem to assume that the mere appearance of a ‘thick’ institutional plethora provides sufficient evidence for the presence of associative relations. In Cooke and Morgan’s detailed discussion of the governance of regional economies, it is argued that:

“Local development is...conditioned by the governance of inter-firm co-ordination and, the thickness of inter-connections among agents, the existence of Marshallian ‘attractors’ capable of evolving new strategies, and the diffusion of relationships beyond the local or even national markets. Successful industrial districts share a common ‘productive culture’ involving high levels of trust and loyalty and low levels opportunism owing to the existence of social integration or a ‘community market’ (1998, p. 131).

However, what role particular associative institutions actually play in the construction of such ‘collective orders’ and ‘common cultures’ is more difficult to assess. In the previous section of this thesis the actual institutionally-led process (and conscientious project) of cultural change has been discussed in terms of practices and discourses of entrepreneurial culture and, to an extent, ‘anti-public sector frame of mind’. Here, however, the concern is with the actual linkage between associative experiments and associative behaviour.

A number of key issues arise in that regard. In the first instance it should be noted that the institutional map of the Ottawa region is in many ways a reflection of competing business and corporate interests, coupled with significant *territorial* divisions between these interests. As such, one of the key tasks associated with creating a sense of common industrial atmosphere in the region has been to provide for institutional coordination between various actors. Indeed, such a task is not new to the Ottawa polity, as the historical overview of the region and its politics revealed. Rather, the experience of institutions-building and economic regionalism throughout the 1980s and 1990 points to remarkable continuities in terms of split territorial and corporate identities.

Within that context, the attempts to create overall ‘strategic economic directions’ which would reflect broad consensus across a wide range of interests have always had to overcome considerable barriers to associative governance. Thus, for example, while in 1997 the Ottawa Economic Development Corporation published its Strategic Economic Development Action claiming to have embarked on a “partnership model that is enthusiastically supported by the agencies involved in economic development” (OED 1997b, p. 7), and presented its strategy during the celebratory Regional Chair’s Economic Development Conference, there is in fact little evidence to support the claim that it represented long-term coalescence around economic governance.

In that regard, the fate of OED’s economic strategy was somewhat less impressive than its more impressive predecessor, the region’s first multi-stakeholder economic development strategy, known as *Partners for the Future* and developed in 1992. Formulated through a long (and at times politically divisive) process of comprehensive consultations with a wide range of actors, including the universities and community organisations, *Partners for the Future* was indeed an important, if only temporary, ‘institutional moment’ with respect to associative regional economic

governance under the leadership of Regional Chair, Peter Clark. Perhaps most fundamentally, it has established the regional level as the key level of economic development policy-making, coalition building and partnership formation, thus effectively diluting the local economic policy capacity of lower tier municipalities.

Equally important, the process reflected the emergence of regional economic development as a legitimate area for public discourse, in itself quite a novelty for a region hitherto 'immune' to the boom and bust of economic cycles:

"I think what has changed over the past four or five years is the notion that we need to worry about economic development. That's relatively new in this community. So the former regional chair started convening conferences, to talk about what we needed to do. It was also a big issue in the municipal elections in November (1998). So I think what's changed here is that [economic development] is an issue, where probably five years ago and certainly ten years ago it was never an issue, never part of the public debate and dialogue" (Regional councillor).

And as a prominent member of the business community argued:

"I think that there were a lot of people that embraced the document...but I don't think there was ever a consensus in the community about economic development. I think it was a benchmark at the time. I think there's been a number of economic development initiatives in the region that ...if you were charting them they would be landmark pieces, and *Partners for the Future* was one of them."

However, as the remarks above imply, whatever consensus was achieved between partners tended to be rather temporary and inherently unstable. Thus, the achievement of sustained institutional *stability*, or institutional 'fix', in order to allow for inter-institutional associationalism to take root proved quite impalpable. By the mid-1990s the uncooperative relations between different regional institutions and economic development agencies have reached a point of crisis. This, in turn prompted the Regional Municipality of Ottawa-Carleton to conduct a complete review of the Ottawa Economic Development Corporation's mandate, arguing that OED had failed in one of its key mission, namely to provide for an effective forum of cross-organisational, multi-interest

and inter-institutional collaboration. However, the review process amounted to little beyond the well-worn repetitive suggestion that the region should have “one voice” to speak for all economic development interests in the region. As John Pigott, then chair of OED stated at the time:

“There are different roles for each group in Ottawa-Carleton, and we need to emphasise ‘partnership’, and avoid territorial ‘squirmishes.’ The issue of one economic voice is not an easy one, and we cannot allow our time and resources to be wasted searching for an easy answer.”

A particular source of difficulty regarding coalescence and governance has been further exposed during the 1990s when it became clear that Ottawa’s power structure was in a process of transformation, and that the old established downtown business elite, represented by the Ottawa Board of Trade had to give way to ‘new actors’ from the technology-oriented complex.

Although not formally an ‘economic development’ organisation, the Board of Trade (BOT) has played since the 19<sup>th</sup> century an important role in the economic life of Ottawa, primarily through its traditional representation of small businesses such as retailers, as well as more professional service providers such as accounting firms and lawyers. Despite the appearance of the Board of Trade as a regional body, its constituency has traditionally come from downtown Ottawa businesses, and as such one of the main priorities advocated by the BOT has been the on-going challenge of downtown redevelopment. Especially since the 1970s, when the federal government announced the decentralisation of federal employment, thereby impacting the economic fate of downtown Ottawa considerably, the issue of downtown redevelopment has featured on the agenda of both Ottawa City Council and regional government. The general opinion of both merchants and city officials is that revitalisation efforts have so far resulted in modest success, as the urban development dynamics in the past 20 years

has generally favoured suburban commercial and industrial development rather than city centre development. Nevertheless, the BOT has devoted substantial organisational resources towards advocating further downtown regeneration initiatives.

In addition to downtown related issues, the BOT as an economic development agents has undertaken to enhance the 'business climate' in the region through a variety of initiatives such as advocacy, lobbying, position papers and 'good news' network. Perhaps the most prominent initiative in the BOT's economic agenda has been its championing of governance restructuring in Ottawa-Carleton as a way of enhancing the business climate of the region. As the former president of the BOT explained:

"The Board has been leading the charge to streamline our governments in this region. We have presented a model to the Citizens Panel and also presented it to the provincial government and asked them to move forward, just like in Toronto. We believe we should have a one city model and that the rural townships should decide their own destiny...The over-abundance of government institutions in Ottawa-Carleton is a substantial hindrance to conducting business in the region, and a substantial hindrance to attracting business to the region from an international perspective.

At the most fundamental level, this position is based on the assumption that 'less government' means less taxation and more streamlined regulatory procedures, reflecting to some extent the strong position of the property development industry within the BOT.

Importantly, the BOT has placed considerable emphasis throughout the 1990s on advocating for 'proper' economic governance and the appropriate division of labour between the region's complex array of economic development agencies. In particular, the BOT has criticised directly the Ottawa Economic Development Corporation throughout the 1990s for becoming a competing 'business advocacy group' that would endanger the position of the BOT, and indeed threaten the rationale for its existence.

The crystallisation of the conflict between the BOT as representative of traditional business interests and emerging elites from the technology-oriented sector

came in the mid-1990s when OED, until that time dominated by traditional business interests closely linked to the Board of Trade, suffered from instability and crisis. In a context of troubled relationship between the Ottawa Economic Development Corporation and regional council, as well as between different business interests, OED's board of directors decided to dismiss its president, Keith McGruer, himself a prominent figure from the property development industry. His dismissal by the board of directors brought to an emphatic end the privileged position that the real estate industry had within the organisation. The event caused considerable stir in the Ottawa business community and regional politics, and left some of the 'old guard' of Ottawa's business elite bitter and dismayed.

Importantly, then, this event reflected the shifting contours of political powers within Ottawa's business leaderships, representing the relative decline of the Board of Trade, with its traditional allegiance to small downtown businesses and the development industry, and increasing representation of and orientation toward the technology-oriented industry by OED. The resultant conflict between the Board of Trade and the Ottawa-Carleton Economic Development Corporation left many within the 'old guard' of Ottawa's business elite bitter and dismayed. In particular, an oft-heard argument provided by Ottawa's traditional elites has been that OED's insistence to deal with issues related to the 'internal' economy (small business development, venture capital mediation, networking strategies, etc.) was an intrusion on the traditional role of the BOT, and represented considerable and unwarranted deviation from OED's main mandate as an inward investment promotion agency. Consider the following comment from a prominent member of the development industry, who was also a past chair of OED:

"OED is not the strong outfit that they were, in my opinion, three-four years ago. They switched the way they were doing things. When I and the [former president] of the Ottawa Economic Development Corporation were involved there was an agreement that they would work on external marketing and we at the

Board of Trade would work internally. The Board of Trade became weaker, so OED started working both internally and externally, but they weren't working as hard externally anymore. I defy you to walk into an embassy and get information on Ottawa. It's not a joke! That's the job of OED. Walk into Paris or Copenhagen and see if you can get information on Ottawa. OED should be doing that job. Keith [McGruer] was working to that end."

However, the view of traditional power bases within the Ottawa region became rapidly obsolete as the economic governance institutions of the region, particularly OED and OCRI, began to increasingly emphasise *internal* business and entrepreneurial development as one of the cornerstones on the road to re-building the Ottawa region as a reflexive knowledge-based economic entity. A senior official at OED reflected this new, so-called 'strategic' sentiment which seemed to have engulfed the organisation during the late 1990s:

"I'm seeing the world through the perspective of long-term, strategic economic development. Therefore, you would not get an answer from me "well, we need a hotel...or we need to have more accommodation for tourists...." These are issues of business development, but economic development has a broader perspective. So when I speak of economic development it prevails to strategic issues such as 'strategic infrastructure' or the relationship between the business and industrial enterprises of the region and the available work force. Not only in this instant in time, but more importantly, into the future"

And as a former OED official reminisced, the institutional re-calibration of OED and other agencies reflected considerable shift in the understanding of what economic governance *means* and of the institutional infrastructure needed to support this changing understanding:

"At the time [1980s] people would observe that a great deal of the amount of business that we were about was a heavy emphasis on 'industrial' development, if you will, vaguely defined and loosely understood to be the pact of diversification away from government dominance and to economic development as was *then* understood to be 'industrial': manufacturing, advanced manufacturing, and so on. So OED moved from the real estate industrial perspective to a broader and better understanding of the diversification model, primarily focused on the advanced technology sector, and through that the community adopted a change of mission for OED that would focus more on the value and the opportunity in terms of assisting home grown technology companies, as opposed to attracting investment.

It's span-off other organisations like OCRI, which was put in place primarily as a link between secondary educational institutions and the business community, and others like the Ottawa Life Science Council”.

Thus, towards the later part of the 1990s Ottawa Economic Development Corporation has sought to reposition itself as an *animating* agency, aiming to provide the necessary linkages, information base and platform required for an-going dialogue between the region's multiplicity of economic and political communities.

Importantly, within that process, the re-definition and re-positioning of OED as the Ottawa-Carleton Region's key economic development 'animator' and associative vehicle was given high priority:

“The history of OED was that it was very heavily financed and driven from government initiatives, which many economic development organisations in Canada have been. OED was unique in that it was an organisation designed in its by-laws to be a membership organisation. What I want to convey is that in a membership organisation people pay dues to join. This is a construct that is very much like boards of trade, or groups that are related to advocacy. But that advocacy function is not one that is consistent with the broader strategic-wise, over-arching perspective. So we are now in the process of changing that” (senior official, OED).

Indeed, the arrival Brian Barge on the scene in 1996 as the new OED president signified a change in the institution's philosophy, both in terms of its economic development orientation and its strategy towards other actors in the community. According to this new vision, the regional development agency is no longer a business advocacy group, competing with chambers of commerce and other business organisations, but a localised space for civic engagement, an “animator” in charge of creating a 'new milieu', as it were, for constant dialogue between the public and private sectors, and between firms.

This may signify firstly, a desire to find space for OED itself, in light of mounting criticism of its role and effectiveness (as articulated by the Board of Trade, for example). Secondly, it might point to the changing nature of public-private relations in the region. And thirdly, it has pointed to a growing recognition of the potential of institutions such as



OED to contribute to the development of social capital in a particular territorial assemblage. As a senior OED official revealed in an interview, by the late 1990s OED was in the midst of substantial efforts to become a more engaging institution:

“Fundamental to a partnership (as opposed to just membership) is the combining of resources by public and private sectors. So we move from a public organisation, to a partnership. So OED is a public-private partnership, that has, as its main mandate, to consider and develop the long-term strategic economic development perspective.

So in this partnership it's not the charge dues to members, which is the way that the private sector component used to be (and OED itself used to operate that way), but in fact the members of the community—industrial people—come with their knowledge and their money to join, and then move forward.

This is natural, and the reason this is natural is that many years ago there was very little sophistication and knowledge held by the industries, and much of that resided in government. But now, with the industries being much global in nature and knowledgeable as well, it's natural that government would relinquish some of its traditional role and this kind of 'natural' partnerships emerge”.

The re-orientation of OED was thus a result of a growing recognition that the region's space economy has been transformed fundamentally, from a 'single industry town' (the industry being the somewhat paternalistic public sector economy) to one in which the presence of major technology and R&D institutions create new sets of requirements in terms of labour market adjustment, infrastructure provision, and 'soft' institutions (such as 'talk', networking and knowledge-sharing) related to the process of innovation and product development.

Importantly, however, the *recognition* that economic change and institutional transformation are somewhat inter-dependent does not guarantee concomitant practices. In particular, as an associative and partnership organisation, OED has found itself relying on input, and at times leadership, from private sector representative in order to steer its course effectively, firstly as a bridging institution between the market and the state, and secondly to provide it with a working space among the region's extraordinary array of institutions and associations. As Mr. Barge commented, the task of tooling the private

sector into a *meaningful* institutionalisation process in and through OED has suffered from a lack of clarity as to the precise role that potential partners might play, compounded with a legacy of rather ineffective associationalism through the history of OED:

“I think the jury is still out on whether the private sector has become a full partner here. The experience so far has been that the private sector would welcome the model we’re proposing. There is an agreement on the principal of a public-private partnership, but we have not been able to articulate, until now, how an interested private company can in fact make its contribution...So we are moving to a ‘partnership’ model which in our view is the only embodiment of the community” (Brian Barge, interviewed by author).

And as a former OED board member from the private sector revealed, the concept of private sector commitment and involvement in associative-partnership institutions such as OED has been problematic because of a complex combination of ‘anti-statist’ attitude (that is, an almost pre-given negativity towards any institutions associated with ‘government’), and an inherent culture of individualism:

“I think the biggest problem here is that people look at OED and view it as being an arm of regional government. Yes, there is a good side to that: you know it’s going to have an ‘organisation’. But the bad side is people are lazy, and they say: “well, if regional government is running OED, then why do we have to get involved”? I don’t know how to put it exactly...I put it from a point of view of a life style change; I put from the point of view of people having different objectives now...and I noticed here too among the younger lawyers: they’re not as interested in the community as they are in their own practice and their immediate environment”.

Thus, the task of re-constructing OED as a more meaningful partnership during the late 1990s proved rather challenging. In addition to the internal problem facing OED as an associative partnership, it may be useful to ask how successful has been the Ottawa Economic Development Corporation in achieving *inter*-institutional coalescence. As the regional government’s chosen vehicle for the promotion of economic development, and as its role as the generator of networking relations between different segments of the Ottawa economic development community, OED has explicitly aimed at creating a dense

institutional environment. However, these efforts, by and large, did not resonate well with other organisations that had been keen to protect their territorial turfs, their membership profile and their independent viability. Indeed, under circumstances of regional government sponsorship for different organisations, the protection of well-marked and individualised spaces of operation seemed like the logical behavioural course. Consider, for example, the following evaluation of OED by a president of another industrial association:

“They’ve done a good job in bringing people together, but their job should not have been the spirit of that. It’s organisations like ourselves that, for specific strategic development, have to spearhead. Therein lies the difficulty because if they take a leadership role on a project, none of the organisations like ourselves [is going to participate]. They’re going to get criticised because they’re not working on their area of expertise”.

Likewise, a representative of another organisation has commented:

“Part of the problem that OED face is that they’re not an expert in every field, nor should they be, and they have to bring people together in such a way that we’re going to leverage each other. They’re in the economic development game, and we’re in the sectoral game, and it’s a slightly different context.

At the most fundamental level, this reflects the difficulty in reconciling the purpose of institutions with explicit mandate for economic development for the region with institutions that, despite their rhetoric, are committed first and foremost to their supporting firms.

The tension between institutions and associations also reflect the dynamics of Ottawa-Carleton’s changing economic and political geography, namely the growing dichotomy between the traditional downtown business power and the emerging influential technology-oriented community in the region’s west-end, to which OCRI serves as an institutional locus. The divergence between these competing elites is not only geographic or economic, however. The different nature and spheres of activity

associated with each economic community has led to quite different socio-economic visions, particularly related to the role of government and the appropriate policy support which each segment requires. As the president of the BOT commented:

“For a number of years we’ve been lobbying that OED should focus exclusively on external marketing for the region. OED has become a *competitor* with the local chambers of commerce, using government moneys to create membership and organise networking events, and focusing on internal economic development rather than on external economic development. Our believe is that their focus should be on the external economic development, and they should *not* be in the membership and networking business. If they want to do events they should work in partnership with us or the chambers to put events that are related to economic development, but not events that are just social functions.”

The ideological underpinnings of the BOT’s position should not be underestimated. As another prominent member of the BOT quite openly revealed, the criticism of the BOT of the OED are grounded in a neo-liberal view of the appropriate nature of economic governance:

“I would submit to you that OED, although being a public-private partnership, is almost completely financed by the public sector, and therefore dances to the tune of government. I think that the private part of the partnership is mitigated substantially by that dynamic. On the other hand, if you look at models of economic development in the US—the Houston ED Partnership [for example] — where it is completely privately financed, and they only invite government to participate when it is necessary, it seems to be working pretty well, because who know better how to grow the economy than business and business people?”

Thus, the tension between institutions, in this case between OED and the BOT is inherent in a climate of rather low levels of trust between different interests and different fractions of capital. As a result of this cultural mindset, attempts by agencies such as OED to create a framework for networking and stronger associative ties are immediately looked upon with a great deal of suspicion. Consequently, this frustrates efforts to create an overall environment in which associative economic governance is possible. Networking events and associative experiments have been subject to sharp criticism from a variety of sources, originating in both private sector and public sector circles. As the conflict

between the BOT and the OED suggests, most of these criticisms emanate from a desire to protect particular turfs and organisational viability rather than substantive arguments about the merits of networking. Cautiously, then, an interpretation could be forwarded that the overall business culture in the region militates against comprehensive and institutionally-based associative form of economic governance.

Following on that, the representation of interests—economic and territorial—in and through institutions has retained a problematic character in Ottawa. A particular issue of interest in that regard has been the somewhat troubled relationship between OED and the Ottawa Centre for Research and Innovation (OCRI), as a result of the gradual ‘gravitation’ of OED towards associating itself with the high-technology community, and OCRI’s ‘natural’ affiliation with the same economic sector. As a senior OED official explained, the increasing ambition of OED to become associated with the high-technology complex has had important roots in an interpretation regarding which segments of the economic community ‘count’ the most:

“When you have a corporation of a certain size and capacity you obviously have to prioritise your work, doing that as effectively as you can. So we as wealth generators try to...concentrate on those who are viewed by members of our board and staff to have the optimum ‘pay-back’ potential. Those are generally the advanced technology sector and the sub-sets of that: the semi-conductor industry, the multi-media industry, and the life sciences.”

And as a senior official at OCRI revealed, the gravitation of OED during the 1990s towards the technology-oriented complex in terms of economic policy, associative experiments and private sector involvement has not been viewed favourably by OCRI’s officials, despite their understanding of OED’s motives:

“With OED it’s a difficult relationship, and it’s difficult for the both of us. Theirs is an overall mandate for the community, and they get substantial support from the government. Theirs is a different role than ours. And yet, what has happened is because technology has become the industry of the community, we sort of got in their way, and they got in ours.

But the technology industry...they consider us [sic] as their 'hub'...we have very high membership fees—up to \$50,000. So if Nortel, Newbridge and Mitel put this much here, plus money for other projects we run jointly, they tend to look to OCRI, which makes it difficult for OED”.

And as two high-technology executives and OCRI members viewed it, OED's effort to tool the technology-oriented complex and OCRI into meaningful and long term associative experiments were doomed to failure to begin with because of the particular 'nature' (or perhaps corporate culture) of the sector:

“The other side of it is that the technology business is different. First of all, I don't consider that it's the obligation of the technology sector to help with the 'economic development' of the community. We should co-operate, but that's what we and Nortel and Newbridge pay taxes for: we pay taxes to this region to solve the economic development problem. Our role in economic development is to help the [high-technology] companies get bigger and bigger, and when Nortel announced this year that they're hiring 5,000 new employees, and Newbridge announces that they're hiring 2,000, if that isn't economic development, what the hell is?” (High-technology firm executive 1).

“The technology companies believe that if they're successful, the community is successful. So they don't participate in joint things in the same way. So you're going to get people in other organisations that are going to say “the technology people don't put money into the community; they don't support the community”. Well, I bring in \$600,000 a year just in membership, with a budget of \$4.3 million, most of it comes from technology companies. So they don't do it in the same way, but these are the 1990s. We can't keep the 1970s model forever” (High-technology firm executive 2).

Finally, on this issue, an interesting interpretation has been offered as to the *territorial* dimension embedded in the pattern of inter-institutional relations portrayed above. As the 'home' to many of the region's technology-oriented flagships such as Nortel, Newbridge and Corel, the west-end of the Ottawa-Carleton Region, constituting the municipalities of Nepean and Kanata, has grown in political and economic confidence. This has manifested itself most vividly perhaps within the debate regarding the possibility of local government restructuring in the region which ensued in the 1990s and provided for a fascinating window into the time-honoured and somewhat bitter territorial

divisiveness in the region, despite the efforts of OED and other institutions to represent a picture of regional ‘structured coherence’. At the end of the process, by 1999, internal discussions in the regions failed to generate an agreed-upon and ‘voluntary’ restructuring plan, when the City of Ottawa and the Regional Municipality of Ottawa-Carleton constantly advocated a uni-city model (basically amalgamating the entire region into a one-tier municipal government), while the suburban municipalities, mostly Kanata and Nepean bitterly opposed to such a structure, often citing their economic success as evidence for the viability of their political ‘independence’.

While in the winter of 1999 the province of Ontario seemed finally set to impose a ‘uni-city’ model on the region, there were little signs, at the time of writing, that this imposed solution would not result in further bitterness and resentment towards the new structure, especially from the west-end part of the region (Gray and Lewington 1999).

Within this particular political framework, it is interesting to note that territorial divisiveness and perceptions about the geography of economic power in the region have been embedded within the operation and performance of Ottawa-Carleton’s institutional milieu. While this may sound as anecdotal evidence, it is nevertheless something worth considering as *part* of the overall explanation of institutional *dissociation* within the region:

“There’s another angle [to our relationship with OED and other institutions]: I hate going downtown, and it’s not just geographic. There’s a ‘downtown group’, and there’s the ‘technology group.’ When I’m out here [in the west-end of the region] there’s a comfort level among the technology industry where they’re grouped...where they’re in a ‘silo’...But when you go downtown, there’s a ‘downtown feel’...it’s banks, it’s financial institutions, it’s lawyers...and it’s not as comfortable, so you don’t find the technology people participate as much in downtown activity. You won’t find technology people at OED events...you’ll see very few technology people there.

All of our events we hold outside [the city’s core]. We have the Corel Centre [in Kanata] and they [the technology-oriented people] love it. For our technology executives breakfast—at seven o’clock in the morning!—they drive all the way out to the Corel Centre. I tell you, if I held that downtown, we wouldn’t get half as many people” (senior official, OCRI).

And as another OCRI official recalled about the selection of OCRI's site:

“When we examined the current site we thought, “we’re in trouble: nobody was going to come out here.” But here we are on the fourth floor and we’re looking out, and there’s Mitel, and there’s Newbridge, and there’s...this is where we belong! When we go to a nearby restaurant for lunch, nearly everybody that comes in I know. The industry people know us because we’re in the same milieu!”

Thus, the difficulties associated with finding a coherent structure for associationalism in the Ottawa-Carleton Region have encompassed a number of dimensions. The first dimension includes the problems encountered by institutions such as OED (the region’s most explicit associative institution in terms of public-private partnership and a region-wide mandate) in creating a framework for sustainable public-private partnership within its own institutional apparatus. The second set of difficulties have been associated with institutional (in)stability, given the somewhat troubled history of OED. And thirdly, there is the relationship between OED and other institutions, which, as argued here, has been hampered by a complex combination of political, economic and territorial factors that have not been favourable for associative economic governance.

#### **4. Concluding Comments**

By the late 1990s, growing criticism from a variety of sources—local and regional politicians, economic development and industry-specific agencies, and private sector representatives—have caused OED to re-consider its mandate and ‘space’ within the institutional plethora of the Ottawa-Carleton region. In an attempt to defend its very existence in the face of possible abolition by regional government, a change of approach has been taken by OED President, Brian Barge. Essentially, OED was to re-construct its image and viability by focusing on ‘consensus areas’ in which there would be less



potential for criticism and turf wars. The most natural sphere of activity would be that of regional promotion, marketing and inward investment lobbying, and at the same time OED would retreat from *internal* economic governance.

In effect, this would indicate somewhat of a *strategic withdrawal from ambitious associative and reflexive economic governance*. As senior officials in OED rationalised it:

“The orientation is I think shifting back, to where OED historically was, and that is positioning the region internationally; being the common voice, and what I would call ‘the Corporate Message of Ottawa’. We are really the corporate image-keeper in terms of positioning the region. We also get very much into what I would call a very focused, sector-specific approach like the semi-conductor fabrication initiative” (Senior official 1, OED).

“To the extent that there has to be a common theme and a common marketing strategy in positioning for Ottawa globally, that’s clearly our mandate. I think that it’s coming back and being re-iterated that that’s the one area that has always been [the mandate of] OED. That’s based on the whole idea that a greater awareness of our core strengths, especially the technology side, would enhance the ability of Ottawa to attract strategic investment” (Senior official 2, OED)

Such withdrawal from ‘strategic economic governance’, including for example the setting-up of long range goals and the identification of strengths and weaknesses within the regional economy, has been therefore cast by OED officials in terms of ‘natural evolution’ of the regional economy. As the economy matured, the argument goes, it develops a critical mass of firms, skills and other resources, thus lessening the need for internal growth strategy, while increasing the need for external marketing and promotion in order to sell the success story to potential investors.

Such ‘strategic withdrawal’ from economic governance, however, stands in sharp contrast to the need for constant ‘reflexivity’ and learning capabilities which authors such as Storper (1997) and Florida (1995) have identified as critical for continued regional economic success. It also contradicts the idiosyncrasies of ‘institutional thickness’

identified by Amin and Thrift (1995a), among the most prominent of which is the persistent anticipation of economic challenges and the formation of strategic responses to them. Rather, the rationale of OED's latest re-shuffling of priorities seems to resonate from its struggle for survival amidst the regions' multiplicity of actors.

Thus, by the late 1990s it would seem that OED and key actors in the region have come close to abandoning the rather ambitious region-wide and reflexive and associative economic governance which had been on the agenda since the late 1980s. Instead, the need to 'sell the region' has become an obvious target for consensual politics, but it is a rather shallow sphere of activity, where the stakes are relatively low and consensus is bought at a low cost. In areas of more substance, however, the achievement of inter-institutional collaboration has proved more challenging and frustrating, as documented in this chapter.

As documented in this chapter, the evidence regarding the relationship between institutional development and associative governance in Ottawa presents a rather mixed and complex picture. On the one hand, within the technology-oriented complex, the particular path-dependent nature of the industry has entailed important elements of 'collective action' and 'collective orders' emanating from the affinity of important actors with local and federal research institutions. On the other hand, when one broadens the analysis to include *region-wide* relations between different economic actors (and their representative institutions), and between these actors and other segments of civil society, then the evidence points to rather limited associative apparatus. From that perspective, it is perhaps worth to note the remarkable historical continuities in the relationships between institutions, firms and economic governance that have been present in Ottawa. In particular, the problems of coalescence around issues of economic governance, and the (somewhat uneasy) historical relationships between local 'elites' and civil society are

features which remain rather evident in the Ottawa regions of the late 1990s. In that regard, Taylor's historical analysis of the economic and political development of Ottawa remains powerfully relevant:

“If the city could claim to have an image, it was that imposed by the large, corporate-like entities that over-arched the fragmented society. Ottawa was successively a canal town, a timber town, a lumber town, and a federal capital. But these dominating elements—and the image they carried with them—were more artificially ‘stuck on’ the community than the product of its own activity” (Taylor 1986, p. 121).