

# **THE COLLABORATIVE CHALLENGES OF REGIONAL GOVERNANCE:**

---

Innovation, New Social Technologies & Civic Entrepreneurs

By:

**A. Chaiton, T. Dibbits, G. Paquet, J. Roy, C. Wilson**

Subsequently published in Chapter 7 of *Alliances, Cooperative Ventures and The Role Of Government In The Knowledge Based Economy: Policy Issues For Canada And Beyond*, Masao Nakamura, editor, Centre for Japanese Research (KBE Project), University of British Columbia, Vancouver, BC. 2002.

***Centre on Governance, University of Ottawa***

136 Jean-Jacques Lussier, Ottawa, Ontario K1N 6N5

Tel: (613) 562-5800 ext. 4910

Fax: (613) 562- 5350

[www.governance.uottawa.ca](http://www.governance.uottawa.ca)

**TABLE OF CONTENTS**

1. Introduction.....3

2.Regional Learning.....4

    2.1 Collaborative Governance & Regional Learning .....5

    2.2 Governance Innovations .....6

    2.3 Partnerships.....7

3. Regional Learning Processes .....9

4. Comparative Analysis.....14

    4.1 Structure.....14

    4.2 Conduct.....22

    4.3 Performance .....24

5. Lessons Learned .....27

    5.1 Partnership-Based Governance.....27

    5.2 Regional Learning.....29

6. Preliminary Conclusions—Toward a Culture of  
    Collaboration.....32

---

***The Centre on Governance***

The Centre on Governance is an interdisciplinary research and teaching unit at the University of Ottawa, set up to examine the changing patterns of organizational and social coordination. Its main objectives are to construct a framework for analyzing coordination problems and to develop tools and conduct action research to help improve governance structures in need of repair. The Centre strives to raise the awareness of governance issues, to advance the current knowledge and to make new learning available to practitioners in the community.

***Centre on Governance***

## **The Collaborative Challenges of Regional Governance: Civic Entrepreneurs & New Social Technologies**

### **1. Introduction**

This paper presents the results of the first year of a three-year comparative study to examine how different communities – Ottawa, Canada; Glasgow, Scotland; and Silicon Valley, California – address the issue of innovation in a collaborative environment. Given the multiplicity of governance options in a local arena, this paper begins the process of discovery of why some schemes are effective in one location, and unworkable in others. In each case, it was observed that certain portions of what have traditionally been separate roles for public or private organizations were being subsumed under a broader partnership modality.

Regional innovation increasingly requires collective intelligence, encompassing diverse collaborative governance arrangements underpinned by local investments in financial, intellectual, and social capital. From its Latin roots, *com* and *laborare*, collaboration means “to work together”. Collaboration is thus an active social process directed towards common goals. Innovation, the product of new perspectives brought to bear on existing problems, is also a social process. As such it can be enhanced by successful collaboration or diminished by the lack of it.

Understandably, the challenge of regional innovation is inevitably linked to the challenges of distributed governance (how to work together) including, the establishment of shared vision, effective communication, the achievement of common understanding, reliable commitment and trust. Simply put, regional innovation is dependent on local stakeholders’ abilities to construct effective systems of collective learning.

The principal subjects in this study – the Glasgow Education Business Partnership, Joint Venture Silicon Valley and the Ottawa Centre for Research and Innovation – have each been recognized for their achievement in private-public-civic collaboration. The study’s overall methodology has been to first map the players in each region and identify their formal and informal ties, and then to characterize their interactions and processes of social learning.

This paper focuses on the need for mapping the socio-economic context and local governance mechanisms in order to provide a basis for comparison between these three unique regional learning systems. Subsequently, however, the study will present diagnostic tools, benchmarks, and metrics to aid in decision-making and in the evaluation of collaborative initiatives.

Our main objectives in this paper may be summarized as:

- to explore the conceptual theories in good currency that shape the collaborative governance context around regional innovation;

- to present a methodological template for examining the local governance system and its impact on regional innovation;
- to profile the nature of the regions and partnerships under investigation; and
- to compare the results of our initial survey and offer lessons learned and an interpretation of these findings.

## 2.0 Regional Learning

To understand the determinants of ‘*regional learning*’, one must explore the learning dynamics of city-regions. A convincing body of knowledge points to learning as a determinant of industrial competitiveness, of product and process innovation, and of collaborative capacities (Saxenian, 1994). The capacity to learn in a complex system like a region is shaped by a variety of socio-economic factors including history, ideology, power structures, industrial base, and sectoral coordination, as well as the demographic and cultural make-up of the population (de la Mothe and Paquet, 1998).

Saxenian (1994) ascribed the key determinant of regional competitiveness in Silicon Valley to the establishment of a “network system”. A network system, according to Saxenian, is a decentralized industrial system in which production is organized by distributed linkages among specialized firms that compete intensely while simultaneously collaborating in both formal and informal ways with each other and with local institutions like universities.

What matters in these network systems is the combination of competitive and collaborative relationships within the community. In Silicon Valley, the rich social, technical and productive relationships foster entrepreneurship, encourage experimentation, and nourish collective learning. Thus, those elements of the region's infrastructure that promote social, technical and productive interactions are as critical to the success of local firms in their own individual activities. “Innovation stems from the interplay among the different institutions and individuals – firms, laboratories, universities and consumers. The result is a society composed of more network-based governance patterns” (Stoker, 1996).

The network system, creates opportunities for public, private, civic and academic organizations to exchange knowledge in a high trust environment that facilitate mutual learning. The fluidity of the system enables creative people to acquire different perspectives and apply them in an innovative fashion to the problems, opportunities and markets they encounter. Saxenian identified a number of important factors in this exchange process such as the density of communication networks, group affiliations, cooperation between competing companies, fluid organization structuring, mobility of the workforce, local discussion forums, venture capital leadership, collaboration with world-class universities, and international connections. Silicon Valley has excelled in each of these, and as result, has been able to spawn successful start-ups much faster than anywhere else.

*In this new ecology [of local governance] a range of corporate, regional and personal networks will organize the most critical process: generating new knowledge that can be translated into products and services. Durable and dynamic networks are underpinned by reciprocity and mutual trust, which allow members to share information, risks and opportunities with greater ease (Leadbeater, 1999).*

According to many commentators today, competitive advantage lies in the concentrated diversity that is characteristic of city-regions – a diversity, for example, of intellectual capital, business opportunities and social infrastructure. In an argument as old as Alfred Marshall, city-regions can contribute in a unique and significant way to the flexibility, responsiveness and innovation of their local enterprises specifically because they can support high degrees of specialization – specialized labour, specialized knowledge, specialized services, etc.(Capello, 1999).

In exploring how successful governance might be achieved, we have focused on three elements within the three regions: i) the constituents and patterns of ‘regional learning and innovation’; ii) the governance innovations that foster regional learning and socio-economic performance; and iii) the extent to which successful cross-sector partnerships improve regional governance.

## **2.1 Regional Learning & Collaborative Governance**

Traditional approaches to regional innovation have emphasized a limited set of economic development policy instruments linked largely to planning (internal) and promotion (external). While these elements remain significant in what Best (1990) first described as the ‘new competition’, local governance regimes can contribute substantially to the overall innovation process. [Local] "governance, with its bringing together in partnership of governmental and non-governmental forces, makes the simple prescriptions of public administration unsustainable" (Stoker, 1998).

Since, all sectors are increasingly engaged in a variety of multi-stakeholder forums, there exists a growing inter-dependence across public, private, civic and educational spaces. No single organization seems to ‘go it alone’ any more, and consequently both the manner by which cross-sector interactions occur, and the nature of the collective intelligence that emerges from them, become critical determinants of the quality of collaborative action and local innovativeness.

As collective intelligence is applied to collective action, these boundary-crossing relationships evolve into new local rules of engagement, fostering a new division of tasks between local actors. Governments turn to partnerships and networks to mitigate risks associated with complex social problems. In doing so, they relinquish not only public resources but a degree of public control to private and community interests. Business leaders trade time and financial investment in public goods for access to the public and civic levers that can enhance their profitability. Community organizations trade legitimacy and credibility for private and public resources. In essence, the new rules create local markets for the conversion of ‘hard’ community assets into ‘soft’ ones and vice versa. Benefits tend to move from one sector to another by virtue of the value adding contributions of the third.

Some commentators have suggested that these new associative mechanisms appear to be much more capable than traditional public sector models of effectively engaging business, leveraging their resources and commitment, and undertaking collaborative-based projects (Chrislip & Larson, 1994). The convergence of public, private and civic interests satisfactorily encompasses the multiple dimensions of local development strategy (Storper, 1997), associative democracy (Cohen and Rogers, 1995), distributed governance (Paquet, 1997), and the collective governance dimensions of city-regions in an era of globalization (Scott & al., 1999).

These types of collaborative strategies require a redefinition and conceptual expansion of economic development theories in a local public sector context. Despite a growing local empowerment due to either to devolution or to the dumping of responsibility from other levels of government, local governance has typically been slow to respond with synergistic strategies targeted towards common community challenges.

Even the promise of gains from reductions of transaction costs due to proximity have typically failed to persuade local leaders of the need for joint strategies. Traditions of confrontation and the general lack of cooperative competencies, tend to invalidate the key message that good local governance should provide a capacity for integrative local action (Stoker, 1996). Our experience with practitioners in Glasgow, Ottawa and Silicon Valley, however, suggests that broadly based community governance can be achieved although there may not be a common and reproducible template that is universally applicable.

## **2.2 Governance Innovations**

With regard to *governance innovations*, there is a strong tendency to emphasize economic agents, and the ability of firms to collectively innovate through shared learning, an approach best exemplified by Florida's "learning region" (1995). In this market-centric perspective, regional innovation amounts to the sum of firm innovation based on inward looking organizational learning and outward looking environmental scanning through a firm's web of private and public community linkages.

However, this view tends to ignore the social innovations that catalyze and sustain diverse members of a community in collaboration, which has the effect of contributing to both the dissemination of knowledge across sectors and industrial clusters, and the creation of new knowledge from the novel perspectives brought to bear. Moore (1996) points to fluid firm boundaries, multi-stakeholder ties and business ecosystems, as a necessary precondition for competitive advantage in the knowledge economy. Peirce (1993) and Ohmae (1995) point to the growing importance of 'citistates' and economic regions that require new forms of local collaboration to offset both globalized businesses and fragmented government.

In most urban areas, the limitations on traditional governance models and the distribution of authority due to the nature of complex local problems demand a new model of leadership

(Henton et al, 2000). Henton suggests a collaborative model of “regional stewardship” to leverage the networking and catalyzing power of civic entrepreneurs<sup>1</sup> to build new forms of synergistic ties (Henton et al, 1997).

### 2.3 Partnerships

In governing such *partnerships*, there exist a variety of schemes that have developed around the world to coordinate partnerships: some relying more on the government initiatives, others leverage the business sector, while still others are rooted in community forces. There are many possible ways of managing these partnerships but we know little about the reasons why some schemes are quite effective in one location and fail to be transferable to another<sup>2</sup>. In our examination of Glasgow, Ottawa and Silicon Valley what drew our attention was not only their success at collaboration but also that they often approached similar issues using dissimilar mechanisms of coordination.

The variety of collaborative schemes also tends to muddy the waters about whether the strength of community ties pre-exists in a region (endogenous) or can be developed (exogenous). While Putnam is pessimistic about the creation of ‘civic community’, Chrislip and Larson suggest that

*“the development of ‘civic community’ ...is an outgrowth of successful collaborative endeavours. When collaboration succeeds, new networks and norms for civic engagement are established and the primary focus of work shifts from parochial interests to the broader concerns of the community. Collaboration...not only achieves results in addressing such substantive issues as education, health, and children’s services; it also builds ‘civic community’”* (Chrislip & Larson, 1994).

As the emphasis on partnerships drives concertation, the cultural dimension augments the importance of a socio-economic capacity to collaborate. Putnam and Fukuyama both underscore how culture is at the nexus between *glocalization* and community on the one hand, and the central importance of collaborative ties on the other. The so-called ‘new competition’ therefore emerges as a simultaneous set of competitive and cooperative relations, with the latter complementing the former through its cultures of trust (Best 1990; Sabel 1993; Putnam 1993; Fukuyama 1995).

---

<sup>1</sup> Civic entrepreneurs – “*entrepreneurs who use the spirit of enterprise to re-invigorate the spirit of community*” (Henton, et al, 1997).

<sup>2</sup> Our Ottawa-based partner – the Ottawa Centre for Research and Innovation (OCRI) – illustrates the challenge. On the one hand, OCRI’s organizational success across the Ottawa region suggests that the need for learning partnerships is being recognized and embraced. Yet, there is a lack of conceptual tools both to measure OCRI’s outputs and to guide the selection of their inputs. In addition, many other regions across Canada have asked OCRI for advice on replicating its model of civic entrepreneurship, but OCRI’s lack of conceptual understanding has stymied this potential knowledge transfer.

This socialization of competitive behaviour underscores both the interdependency and connectivity between individual entrepreneurs, sector organizations and local institutions (Kanter, 1995) with new forms of synergistic governance characterizing socio-economic development (Lawson and Lorenz, 1999). However, this British work remains at an early stage and it has yet to be examined in detail in Canada.

Building on the work of Camagni (1991) and the dynamics of the innovation milieu described by Lawson and Lorenz (1999), we suggest that *collective learning* is the product of a region's tacit knowledge flows and its innovative capacity. In other words, regional production and innovation systems are interdependent with regional mechanisms for knowledge management. Our own experience with in Ottawa's technology community suggests that the majority of firm innovation rests on knowledge external to the firm (Roy & Wilson, 1997). Capello makes a similar claim on collective learning as a form of "club good", one that provides shared externalities within the milieu (1999).

This emphasis on interdependence implies that an attempt to explicitly enhance regional innovation will require attention to the governance dimension. The production externalities, innovation dynamics, and civic bonds that are all necessary and components of regional innovation require coordination. However, their coordination is an increasingly complex challenge, "in a world where all tiers of government must increasingly collaborate with one another as well as with non-governmental organizations of various kinds in order to pursue their goals." (Scott, et. al., 1999)

However, inter-dependence does not of itself necessitate cooperation as we know from the 'prisoner's dilemma' (Axlerod, 1984). So why do community organizations collaborate? Because they have to! Because when traditional private, public and civic avenues fail or prove ineffectual in dealing with complex problems, community members tend to "do it themselves", opting for cooperation as a strategy of last resort (Chrislip & Larson, 1994). However, it is not an easy transition to make.

The separate rules, norms and accountabilities in each sector often conflict. When authority is distributed among business leaders, local government, educators, and interest groups – each of whom may lay a valid claim to some degree of authority – their natural conflicts can manifest as "solution gridlock". There are just too many ways to say "no" and too few ways to say "yes" (CCMD, 1996). As such, there is literally "no one in charge". There is no over-arching authority that can command compliance. In such circumstances, collaboration amounts to a form of "no authority" or at least a temporarily delegated authority that competes with no one and permits the group to experiment and "learn their way to a solution" (Chrislip & Larson, 1994)

Accordingly, civic entrepreneurs are seen as central catalysts, both in forging alternative (non market and non state) organizations and shaping local culture in ways that aim to generate civic-based capacities for collaboration across sectors (Henton et al, 1997). Foreshadowing this somewhat the more recent rise of 'civic entrepreneurship' in North America, Johannisson

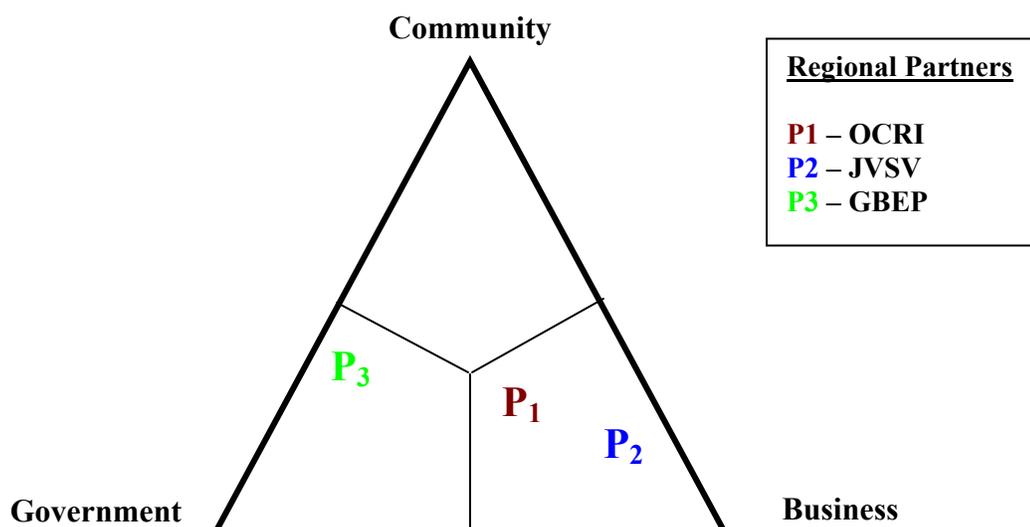
distinguished between the autonomous entrepreneur and the social entrepreneur. Whereas the former considers the community as a means to personal goals, the latter concentrates on the development of community as a primary goal (Johannisson, 1986). Johannisson's regional strategy involved an integrative set of processes and actors that coalesced around the mobilization of local resources through the activities of the social entrepreneur.

The primary asset that these civic or social entrepreneurs mobilize is non-material – it is reputation, credibility, the strength of local identity, and the creativity of community members. Yet they wield these intangible assets like they were financial ones. They are invested according to a business plan and the entrepreneur's sense of what is likely to be most profitable (in an intangible way). Those investments are closely monitored. Ultimately, the investment reaps a return, which is again re-invested. The retained earnings of intangibles buy access to resources - - money, people, and in-kind equipment and services -- even if they may not be directly convertible to currency itself.

### **3. Regional Learning Processes**

The first phase of our research has been premised on the underlying assumption that as partnership practitioners have outpaced existing local governance regimes, often leading in the creation of new ones, little is understood of these regimes beyond that they seem to be producing results. Accordingly, our starting point for phase one has been to complete a mapping of the socio-economic terrain within each of the regions under study. This was accompanied by a more specific delineation of the major players and forces shaping the three principal partnership-based organizations operating in each of the regions.

Using a modified Boulding triangle (1970), we depicted the relative governance orientations among the three regions. The relative positioning of each regional partnership helps to provide a rough depiction of the governance patterns that have evolved in each area. While all three organizations are non-profits, as partnerships they are examples of multi-sector power sharing and as such are expressions of the region's underlying governance. Their differences in engaging resources and attention from the three sectors suggest which sector seems to dominate in each area. The typology below is presented as a characterization of the regional descriptions that follow:



*Ottawa Centre for Research and Innovation (OCRI)* - OCRI was originally created in 1983 as a not-for-profit collaborative research effort among 14 partners including regional government, the region's two universities, two federal government research labs, seven area technology firms, and two real estate firms. It now boasts over 500 corporate members including hundreds of MNE's and dot.com entrepreneurs, four school boards, eleven post-secondary institutions, four major research institutions and several community charities. It also includes over 10,000 individuals who regularly participate in OCRI programs or events. OCRI has become the major conduit for accessing the technology community. Its core competence at collaboration has continually expanded the scope of its partnership activities from research to business services to education to economic and community development to international marketing.

OCRI vision is to bring people, ideas, and technology together to enhance Canada's capital region's globally competitive knowledge economy and superior quality of life. OCRI believes it can achieve this vision by creating and facilitating partnerships that:

- expand and enrich the region's talent pool,
- support innovative research,
- foster quality education and life-long learning, and
- develop effective technological solutions that meet community and individual needs.

OCRI is essentially a project cooperative, in which it leads or participates in a variety of independent programs that receive funding from a range of public and private sources. While a not-for-profit, it invests its reputational assets in much the same way businesses invest financial capital. It is very much a grassroots organization, accepting new projects under its wing only if they advance the interests of OCRI members and the broad interests of the community. Although

50% of its \$400,000 budget was initially provided by regional government (a contribution that is now less than 5%) its major funding now stems from the shared resourcing of collaborative initiatives in the community.

OCRI's programs include a variety regional networking events and seminars directed at industry, collaborative educational initiatives, primary research programs, and the development technological tools for commercialization and education purposes. OCRI is the lead partner in Ottawa's smart community demonstration project "SmartCapital" and the co-ordinator of a regional talent pool initiative.

*Joint Venture: Silicon Valley network (JVSV)* - Joint Venture Silicon Valley was created in 1992 during an economic downturn as an outgrowth of the concern by many high-tech business leaders that "something was wrong with the Valley". Leveraging their both reputations and resources, these leaders, including David Packard of Hewlett-Packard, Ed McCracken of Silicon Graphics, Jim Morgan of Applied Materials, helped shape a collaborative regional strategy aimed at sustaining Silicon Valley's economic vitality. The result was a public, private, and civic partnership model to deal with the cross-jurisdictional problems that were hampering the Valley's growth. A consultative process was embarked upon that produced a regional assessment document, *Blueprint for a 21<sup>st</sup> Century Community*, that provided a basis for community leaders to act in concert. Initially, 13 separate initiatives were begun to address a wide variety of community issues.

The Joint Venture's original mission was "to bring people together from business, government, education, and the community to act on regional issues affecting economic vitality and quality of life". Many of its initiatives ambitiously targeted such issues as the fostering industry clusters, regional government reform, educational reform, social equity and the bridging of the Valley's digital and economic divides, and the incubation of business alliances and joint innovation. Driven by private sector need for continued growth, these leaders were able to put together the coalitions necessary to make the Valley more business friendly while beginning to address some complex social problems.

More recently, after an intense effort to include all regional stakeholders in a decision-making process, Joint Venture's evolved a new mission, embodied in *Silicon Valley 2010*, "to enable all people in Silicon Valley to succeed in the new economy." Joint Venture pioneered what is now referred to as a 'community venture capital' model by raising resources from corporations, foundations, state and federal government authorities and then investing them in initiatives that produced public benefits for the region.

Quick to recognize that the quality of education is essential to business success, Joint Venture made the 21<sup>st</sup> Century Education Initiative one of cornerstone programs. This multifaceted initiative focused on professional development for teachers as well as curriculum development by creating opportunities for connecting teachers with the business community. One of the 21<sup>st</sup> Century's leading programs was Challenge 2000 which raised \$20 million for multimedia

education and received national recognition and was cited as an “exemplary” educational technology program by the US Department of Education.

*Glasgow Education Business Partnership (GEBP)* - The creation of the Glasgow Education Business Partnership stems from Scotland’s ongoing struggle with double-digit unemployment due to industrial decline and a lack of quality education to compensate. It is a jointly funded by the Scottish Enterprise Glasgow, the largest of member of the Scottish Enterprise Network (a Scottish government agency) and the Glasgow City Council. It is also the product of a Scottish policy decision to link public resources with business, education and community partnerships.

The work of the GEBP is critical to ensuring that Glasgow produces young people with the skills required by business. The GEBP is primarily focused on linking primary, secondary and adult education with the business community, to improve student achievement, to equip them for tomorrow’s workforce and to promote lifelong learning. After seven years of existence, the GEBP activities have impacted over 45,000 students and 3,000 businesses. In 1999, GEBP’s achievements were recognized with two prestigious awards -one as the UK’s most supportive EBP and as the recipient of the International Partnership Network’s Global Best Award for excellence in business-education partnerships.

### *Survey*

In addition to conducting regional literature reviews and onsite interviews, our work in Year one made use of an online survey to elicit direct feedback from stakeholders in each of the three communities.

The survey was designed to be exploratory, with a view to uncovering as much as we could about the partnership dynamics of each organization. Thus, we asked a large group of respondents from each region about the nature of the partnership entity under study, the specifics of their relationship (if any) with each organization, and the contribution (if any) to overall regional performance of the activities undertaken by the partnership entity.

A survey population of 7,000+ comprised of individuals from all sectors -- business, public, civic, and education -- was invited by our local partner to contribute to the study. These individuals were established contacts of the partner organizations or local opinion leaders.

Over the course of several months, participants were able to complete the online the survey’s 47 questions, which were broken down in to four parts in a mix of open- and close-ended questions, to allow for qualitative and quantitative data. Part I, *Structure*, examined issues of concern in each region and profiled the participant and their organization. In Part II, *Conduct*, respondents were asked about their your most significant collaborative initiative. Part III, *Performance*, looks at their assessment of that same initiative and Part IV, *Final Thoughts*, sought each participant's opinion on the collaborative process in general.

### *Centre on Governance*

A copy of the survey can be viewed at - <http://www.governance.uottawa.ca/project/splash.htm>

## 4. Comparative Analysis

Based upon the three major components of our survey, this section presents selected results across the three regions under study – reporting, as much as possible from the perspective of local actors and their interactions (or via or outside of our partnership-based organizations).

### 4.1 Structure

#### *Glasgow Education Business Partnership:*

Glasgow, with a population of over 600,000, is declared the largest of Scotland's cities and the heart of Scotland's economy. It is also Scotland's principal commercial centre, producing 15% of Scotland's gross domestic product (GDP), and one of the United Kingdom's main retail and office centres. [www.glasgow.gov.uk]

As a primarily manufacturing industry in the 1980's, Glasgow has experienced a great deal of hardship due to a series of recessions, globalization and technological advance producing unemployment rates of up to 50%. Although many initiatives have successfully battled Glasgow's poor economic performance, unemployment still remains high and well in excess of Scotland's average of 7.1%.

Furthermore, the city faces a situation where employment access is uneven and closely linked with social factors. In some of the city's neighbourhood improvement areas, or Social Inclusion Partnership (SIP) areas as they are referred to, unemployment levels are as high as 15%, compared to a city average of 9%. (GEBP, 2000b)

The situation in Glasgow seems to be turning around. The first impression you receive upon arriving downtown is that of a city "in progress". There is construction (mostly renovation) going on everywhere. Today, Glasgow's economy is primarily supported by the service sector, namely finance, banking, public administration, education, healthcare and tourism.

More recently, growth in the software and the bioscience industries has been encouraged by the Glasgow's higher education system, in which the Universities of Glasgow and Strathclyde rank 2<sup>nd</sup> and 3<sup>rd</sup> highest respectively among all Scottish Universities for investment in research. These sectors also have access to the University of Edinburgh, which is considered a leading

#### **Main Growth Areas for Glasgow:**

<b>Transaction Processing</b> Employment has increased by 26% between 1993-96
<b>Call Centres</b> Glasgow is the leading UK location for call centre activity
<b>Software</b> Between 1993-98 the number of software companies has increased to 300, with aggregate sales turnover increasing by 60% and employment by 250%.
<b>Biosciences and optoelectronics</b> Both sectors are experiencing vigorous growth.
<b>Creative Industries</b> A number of key creative industry sectors are located in the city, including design, TV and media.

[www.glasgowdevelopment.co.uk/Facts/ff-upgrowth.htm](http://www.glasgowdevelopment.co.uk/Facts/ff-upgrowth.htm)

centre for basic information technology research in the UK and ranks as one of the world's top ten research centres in computer science.

In an attempt to deliver public services at the most local level possible, the local government in Scotland operates in a two-tier system (since 1996). The Scottish national authority is a result of the devolution of power from Westminster to Scotland, Wales and the English regions. Scotland has, in turn, granted local governments independence to manage their day-to-day business as they see fit. The central government influences local government policy and programmes only through advice and financial means.

The Labour party, a democratic socialist party, holds the current political power in Scotland. Policies are developed based on a principle of 'collective consciousness', in that society is viewed as a sum of its communities where "power, wealth and opportunity are in the hands of the many, not the few." (Labour Party constitution)

In 1999, Glasgow set its key objectives to "tackle the poverty, social exclusion and poor health experienced by Glasgow's citizens and provide accessible and relevant services to the City's diverse communities through the development of Glasgow as a caring city. This would include partnership working to improve health, to secure high quality care in the community and to ensure children and young people throughout Glasgow have the opportunity, facilities, and services needed for the best possible start in life."<sup>3</sup> This has led to a strong focus on education, and to commitments of resources to the provision of access to the latest technology.

Glasgow's economic prosperity suffers from the poor educational performance of its youth -- almost one third of young people leave school at the end of compulsory education. Of those leaving school, almost 15% leave without any qualifications whatsoever, compared to the Scottish average of 6.6%. Furthermore, the city's school attainment levels are far below the national average. Unemployment among school leavers is 22%. (GEBP, 2000b)

The work of the GEBP has been viewed as critical to improving Glasgow's ability to produce young people with the skills required by business. The GEBP is primarily focused on linking primary, secondary and post-secondary education with the business community, in order to improve student achievement, to equip its young people with the skills for tomorrow's workforce and to promote lifelong learning.

GEBP receives portions of its funding from the Scottish Enterprise Glasgow (SEG) and Glasgow City Council. However, the majority of its resources, financial and in-kind, are obtained on a project by project basis from private corporations. SEG and Glasgow City Council also contribute to the setting of GEBP's strategic direction at the Board of Directors level, comprising seven of thirteen board members. A single college represents the education sector and there are

---

3 [[www.glasgow.gov.uk](http://www.glasgow.gov.uk)]

two representatives from each of the business community and civic community. GEBP itself represents the final member.

GEBP has endeavoured to meet their mandate of transforming the city through improved links between the education environment and the workplace using collaboration to forge sustainable relationships between employers and education. Their collaborative efforts encompass the entire project range from goal and objective setting, to the sharing of responsibilities, evaluation and recognition.

Private corporations appear to participate in the activities of GEBP in a more passive role. With such a strong government support, financial and advisory, GEBP takes care of the work and it is perceived that the business community tends to let things happen, rather than making them happen. In some interviews with private partners, their key benefit from collaborating was public recognition as a socially responsible corporate citizen. This was valued for the access it offered to public decision-makers and public funds but also for the business and marketing opportunities it afforded.

Nonetheless, the private sector is beginning to realize (Dimmock, 1997) some of the internal benefits of community partnerships including positive PR, recruitment, learning from education, motivating staff and access to resources. An external independent survey discovered that 40% of the organizations involved with GEBP experienced widespread organizational benefits, at least 25% more than many organizational approaches (GEBP, 1998).

The leverage gained from their relationship with the SEG (the role of the parent Scottish Enterprise in the Scottish economy is very direct, and highly visible) has allowed the GEBP has resulted in a reputation of effective programs, to a point where they now stand on their own.

#### *Joint Venture Silicon Valley Network:*

Silicon Valley is centered around Santa Clara County and includes portions of San Mateo, Alameda, and Santa Cruz counties. It is home to more than 2.5 million people and more than 7000 technology-based companies. Originally known as the "Prune Capital of America", Silicon Valley has established itself as the technology capital of the world and continues to push forward with over \$9.7 billion USD in venture capital investment in the first six months of the year 2000 (JVSV, 2000b).

The clusters that are driving the Valley's economy are computers/communications, semiconductors, software, bioscience, defence/space, innovation services and professional services. Together these clusters represent 40% of the region's employment. (JVSV, 2000a) Silicon Valley has begun to leverage its historical strength in technology to become the creative core for the Internet industry.

#### *Centre on Governance*

The governance of Silicon Valley's economy has evolved with its economic growth. Doug Henton (1999) characterizes the Valley's evolution through phases of *laissez faire*, business dominance, collaboration and currently networking. The region has developed a vision embodied in the document *Silicon Valley 2010* of what Silicon Valley will look like at the end of the next decade in the areas of productivity and prosperity, natural environment and livability, inclusiveness, and regional stewardship.

The Valley is battling the Digital Divide. According to feedback they received in an extensive consultative process, the Digital Divide is more than connecting individuals to the Internet; it is about connecting individuals and corporations to opportunity in the new economy. The divide is found in regional differences in educational accomplishment, economic gaps, and workforce gaps.

As a result of cooperative efforts by educators, businesses and parents, Silicon Valley has seen improvement in the quality of education over the past few years. The region's high school graduation rate of 75% is now eight points higher than the statewide average. Unfortunately, there is still a great deal of variation by ethnicity, ranging from 95% of Asian students to 57% of Hispanic students (JVSV, 2000a). Silicon Valley leaders are keen on generating rather importing the talent they need to support their growing industries through a strong education system that includes: Stanford University, University of California, Berkeley, California State University, and San Jose State University.

The growth of Silicon Valley has not benefited all residents. The region's average salary is \$53,700 well above the national average of \$33,700. However, there are a number of demographic groups that have been left behind. The top salaries are found in the software industry with an average of \$95,000, while the largest employing industry, local and visitor services, has an average annual wage of \$22,900. (JVSV, 2000a)

A lack of sufficiently qualified local talent forces corporations to recruit outside the region and accrue the additional costs of recruiting and hiring, not to mention lost opportunities. Furthermore, it is estimated that the Bay Area loses at least \$841,000 per day in lost productivity due to traffic congestion, a collective 90,000 hours on any given day. The high level of commuter traffic is related to the high cost of living. Housing prices have skyrocketed to the point where only 37% of the homes are affordable for medium income families. (JVSV, 2000a)

The residents of Silicon Valley have begun to recognize their responsibility for each other. Civic engagement is far above the national average. Eighty-three percent of households in the Silicon Valley region donate to some form of charity compared to 69% nationally. The growth in technology has been paralleled in the civic sector. Nonprofit organizations served 40% more people (up 3.6 million individuals) in 1998 than in 1995.

Despite of its challenges, Silicon Valley is admired by technology based cities around the world, not only for its technical competence but also for its cooperative style of governance. Many

regions are trying to imitate its continued success and adaptability. As the Valley's economy changes in response to new industry focuses, it is likely the community will continue to reshape itself to remain at the forefront of the technological world.

With the creation of Joint Venture in 1992, concerned business and high-tech leaders have developed a regional capacity for collaboration to sustain economic vitality. Despite community scepticism, Joint Venture forged a model of cooperation to identify and to find solutions to problems hindering the advancement of Silicon Valley. The result was the *Blueprint for a 21<sup>st</sup> Century Community*. According to Henton, "we did not want to create another task force. We wanted to move beyond committees to creating active programs. In essence, Joint Venture was a **network of leaders**. It was not a grassroots organization." The current mission of Joint Venture is, "to enable all people in Silicon Valley to succeed in the new economy."<sup>4</sup> Joint Venture initiatives have ambitiously pursued the transformation of the education system, the fight against the vast economic divide that threatens to cripple the region, regional government and policy reform, and the incubation of business alliances and joint innovation.

The partners of Joint Venture opted for collaboration for three reasons:

1. Collaboration yields creative solutions,
2. Collaboration builds commitment to implementing those solutions, and
3. Collaboration allows for decision-making authority where multiple jurisdictions are involved and no single decision making authority exists. (JVSU, 1999)

The economic slowdown in the early 90's caused industry leaders to join together to work towards solutions to common problems. The heavy representation from the private sector has provided the resources and the buy-in necessary to create a successful organization.

Currently, the private sector holds the majority of seats (11) on Joint Venture's board. There are four representatives from the educational sector, 3 from the civic sector and 2 from government.

#### Joint Venture's Original Board

Susan Hammer, Mayor, San Jose  
 James C. Morgan, CEO Applied Materials  
 Barry Boulton, Sierra Club  
 Gary Burke, Santa Clara County Manufacturing Group  
 Winston Chen, Solectron Corporation  
 Lee Cunningham, Assoc. of California School Administrators  
 Yvette Del Prado, Tandem Corporation  
 Tommy Fulcher, Economic & Social Opportunities, Inc.  
 Ron Gonzales, Supervisor, Santa Clara County  
 Tom Hayes, Applied Materials  
 John Kennett, Pizazz Printing  
 Thomas Lewcock, City Manager, City of Sunnyvale  
 Paul Locatelli, Santa Clara University  
 Edward McCracken, Silicon Graphics Computer Systems  
 William Miller, Stanford University  
 Becky Morgan, State Senator, 11th District  
 John Neece, Building & Construction Trades Council  
 Peter Nelson, Pacific Gas & Electric  
 James Norton, American Electronics Association  
 Joe Parisi, Therma  
 Allan Seid, Asian Americans for Community Involvement  
 John Sobrato, Sobrato Development Companies  
 Steve Tedesco, San Jose Metropolitan Chamber of Commerce  
 Barbara Tryon, Mayor, Los Altos Hills  
 John Vasconcellos, State Assembly, 22nd District

4 ([www.jointventure.org](http://www.jointventure.org))

There is top-level involvement in JVSV's activities from the mayor of San Jose to state senators to top officials of Sun Microsystems, Price Waterhouse Coopers, Santa Clara University and many other major organizations. This top level commitment created a strategic focus that has evolved from creating a more business friendly environment to examining the local environment and creating an economy that allows all Silicon Valley citizens to succeed.

The executive level of influence allowed Joint Venture to effectively tackle and reform the region's business policies and regulations. It also enabled a systematic reform of the educational system; Challenge 2000 was not just a few programs designed to assist struggling schools, it endeavoured to bring about the reform of school curricula and the professional development of teachers.

Joint Venture pursued a venture capital model of funding; the money received was considered and investment in the future, creating an environment where achievement of goals and measurable objectives were monitored. As an investment, Joint Venture is accountable to the investors, which is largely comprised of private corporations, surrounding cities and large foundations.

Of late, Joint Venture has begun to change its focus from "developing jobs to developing people". The key to this new direction was an intense effort put forth to ensure the inclusion of all the major stakeholders in the Valley in a visioning process, through public meetings and committee representation, as well as the involvement of regional leaders to secure acceptance and support. Their new three-pronged focus is *education, workforce development, and technology access* with a view to engaging business, government, and civic actors in the region to coordinate their activities with one another so as to obtain maximum leverage with existing resources to achieve 'scale' effects across the region.

#### *Ottawa Centre for Research and Innovation:*

The national capital region is home to more than 1 million Canadians. The region's economy is worth over \$US 20 billion. As the national capital, Ottawa has generally enjoyed economic stability due to its association with the federal government. However, during the past decade Ottawa has experienced a major recession, a significant downsizing of federal public sector institutions and provincial downloading all during a time of increased globalization and competition.

Ottawa's response was to shift from being a government driven town to a centre of advanced technology, experiencing a five-year growth rate of 90% and becoming Canada's R&D capital, responsible for 90% of all Canadian telecommunication's research. The region has grown beyond simply compensating for its financial hardships of the early 90's and is poised for a 16%+ growth over the next 4 years,<sup>5</sup> the highest economic growth rate in Canada.

---

5 [[www.ottawaregion.com](http://www.ottawaregion.com)]

Today, Ottawa has a diverse economic base. Its economic clusters include: life sciences, photonics, telecommunications, professional services, microelectronics, software and tourism. The top employers in the region illustrate this diversity, with telecommunications leaders, federal government, regional governments, educational institutions and school boards, health services and tourism all contributing in major ways to the economy.

This economic success has been fuelled by a highly educated workforce. Twenty-six percent of Ottawa citizens (over 25 years of age) have completed a university degree. This achievement level is the highest among Canadian cities, which currently average 17%. Another 19% have completed a diploma or certificate.<sup>6</sup> The region tends to create its own workforce and commercializes many of its own ideas developed in local educational institutions which include 3 universities, 2 colleges of applied arts and technology, and numerous private colleges and training facilities.

The Geneva based Corporate Resources Group ranked Ottawa sixth in the world in terms of its quality of life. The ranking is based on many factors, including low crime rates, environmental cleanliness, public services, political stability, social and economic conditions. The citizens of Ottawa contribute to the quality of life through personal involvement. Eighty-four percent of Ottawa citizens make financial donations and 34% volunteer their time to charitable and non-profit organizations.

In January 2001, the region of Ottawa, currently consisting of 12 municipalities in a two-tiered governance system, will amalgamate into one city resulting in the restructuring of regional human resources, services and operations into a single-tier system. It is hoped that this regional restructuring will maximize representative accountability and create a city that preserves community identity while simplifying access to cost-effective services. (Shortliffe, 1999)

Ottawa is working to successfully position itself in the global economy. With its growing advanced technology sector, evolving governance structure, and high quality of life, the region has a positive future. Nonetheless, the region is beginning to feel the growing pains of traffic congestion, an expensive housing market and insufficient talent. There is a growing awareness, that failure to address these problems will impact the region's ability to meet its full potential (Ottawa Citizen, 2000) but to do so will require some collective consensus.

The Ottawa Centre for Research and Innovation (OCRI) has positioned itself at the core of region's capacity to generate broad community collaboration. It has evolved from a not-for-profit collaborative research effort to an organization that orchestrates the bringing together of people, ideas and resources to improve the region's talent pool, educational performance, innovation and quality of life.

---

6 [[www.ottawaregion.com](http://www.ottawaregion.com)]

Grassroots involvement drives OCRI's direction and success. OCRI has tended to involve mid-level managers, small businesses leaders, teachers, consultants and service providers, researchers, community activists and local government officials. Its current board consists of 4 representatives from post-secondary institutions, one from the Ottawa District School Board, 11 from technology firms, one from regional government and two from federal government research institutions.

OCRI has flourished as a civic entrepreneur, facilitating cooperation by bringing together people ideas, technology and resources. Instead acquiescing to the style and culture of its original majority partner, the Regional Municipality of Ottawa Carleton, or even to the needs of its business members, it opted for a more supportive inclusive role. The diversity of OCRI stakeholders is unique in the region, ensuring broad commitment ensues from all levels of planning. A central theme of its own corporate culture is that it does not take ownership of initiatives brought its way by enterprising business people or citizens. Yet it has been able to benefit reputation wise from the innovations and programs brought forward by people in the community.

OCRI is unique from both JVSV and GEBP in that it is membership driven. OCRI began with funding from the Regional Municipality of Ottawa Carleton plus membership fees from 14 organizations. Today, support from over 540 members, from large corporations to school boards, research laboratories to individuals, is collaborating to create a new regional infrastructure, new investments in programs and services for the benefit of the community and new opportunity for individuals and organizations. The investments made by a wide range of stakeholders have advanced the community's competitiveness its reputation and its quality of life.

The majority of OCRI's initiatives seem to be focused on enhancing market linkages, by connecting firms with one another, and on developing the region's knowledge infrastructure, by connecting firms with knowledge producing institutions. However, OCRI's program budget (1998) seems to suggest that it was primarily in the business of developing community culture through education related programs -- programs that have encouraged a shift towards a more high-tech, entrepreneurial community. These initiatives accounted for 53% of OCRI's budget, while human resource, professional development, networking and technology diffusion concerns accounted for only 32% of its budget. OCRI's smallest allocations were aimed at traditional R&D (15%) or efforts aimed at anticipating future markets (Wilson, 1999).

Evidence of local recognition of OCRI's success is found in the growing membership base, 400% in over 5 years. More organizations are willing to support the work of OCRI as well as directly participate in the initiatives that occur under its umbrella. Partnership or management opportunities seem so numerous, in fact, that some OCRI stakeholders claim that the organization's goodwill has attracted more opportunities than it can possibly run let alone govern. Over the past decade, OCRI has also been the recipient of a variety of local, national and international awards, including the International Partnership Network's Year 2000 Global Best Award.

## 4.2 Conduct

At the outset, we anticipated that local conditions would have an influence on shaping the dynamics and structure of cooperation in each area. Our research, interviews and supporting survey tend to sustain this view.

The decision by regional organizations to participate in partnership activities seems to be influenced by various perceived urgencies facing their region. Glasgow's immersion in high unemployment seems to drive activities at GEBP in a similar direction. Unemployment was still considered by 85% of the Glasgow survey participants to be the number one concern, a full 10% more than the second place issue of primary and secondary education.

Being a relatively young technology centre, Ottawa tends to be more focused on talent pool issues: attracting talent, retaining talent and post-secondary education. OCRI was the only partnership to rank post-secondary education of greater concern than primary/secondary education. This is interesting given that 45% of Ottawans have a post-secondary degree or diploma.

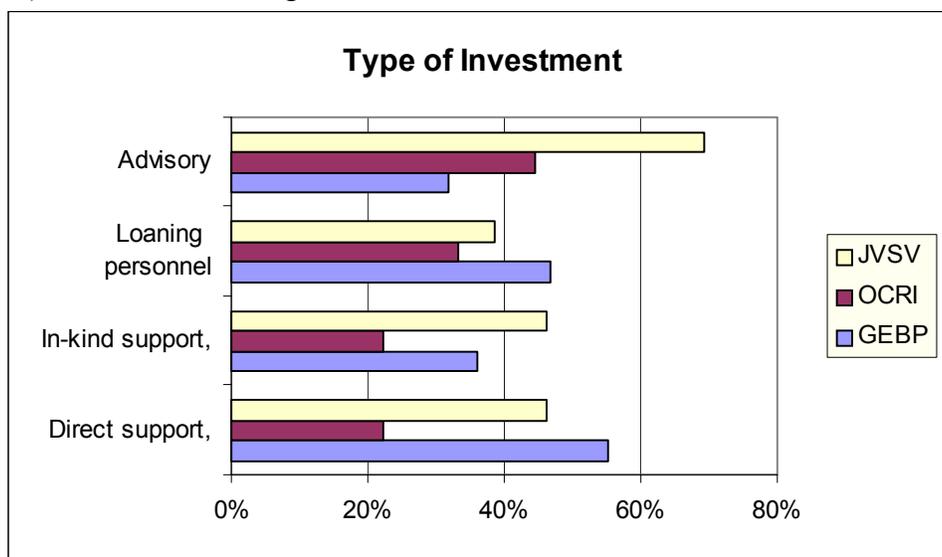
Silicon Valley's mature technology environment has meant that recent 'top of mind' issues have been more about the downside of growth rather than around the promotion of development. As such, JVSV has tended to concentrate on the socio-economic fallout of the valley's growth, dealing with housing, transportation, digital divide and primary and secondary education.

The top six regional concerns as identified by survey participants were:

Ranking	GEBP	OCRI	JVSV
1	Unemployment	Attracting talent	Housing
2	Primary & secondary education	Retaining talent	Primary & secondary education
3	Quality of life	Post-secondary education	Digital Divide
4	Housing	Primary & secondary education	Transportation
5	Post-secondary education	Governmental reform	Retaining talent
6	Entrepreneurial support	Quality of life	Attracting talent

The survey participants were also asked to identify the motivation behind their organizational involvement in collaborative activities within their region. The top three motivations are shown

below. The respondents who were not closely associated with our regional partners (OCRI, GEBP, JVSV) are shown at the right.



Ranking	GEBP			OCRI			JVSV		
			<i>Not-GEBP</i>			<i>Not OCRI</i>			<i>Not JVSV</i>
1	Access to resources,	32%	32%	Innovation,	33%	51%	Access to resources,	53%	20%
2	Innovation,	26%	40%	Access to resources,	29%	40%	Executive interest,	40%	17%
3	Philanthropic reasons,	20%	3%	Executive interest,	21%	23%	Innovation,	33%	41%
				Employee interest,	21%	13%	Employee interest,	33%	7%

Investment in the collaborative initiatives can take on many different forms; financial support, a commitment of organizational time, physical resources, knowledge and problem-solving capabilities. Each region seemed to differ in the types of investment that they would make to

collaboration, not only against each other, but when compared to other collaborative initiatives in their region. From the survey, the greatest contribution of resources from collaborators seemed to be in the form of advice, both for JVSV and for OCRI. Cooperative ventures in Glasgow tended

to receive less in the way of advice and more in terms of tangible resources. However, it should be recalled that JVSV had very high monetary contributions, relatively speaking, suggesting that a few people gave a lot but that for most involved with JVSV advice was the general currency. The majority of the participants volunteer outside of their place of employment no matter the region. However, Silicon Valley leads the way with 89%, Ottawa 81%, and Glasgow 59%. This might suggest that the spirit of volunteerism is stronger in Silicon Valley than in either Ottawa or Glasgow, but more research is necessary here. Nonetheless, the time committed to the Regional Partner (JVSV, GEBP, and OCRI) was often part of an organizational investment rather than purely volunteered. Sixty-nine percent of the Glasgow respondents, for instance, participated in cooperative initiatives on company time. JVSV seemed utilized the greatest amount of personal time with 85% of the participants committing a portion personal time. OCRI followed with 67% allocating some personal time to the partnership.

	GEBP	OCRI	JVSV
<b>Organizational</b>	69%	33%	15%
<b>Personal</b>	20%	11%	8%
<b>Some of each</b>	29%	56%	77%

### 4.3 Performance

The programs implemented by our regional partners range from job shadowing to professional development, to curriculum development to basic research, to policy reform. In addition to the practical targeted objectives of specific initiatives, there also appears to be other ‘spin-off’ benefits from collaboration, particularly knowledge sharing and networking, that are attractive to collaborators. This suggests that there are tangible self-referral benefits from the process of cooperation itself that can enrich the participants learning, contribute to their innovativeness and improve their collective governance. The perceived top three program objectives of local partners were as follows:

GEBP		OCRI		JVSV	
1	Networking	1	Networking	1	Knowledge sharing
2	Knowledge sharing	2	Knowledge sharing	2	Networking
2	Creating awareness	3	Professional development	3	Professional development

3	Training	3	Problem solving	3	Training
---	----------	---	-----------------	---	----------

We also observed that the focus of collaborative activity was decidedly local in nature. Although some respondents in the survey indicated state/provincial or national dimensions to their cooperative activities, the primary concern was local. Less than half of the respondents from Glasgow and Silicon Valley indicated collaboration extended beyond the region to any degree. Given the concerns and objectives that tended to catalyse partnerships, this does not seem unusual. There decidedly more of OCRI's projects that had national and international dimensions, however, the regional level seemed the most important area of interest for it too.

Gray (1989) identified commitment to collaboration as a key element of the sustainability of cooperation, particularly because it reflects the common interests and level of trust among participants. In our own survey, participants expressed high levels of commitment to their projects and to the engagement process epitomized by the regional partner. Their commitment also seemed enhanced by the belief that their collaborative initiatives were helpful in making their region succeed in a knowledge-based economy. Eighty-seven percent of all the participants felt the collaboration was "important" or "very important" to success in the knowledge economy. Respondents also recognized the key role played by our regional partners in facilitating cooperation.

In order to begin to attempt to qualify the importance of each of the three regional partners, the survey participants were asked how the loss of regional partnership organization would affect the region. In response, the Glasgow respondents identified a loss of the link between business and education. Many business-education programs are administratively connected to the GEBP and that coordination would suffer greatly. Others expressed that the region would be adversely affected by such a loss. A sample of some of their comments include that "education and quality of life would suffer tremendously", that "Glasgow would lose one of the only conduits between schools and private sector businesses", and that "pupils would be deprived of opportunities to gain life skills for employment and life."

Ottawa participants suggested that if OCRI ceased to be, the most apparent loss to the region would be the drive towards partnership and the exchange of ideas. They suggested that the region would also lose a capable administrative body to facilitate consensus among competing interests in the area. Several participants pointed to a potential for economic loss. One even claimed, "the company would be off to the US or Europe."

Silicon Valley participants recognized the loss to the region to be the absence of forums to facilitate collaboration and foster networking between schools, businesses, government and the community. The discontinuation of Joint Venture would result, according to some participants, in a descent into fragmented views of the region rather than a coordinated and collaborated vision. Ultimately many opportunities might be lost. Others voiced concern that an advocate for

equity and social justice in education would be lost. Joint Venture was considered not only as an advocate for equity but also a catalyst for many important social and civic innovations.

## **5. Lessons Learned**

The purpose of this section is to sketch out a preliminary interpretation of both the survey findings and our related research across the three regions – and their partnership-based organizations. We begin with a summary of our findings in terms of the emergence of a partnership-based governance. Secondly, we provide an integrative template of social learning to capture the main governance dynamics and collaborative forces that seem to drive a notion of collective intelligence for a city or region today.

### **5.1 Partnership-Based Governance**

What is clear from the results of our ongoing research is that in each of the three regional environments, new governance models are being formed, and these models are increasingly organizational hybrids of private, public and civic interests. There are three main characteristics that seem to characterize these new organizational initiatives: a network and project-driven structure and logic; an emphasis on creativity and organizational looseness; and the pursuit of objectives that emphasize collective performance attributes and indicators not well identified and understood by traditional public sector and private sector based organizations.

The first point, the network and project based logic, supports the notion of civic entrepreneurship, as outlined by Henton and others. Essentially, each of the three organizations under study began with a mix of private and public sector support, and their ongoing presence was by no means assured. To respond to their new challenges, a project-driven emphasis seems to emerge where resources are deployed in new and specific efforts never before pursued within the traditional governance apparatus.

Thus, the organizational structure that results, as the organizations grow by taking on new projects (growth has characterized all three organizations under study), tends to be non-hierarchical and fluid in reaching out to a variety of stakeholders and competencies. The role of the partnership organization becomes a form of brokerage, linking the ideas and skills and energies in a common process that may or may not continue, depending on its success and impacts.

This networking structure is very much tied to the second point, which is the emergence of an organizational culture emphasizing creativity and looseness, flexibility and autonomy (on a project or initiative basis). Our findings, indicate, however, that much like private sector organizations that experience growing pains as they shift from an early entrepreneurial phase into a growth and expansion mode, so too are regional partnerships likely to face change and pressures to adapt. The new competencies and skills required by an increasingly complex organization must be combined in a way that preserves the mission and culture of why the organization began.

This mission, and its corresponding culture often seem to reflect non-traditional goals and objectives in areas not well served by traditional governance models. Fostering social capital, improving quality of life, enhancing technology-based learning and education are often rhetorical based programs of governments, often supported by industry in general terms, but the unique aspect of these partnership organizations is their drive to realize practical improvements in these areas. Moreover, realizing such improvements constitute, for the most part, uncharted waters in terms of defining and measuring progress, and so the challenge is to build support and demonstrate support along the way.

This process of creating and sustaining new networks requires new forms of leadership that appear to be on display across all three regions, to one degree or another. In our discussions with staff from the partner groups, there was a common theme reported about a new organizational ethic emerging that is either set out or stymied by organizational leadership. The challenge is akin to leading by learning.

In order to facilitate learning, all stakeholders must be prepared to:

- Acknowledge uncertainty
- Explicitly accept and embrace error as a precondition for learning
- Be willing to search wherever for solutions

There appears to be agreement that in the new context of partnership organizations, strong leadership is a must, though it cannot be top-down. It must be part and parcel of a process for discovering new goals, new strategies and new relationships. In each of the areas we studied we heard repeatedly mention of the new capacities necessary for today's leaders, such as:

- “Meaning-making” - Leaders are required to make sense of people's experience by helping them put it in a larger context, by providing a sense of purpose, and building a shared vision among its stakeholders
- Ability to inspire trust and confidence - This is done not by taking ownership and but rather by influencing the community to face its own problems.
- Community building – Once trust has been developed, the leadership will have to nourish relationships between organizations, while skillfully recognizing and resolving conflicts, contradictions, and paradoxes. This requires the capacity to suspend judgement, to stand in the other person's shoes and to question one's own assumptions.

Thus, partnership-based governance models appear to have structural, cultural and leadership elements that come together in new organizational forms. While these general characterizations tell us less about the specific successes and failures of each organization in their struggle to foster new models, it is important to underscore that there are strong signs, common to all three

regional initiatives, that they are in fact part of a shared movement of civic entrepreneurship where old rules do little to guide the new processes emerging.

## 5.2 Regional Learning

The diversity of projects and structures deployed across the three regions seems to nonetheless be accompanied by a common emphasis on learning. Indeed, the single biggest driver of the emergence of this new organizational movement seems tied to the emergence of a knowledge-based economy, and a corresponding emphasis on learning as the basis of innovation and therefore the road to productivity and growth. The challenge is that learning is an omni-present concept that seems to apply simultaneously to individuals, organizations, networks and regions. As such, operationalizing learning, particularly of a collective sort, becomes difficult to do, as we struggle with what precisely is meant by the notion of a learning region or a learning-based system of governance.

From our exploratory research in year one, including in particular the results of the survey, we have come to regard the challenge of regional learning as *effective governance alignment in pursuit of greater collective intelligence*. The governance alignment clearly transcends traditional sectoral and organizational boundaries, and is aided considerably by proximity (i.e. within a localized setting). The learning that results, if it results, will be aided by a variety of economic, social, political and technological tools, but their commonality is to improve the collective intelligence of a shared governance system.

In pursuit of this collective intelligence, we put forward the following template as a preliminary mapping of the main actors and flows that shape the learning region:

### A Template of Regional Learning



*Centre on Governance*

The top component is *Investments*. By investments, we mean the source and types of inputs that drive the regional entity. Our expectation is that the nature of the investments will shape the type of initiatives undertaken by the partnership organization. This relationship will be shaped not only by the investments made, and from whom, but also by the motivations of those participating in processes (characterized as collaborative by the organizations themselves) involving the regional entity.

The central component, and forming the heart of the organizational apparatus of the new partnership organizations, is *Initiatives*. By initiatives, we mean the specific set of projects, programs and processes undertaken and managed by the regional entity under study, as well as the scope of their influence (our expectation is a largely regional scope, but it is a testable notion as well). The set of activities determines the organizational apparatus of the regional entity – and the underlying characteristics of these governance models are (as mentioned above) a primary and direct focus of the survey deployed in year one. The work in year two will spotlight specific initiatives the partners have orchestrated as we identify key levers and develop measurement tools for a multi-stakeholder environment.

Finally, the outcomes of such process are reflected along the bottom the template in *Impacts*. By impacts, we mean the outcomes of the activities undertaken by the regional entity, and evidence of a corresponding value perceived by those organizations and individuals engaged in them, as well as a relationship to the overall collective performance of the region. The sustainable impact of collaboration will only continue to be amplified in the future regions as the survey results revealed the developing the capability to collaborate has been one of the most recognized achievements to date.

From this template and our investigations undertaken to form it, we would summarize the contextual, governance and outcome challenges in three underlying principles:

#### **Guiding Principles**

The **inadequacy principle**: *Collaborative initiatives are driven by needs that cross sector boundaries involving multiple authorities and requiring cooperation among those authorities for adequate resolution.*

The **governance principle**: *The source of the investments in collaborative initiatives shapes the nature of the governance model utilized in collective action.*

**The connoisseurship principle:** *“Learning by doing”. Not only is experience itself the best teacher, but the feedback from collaboration requires frequent and ongoing processing and consideration in order to positively shape regional learning and collective performance.*

The findings discussed in the preceding section demonstrate that despite similarities, each of the three regional initiatives face somewhat unique regional challenges, and there are signs too that performances to date vary as well. One challenge of inter-regional comparison is the recognition that different regions may be at different points in their socio-economic trajectory, and the resulting emphasis will be different as a result. The unique context across each region will, in turn, shape the people and organizations living and operating there.

While all three regions share a common emphasis on the knowledge-based economy and technology-based industries as cornerstones of ongoing expansion, Silicon Valley in California is clearly unique for its tremendous concentration and momentum of such activity. As a result, it is not surprising that JVSV has been the largest of the three regional initiatives both in terms of resources and initiatives. It also appears to be the most advanced in terms of measuring its impacts on collective performance (as supported by its regional index for example). Yet, this claim is not necessarily a positive finding – since to whatever degree they have contributed to the Valley’s growth, JVSV has been tied to serious socio-economic concerns about both the viability and liveability of Silicon Valley.

Thus, of the three JVSV may be viewed as the most reactive, a cooperative response to identifiable regional crises that were beyond the grasp of traditional private and public sector institutions. In recent years, the incentive for collaboration has diminished as the Valley’s economy exploded. In fact some Valley leaders have expressed eagerness for a another big crisis or inflexion point in order to catalyse the next wave of cooperation and move the region to address the long term issues of sustainability.

In comparison, OCRI and GEBP both represent a steady building of cooperative capacity. OCRI’s origins predate by almost a decade the potential employment crisis that may have accompanied the federal government’s downsizing in the mid 1990’s. While GEBP is partly a reactive measure to address chronic unemployment, its institutional links to both national and local governments ensures that cooperation is increasingly routinized and that a proactive capacity is developed. In addition, Ottawa’s rapid expansion over the past five years partly explains the loosening ties between local government and OCRI (and the growing proportion of resources from industry), whereas the seriousness of the transition for Glasgow in relation to immediate unemployment concerns is partly reflected in a more substantial base of government resources driving GEBP.

While all three regional initiatives share an emphasis on education as a critical component of the new economy, it is noteworthy that both Glasgow and Silicon Valley are more firmly engaged

than OCRI with traditional educational school systems in this domain. The skills, training and development focus of OCRI is relatively more linked to alternative governance forums and partnerships. It is also interesting to note that each of the three organizations is currently taking a leadership role to develop co-ordinated educational and learning strategies for their entire region. The emergence of new forms of educational partnerships will be a key focus of our work as we proceed with a set of case studies across each region. These case studies will also go deeper into each regional environment, with a careful consideration of such region-specific variables that explain how the generic template above applies in a particular regional setting.

## 6. Preliminary Conclusions—Toward a Culture of Collaboration

The types of collaborative governance strategies we have discussed (including both players and processes) require a redefinition and expansion of the traditional economic development focus. This point is particularly true within the local jurisdictions where our initial investigations demonstrate those new forms of synergistic mechanisms and new types of concerted action remain poorly understood. The key message is that good local governance should provide a capacity for integrative local action (Stoker, 1996).

To become effective capacity-builders, cities and regions must look to strengthen local components of governance where attention is most warranted. As a key example, the results of our survey and other findings point to various elements of a collaborative culture where the values, identities and forums across different sectors must be joined by both common purpose and collective action. While this cultural notion often remains intangible (like so much of what is valued in the new economy) communities will be increasingly forced to understand these new variables and demonstrate their importance through operational measures or indices. The growing sustainable city movement, across Europe and North America, and similar initiatives closer to home, present a case in point<sup>7</sup>.

A complementary perspective comes from broader considerations of what is deemed to be the *quality of life* factor in a locality which emphasizes not only traditional indicators of industrial output, but also a broader discussion and assessment of what it means to achieve and preserve local prosperity. The “globalization” parameters around this investigation suggest that this type of discussion is increasingly relevant to local governance.

---

<sup>7</sup> A variety of local initiatives, like those in Silicon Valley and Route 128 are emerging in cities such as Seattle and Calgary to gauge quality of life and overall collective performance. In Ontario, the Social Planning Network engaged a variety of local partners to produce similar *report cards* on the quality of life of localities across the province. There remains, however, a real distinction between their focus and the efforts to measure distributive trends linked specifically to industry composition, and a technology emphasis in particular. When one is present without the other, obviously the critical next step is to link the two and integrate the result within local development strategies that must be multi-sector.

There is also a close relationship between the existence of collective capacities and other components of local governance. Despite the lack of jurisdictional control over many planning and budgetary components, the knowledge-based economy requires a network inclusive of public, civic and private organizations that both house and produce human capital - a central input to new socio-economic activity. Again, shared resources and direction are key determinants of local performance through the positive externalities produced from synergistic interactions translating into concrete programs and initiatives.

A necessary strategy for all regions is to find progressive ways to design new governance mechanisms that are capable of leveraging private, public and civic-based contributions into integrative processes for improving the collective intelligence of a region. Yet, new *stakeholders* are required. Governance must involve an expanded engagement in governance by all sectors, and it is still too early in our research to draw conclusions as to which sector should be taking the lead – as new leadership requires new forms of collaboration. We are only just beginning to understand the regional foundations and required mechanisms to harness and deploy these dynamics effectively.

As outlined in our introduction, continuing innovation has become the indispensable tool for continuing growth in the new economy. As revealed in the literature, and confirmed by the survey results, successful collaboration is a necessary element in any knowledge-based economy and we have outlined the investments that have been made to begin that process. The collaborative challenges of regional governance will pre-occupy the work of the *Innovation and Learning* project in its second year. As we delve into the detailed case studies of the three regions, we hope to identify more completely the management of their initiatives as well as the challenge of managing the collaborative process itself.

**References:**

Axlerod, R. (1984), *The Evolution of Cooperation*, Basic Books, New York.

Best, M. (1990), *The New Competition - Institutions of Industrial Restructuring*, Harvard University Press, Boston.

Boulding, K. (1970), *A Primer on Social Dynamics*, New York: The Free Press.

Capello, R. (1999) "Spatial Transfer of Knowledge in High-Technology Milieux: Learning Versus Collective Learning Processes" *Regional Studies*, V.33, No.4 pp. 353-366.

CCMD (1996), "The Toronto Waterfront Regeneration Trust", Report on the Deputy Ministers' Task Force on Service Delivery Models, Case Studies Vol 2, Canadian Centre on Management Development, Ottawa, pp. 231-240.

Chrislip, D. and Larson, C. (1994), *Collaborative Leadership: How Citizens and Civic Leaders Can Make a Difference*, Jossey-Bass, San Francisco.

Cohen, J. and Rogers, J. (Eds.) (1995), "Associations and Democracy", Real Utopias Project V.1, Verso, New York

de la Mothe, J. and Paquet, G. (1998), *Local and Regional Systems of Innovation*, Kluwer Academic Publishers, London.

Dimmock, D. (1997), "Measuring the Added Value to Business", *SCIP News*, Vol 47, pp 15-17.

Florida, R. (1995), "Toward The Learning Region", *Futures*, Vol 27 No 5, pp. 527-536.

Fukuyama, F. (1995), *Trust: The Social Virtues and The Creation of Prosperity*, The Free Press, New York.

Gertler, M.S., Wolfe, D.A., and Garkut, D. (1998), "The Dynamics of Regional Innovation in Ontario", in de la Mothe, J. and Paquet, G. (1998), *Local and Regional Systems of Innovation*, Kluwer Academic Publishers, London.

Glasgow Education Business Partnership (1998), *5 Years On – Celebrating Success and Planning for the Future*, GEBP, Glasgow.

Glasgow Education Business Partnership (2000a), *Annual Report 1999-2000*, GEBP, Glasgow.

Glasgow Education Business Partnership (2000b), *Strategy 2000-2003*, GEBP, Glasgow.

Gray, B.(1989), *Collaborating: Finding Common Ground for Multiparty Problems*: Jossey-Bass, San Francisco.

Henton, D., Melville, J. and Walesh, K. (1997), *Grassroots Leaders for A New Economy*, Jossey-Bass Publishers, San Francisco.

Henton, D., Melville, J., Walesh, K., Nguyen, C., and Parr, J. (2000), *Regional Stewardship: A Commitment to Place*, The Alliance for Regional Stewardship, Palo Alto.

Johannisson, B. (1986), "A Territorial Strategy for Encouraging Entrepreneurship" and (1986) "Local Initiatives in A Negotiated Economy", in E. Bylund and U. Wilberg (Eds.), *Regional Dynamics and Socio-Economic Change - The Experiences and Prospects in the Sparsely populated Areas*, CERUM, Umeå University, Umeå.

Joint Venture: Silicon Valley Network (1995), *The Joint Venture Way: Lessons for Regional Rejuvenation*, JVSVN, San Jose.

JVSV (1996), *Blueprint for Silicon Valley in the 21<sup>st</sup> Century*, JVSVN, San Jose.

JVSV (2000a), *2000 Index of Silicon Valley*, JVSV, San Jose.

JVSV (2000b), *Joint Venture's Internet Cluster Analysis 2000*, JVSV, San Jose.

JVSV (1999), *The Joint Venture Way: Lesson Volume 2*, JVSV, San Jose.

Lawson, C. and Lorenz, E. (1999), "Collective Learning, Tacit Knowledge and Regional Innovation Capacity", *Regional Studies*, Vol 33 No 4, pp. 305-318.

Leadbeater, C. (1999), *Living on Thin Air: The New Economy*, Viking, London.

Moore, J. F. (1996), "The Death of Competition - Leadership and Strategy", in *The Age of Business Ecosystems*, HarperCollins, New York.

Moss Kanter, R. (1995), *World Class - Thriving Locally in The Global Economy*, Simon and Schuster, New York.

Ohmae, K. (1995) *The End of the Nation State: The Rise of Regional Economies*, The Free Press, Toronto.

Ottawa Citizen (2000) *Boomtown*, <http://www.ottawacitizen.com/boomtown/>

Paquet, G. (1997), "States, Communities and Markets: The Distributed Governance Scenario", in Courchene, T. J. (Ed.), *The Nation-State in a Global Information Era: Policy Challenges*, The Bell Canada Papers in Economics and Public Policy, Vol 5, John Deutsch Institute for the Study of Economic Policy, Kingston, pp. 25-46.

Peirce, N. (1993), *Citistates*, Seven Locks Press, Washington.

Putnam, R.D. (1993) *Making Democracy Work*, University Press, Princeton.

Sabel, C. F. (1993), "Studied Trust: Building New Forms of Cooperation in a Volatile Economy", in Foray, D. and Freeman, C. (Eds.), *Technology and The Wealth of Nations*, Pinter, London, pp. 332-352.

Saxenian, A. (1994), *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*, Harvard University Press, Cambridge.

Scott, A.J., Agnew, J., Soja, E., and Storper, M. (1999), "Global City-Regions", *Global City-Regions Conference*, UCLA School of Public Policy. Available <http://www.sppsr.ucla.edu/globalcityregions>.

Shortliffe, G. (1998), *Regional Government Reform in the Municipality of Ottawa-Carleton, Province of Ontario*, Toronto.

Stoker, G. (1996), "Redefining Local Democracy", in Pratchett, L. and Wilson, D. (Eds.), *Local Democracy and Local Government*, MacMillan Press, London.

Storper, M. (1997), *The Regional World: Territorial Development in a Global Economy*, Guilford Press, New York.

Wilson, C. (1999) *Civic Entrepreneurship at the Ottawa Centre for Research and Innovation, Centre on Governance*, Ottawa.

[www.glasgow.gov.uk](http://www.glasgow.gov.uk)

[www.gebp.co.uk](http://www.gebp.co.uk)

[www.ocri.ca](http://www.ocri.ca)

[www.ottawaregion.com](http://www.ottawaregion.com)

[www.jointventure.org](http://www.jointventure.org)