

**CIVIC CAPITAL IN THE WATERLOO REGION:
Enabling Regional Economic Governance
(Working Paper)**

Jen Nelles, University of Toronto

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The Myth of the Waterloo Region:

The story of the Waterloo Region straddles the threshold between myth and reality. It is a story of a small town with a remarkably diverse and dynamic economy. It is a region with world class educational institutions that produce a workforce of highly trained personnel as well as an impressive amount of highly successful spin off firms. The University of Waterloo accounts for 22% of research commercialization that happens at all universities across Canada (Klugman, 2005). It is a region driven by the dynamo of an innovative ICT cluster, visionary leadership, strong ties between firms and the university, with a globally recognized brand. It is a region characterized by strong industry associations, robust stocks of social capital and associational governance.

However, a closer look at these claims reveals several important caveats. For example, ties between firms within the ICT cluster are based on the “how-to” of doing business, not collaborative research and development projects or proprietary knowledge exchange (Nelles et al, 2005; Bramwell et al, 2004; Bramwell et al, forthcoming). Recent research suggests that the role of the University of Waterloo has shifted from progenitor of high tech spin off firms and generator of commercializable knowledge to a multivariate role in the region (Nelles et al, 2005; Xu, 2003). In the late 1970s and through the 1980s the university did produce several notable spin offs – i.e. OpenText, Dalsa and Waterloo Maple – however, it is unlikely that current figures place Waterloo’s commercialization activity as high as 22% (Krugman, 2005). A lot of money and effort has gone into branding the region “Canada’s Technology Triangle” to attract international investment but to most firms, both inside and outside the region, it is recognized most frequently as Waterloo.

Recent research has also questioned the strength of regional associative governance. This form of governance involves a wide variety of actors from civic and industry associations and other autonomous groups in the economy and society in decision making, goal setting and policy implementation. It is a form of governance that relies on “network relations based on conditions of trust, reciprocity, reputation, [and] openness to learning” (Wolfe and Creutzberg, 2003). In a region often lauded for high institutional thickness – with a strong industry association in the form of Communitech and collaborative economic development corporation, CTT Inc. among others – and robust social capital some observers note that there have been considerable difficulties in building effective structures for regional economic development. In other words, the structures for meaningful governance relations in the region, “of frequent dialogue, trust and collaboration”, between private interests and different power bases have been difficult to institutionalize. Leibovitz (2003) identifies three institutional sources of this lack of trust between actors, a lack of regional social capital: The character of intergovernmental relations, the reshaping of public-private relations, and the degree of coalescence between private sector interests.

This paper focuses on the issues surrounding regional governance in Waterloo. While there may have been obstacles to meaningful regional economic governance recent evidence suggests that these institutional factors are becoming less significant. The contention that difficulties in institutionalizing collaboration stem from weak social capital ignores the significance and impact of local networks and leaders. The traditional definitions of social capital need to be re-examined to account for the fact that strong

local networks can exist without fully developed “institutional thickness” and for the important role of local agency in expanding reciprocal ties.

The first section of this paper outlines the sources of the three institutional barriers to associative governance in the region identified by Leibovitz (2003). It argues that, while they may have been significant in the past more recent data suggests that they are being overcome as civic capital in the region evolves. The second section critically examines the concept of social capital as it applies to regional economic governance. We conclude that traditional definitions of social capital are too broad and fail to capture the dynamics of collaborative governance in the region. In its place we introduce the concept of civic capital which emphasizes the role of civic entrepreneurs in building networks that permit meaningful collaboration. The final section outlines three pivotal stages in the evolution of civic capital and regional governance capacity.

Barriers to Associative Governance in Waterloo

The Waterloo region, located an hour west of Toronto, encompasses the municipalities of Kitchener, Waterloo, Cambridge and several smaller townships. Often the municipality of Guelph is included in this economic region although it is technically located in the neighbouring regional jurisdiction. In all there are five local governments – one for each municipality and an upper tier regional municipality (the Regional Municipality of Waterloo) – charged with economic development. This fragmentation of authority is one of the most frequently cited obstacles to meaningful associative governance.

There are several institutional and historical issues that have tended to obstruct regional collaboration. The legacy of local identity and concerns about local autonomy

are among the most significant of these issues. Economic character, class divisions and geographic location have contributed to local perceptions of each community and resentments regarding collaborative governance. For example, Waterloo has traditionally been perceived as a white collar town where Kitchener and Cambridge have blue collar origins (Walker, 1987). As the high technology sector has grown the majority of firms have located in the Waterloo portion of the conurbation while Kitchener and Cambridge continue to be dominated by manufacturing. That the region is known to most outsiders as the Waterloo region is a point of considerable resentment amongst the residents and governments of the other municipalities. The three municipalities form one large conurbation such that it is difficult to tell where one starts and the other ends. However, Cambridge is physically separated from the other two by Highway 401 and by a lack of transportation links between municipalities. This physical separation has tended to manifest itself in political distance as well. Cambridge is also culturally divided from Kitchener and Waterloo. The two municipalities on the north side of the highway have German cultural roots whereas Cambridge has British origins. Some government representatives even refer to the highway that separates the communities as the “Sauerkraut Line” (Leibovitz, 2003). While the characterization is unfair one gets the sense when working in the region of a definite local hierarchy. The municipality of Waterloo with its high tech economy, world renowned university, middle-upper class population and international cache dominates the region, followed by Kitchener and the detached town of Cambridge. These historical, economic, geographic and cultural distinctions have contributed to ingrained local identities making the construction of a *regional* identity through collaboration difficult.

Against the backdrop of these distinctive local identities institutional factors have also been significant. The fact that collaboration requires the sacrifice of some measure of local autonomy has also been a factor blocking the institutionalization of associative governance in the region. Cities in Ontario have restricted political and legal autonomy, even more so in a two tier jurisdiction, so municipalities tend to be reluctant to cede power to upper levels of government. The policy areas over which municipalities have control – local economic development among them – are jealously guarded. As a local politician commented:

We've always had a strong Economic Development Department...and I think that there's a feeling here that you begin to lose your autonomy if [Economic Development] isn't here (quoted in Leibovitz, 2003: 2625).

The divisions between municipalities over economic development have been especially pronounced. The regional municipality plays a role in economic development for the region but it is not coordinative. Rather the upper tier is responsible for regional marketing and promotion and tourism leaving each municipality in charge of local business growth and retention. Each city also engages in its own economic marketing, often putting them at odds with the regional goals of the upper tier. Several local officials and private actors have commented on the difficulties of operating in the two tiered system. The Mayor of Kitchener argues:

The two-tier system has gotten in the way of so many good things that could happen here. I sometimes say that we're successful in spite of ourselves, in spite of the competition. Now competition can be good as long as we're not trampling on each other and we're trying to be good just for the sake of being good. And I think we've made some progress although, as I said, the two-tiered system has gotten in our way so that this governance tussle at the municipal level had spilled over into this economic development side that it shouldn't have.

Fragmentation, overlap and competition can bring positive results but there has been a widespread perception in the region that the two tier system has been more of an obstacle to regional governance.

The three area municipalities and the regional level of government are partners in Canada's Technology Triangle Inc. (or CTT Inc.) is a not-for-profit, private-public economic development organization marketing the Waterloo Region and the cities of Cambridge, Kitchener and Waterloo to the world. However, there are concerns amongst local economic development officials that CTT Inc. primarily benefits Waterloo [quote here would be good, contact Michelle for interview]. One official describes the competitive attitude that characterizes cooperation in CTT Inc.:

The CTT is a partnership, but it's a tentative one because everybody has their own vested interest. Everybody wants to sell *their* land. You want to promote the whole area, and it makes a lot of sense on paper to say "Yes, we're part of CTT", but you want to be the place where the plant comes through (quoted in Leibovitz, 2003: 2626).

This competition for investment is also exacerbated by the fact that local property taxes are the largest source of municipal government revenues. Leibovitz takes this attitude as evidence of a lack of trust between local authorities at the regional level (2625).

However, there is evidence that this *attitude* is shifting even though institutional conditions have not.

All of the above factors tend to create an environment more conducive to intermunicipal competition than collaboration. In particular, solutions to local government fragmentation have been considered at all levels of government. In 1997 the direct election of regional chairs and councillors lent more legitimacy to that level of government. However, in the past there was considerable support for regional

amalgamation. The three municipalities understandably opposed this movement and a combination of local objection and political timing blocked local government reorganization. Most actors in the region accept that institutional fragmentation is a reality. The realization that regional governance can only be achieved through local cooperation may, ironically, have led to more openness regarding collaborative economic governance.

Leibovitz also identifies a lack of trust between the public and private sector in the region as well as competition between local associations as barriers to meaningful associative governance. Associative governance requires cooperation between state actors as well as with social and economic actors (Hirst, 1994). Cooperation between various actors in institutions of economic governance is critical to fostering the mutual learning that underpins effective associative governance (Cooke, 1995). Where civic engagement is weak and distrust prevails effective regional governance is likely to be elusive or unsustainable.

Leibovitz argues that there has been a relatively weak local presence of private sector interests in regional governance issues. The sources of this lack of engagement stem from the legacy of failed collaborations, frustration with parochial and turf protecting officials, and scepticism with local development policies. His article suggests that the lack of civic engagement rests on the shoulders of both private and public actors. Local business leaders distrust and have little confidence in local governments and thus distance themselves from public actors but local governments have not encouraged private involvement in regional governance.

Despite the evidence that Leibovitz presents to back up his claims there is considerable evidence to the contrary. Local business leaders have tended to be remarkably engaged in regional economic governance. From the founding of the University of Waterloo to the Board of Directors of CTT Inc. to the recent initiation of a regional Prosperity Forum, the private sector has been instrumental in the economic development of the region. The final section of this paper takes up these points in more detail. Leibovitz does acknowledge that the foundation of Communitech may be indicative of a change in the dismal trends of civic engagement. Communitech, the regional high technology business association emerged in the 1990s with a mandate to support the needs of the growing number of tech companies in the region. This role led to partnerships with technology companies, service firms, academic institutions, business support organizations and government and a role as one of the most visible spokes organizations for regional economic development in Waterloo. However, acknowledging the impact that Communitech has on civic engagement in the community ignores the extent to which the private sector has been engaged in economic governance since the early twentieth century. One might question the stability of these earlier relationships or point to their project-based nature but to claim disengagement misinterprets interview responses that convey frustration with local governments.

The final barrier to associative governance is the weakness of links between associations at the regional level. The Waterloo region is characterized by a large number of organizations and associations. In addition to CTT Inc. and Communitech there are four Chambers of Commerce and many other regional bodies (arts councils, community organizations etc.). However, there is some evidence that suggests that the relationships

between these associations are weak and sometimes even antagonistic. Weak ties between associations carry the same consequences as weak state-society relations – the opportunities and impact of crucial social learning are reduced. Leibovitz notes that traditional industry associations and Chambers of Commerce harbour some resentment towards Communitech. This is due to the disproportionate amount of attention the tech community receives from policy makers as well as the fact that Communitech is often perceived as the most prominent spokes organization in the region despite the fact that its mandate is to support its high tech members.

The propagation of so many organizations is indicative of a certain degree of ‘institutional thickness’. Amin and Thrift (1995) argue that economic success is a function of associations and the interaction between them or institutional thickness. The presence of many institutions of various kinds (including firms, local chambers of commerce, trade associations, development agencies, marketing boards, etc.) is the first of four facets of the concept of thickness. The second is high levels of interaction between these associations. That is, associations must be conscious of each other and be involved in cooperative endeavours. The contacts and exchanges often result in the development of shared rules, conventions and knowledge that constitute the “social atmosphere” or, to use another term, the social capital of a region. The third factor is the development, as a result of interaction, the establishment of formal and informal coalitions and hierarchies. Finally, institutional thickness implies the development of shared goals and visions regarding regional governance – the development of a shared identity based on ties to the region. Thickness can be interpreted as the institutionalization of regional social capital.

What Leibovitz argues is that in a region where one would expect high levels of institutional thickness – due to the presence of a large number of relatively successful associations and a robust ICT cluster – the latter three facets of thickness tend to be underdeveloped. There are weak ties between associations and between the private sector and the state. Political fragmentation and local identities make the construction of a regional identity difficult. As a result there are clearly several critical barriers to associative governance. This paper argues that while some of the institutional barriers discussed here are still relevant they are progressively being overcome. The conclusion that barriers to associative governance stem from weak social capital is inaccurate and misses the extent to which civic capital in the region is intensifying. The following section explores the concept of social capital in the context of regional economic governance and advances a more nuanced alternative – civic capital – as a tool to understand the dynamics at work in the Waterloo region.

Social Capital, Civic Capital and Regional Development

Scholarship on regional economic development has long been concerned with what specific factors contribute to the success of some regions and the failure of others. Among the factors considered are technology, education, institutions, and industrial clustering. All of these play a role as determinants of regional success, but none more so than the character of the *relationships* between actors in a region – social capital. Close ties between actors enables knowledge exchange, social learning, and more effective collective action. Social capital underpins innovative regional economies as well as effective democratic governance. However, for all the alleged effects of social capital,

how it is created, what causes it to flourish and how it is defined tend to be underdeveloped or inconsistently mapped in the literature. Michael Woolcock comments on this trend:

Social capital in the form of trust, it is argued, is created as a by-product of other collective endeavours such as participation in civic associations, but these activities are themselves public goods, and are also identified as social capital, leaving us with the problematic conceptual task of distinguishing between the sources of social capital [and] the benefits derived from them (Woolcock, 1998).

While the concept of social capital has much to offer as a tool for understanding dynamics of regional governance and innovation it lacks precision, it is too broadly defined. Because social capital can be anything to anyone it risks meaning nothing to anyone. To address this concern we introduce here the concept of *civic* capital. This concept builds on social capital literature combining it with work on civic entrepreneurs to produce a more nuanced definition of social capital more suited to unpacking the dynamics of regional economic development than the myriad broader (or even topically narrow) interpretations. This section begins with a review of the social capital literature and identifies some flaws in the application of these approaches to regional economic development. It then continues to elaborate on our alternative, civic capital.

The literature on social capital is rich and varied. It is a testament to the power of the concept that it has been adapted from its original sociological origins to serve political scientists, economic geographers, economists and development theorists. However, the adaptation of social capital to all these applications has diluted the concept with a proliferation of often inconsistent definitions.

The idea of social capital is not new, its conceptual origins stretch back to the founding of the discipline of sociology and Durkheimian notions of mechanical and

organic solidarity (Field, 2003). However, a logical place to start a review of its various definitions is with Coleman. As a sociologist Coleman developed his concept of social capital in the study of educational attainment in American ghettos. For Coleman social capital is a useful resource available to an actor through his or her social relationships. It comprises of:

a variety of entities that all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons of corporate actors – within the structure (Coleman, 1988: 98).

Working from a rational choice perspective social capital emerges as the unintended consequences of the pursuit of individual self-interest. Though it serves as a starting point for many inquiries into social capital the definition Coleman uses is highly functionalist and abstract.

Robert Putnam's approach to social capital is a slightly broader and more detailed but still lacks theoretical precision. His work on the role of civic engagement in generating prosperity and political stability in Italy defines social capital as the "features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993: 167). Social capital refers to "connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam, 2000: 19). According to Putnam social capital increases the potential costs to defectors, fosters norms of reciprocity, facilitates information flows, it embodies the success of previous attempts at collaboration and acts as a template for future cooperation. Though this set of definitions is less abstract than that presented by Coleman – it includes a discussion of what social capital *is* as well as its

effects – it is still logically circular. For example, trust and norms are at once part of the definition of social capital and among the effects.

The clean and simple elegance of the idea of social capital as “connections among individuals” conveys the notion at the core of the concept that the relevant units of analysis are individuals within society and the variety of types and intensities of linkages between them. In his work on civic engagement in the United States Putnam introduces a distinction between two forms of social capital that further refined the theory.¹ Bonding social capital tends to be inward looking and reinforces exclusive identities and homogeneous groups. This type of social capital is good for ‘undergirding specific reciprocity and mobilizing solidarity’ and reinforcing specific identities. Bridging social capital brings people together over diverse social divisions. These connections are better to link groups to external assets and for information dissemination. Bridging can generate broader identities and reciprocity (Putnam, 2000: 22-23). While Putnam laments that this differentiation is not as developed as he would like it is a useful nuance, one that is explored in more detail in our concept of civic capital.

Other scholars have also adapted the idea of social capital to their work. Ostrom and Ahn define social capital as “an attribute of individuals and of their relationships that enhance their ability to solve collective-action problems” (Ostrom and Ahn, 2001:17). It encompasses the concepts of trust, norms of reciprocity, networks of civic engagement, rules and laws. They identify three forms of social capital that they argue are particularly

¹ Putnam’s characterization of bonding and bridging capital shares some intellectual space with previous attempts to differentiate between types of social linkages. Durkheim’s *solidarité organique* (vs. *solidarité mécanique*) and Coleman’s primordial solidarity (vs. constructed solidarity) parallel to a certain extent the distinction Putnam was getting at. The advantage of Putnam’s formulation is that it is much more flexible and can be simply conceptualized as inward vs. outward looking social capital without necessarily tying them to family or ethnic groups etc.

important to the study of collective action: (1) trust and norms of reciprocity, (2) networks and civic engagement, and (3) formal or informal rules or institutions. These three factors are independent inputs into economic and political processes and outcomes, though out of the three ‘trustworthiness’ is the most important. Trustworthiness refers to a person’s preference to cooperate even in the absence of networks or institutional incentives to do so (Ostrom and Ahn, 2002: 15). While their discussion of forms of social capital is quite detailed the problem breadth remains. According to their definition social capital can be defined in terms of individual preferences as well as formal institutions and rules. Also, to the extent that it is reliant upon the concept of trust constrains the application of the concept.

Michael Woolcock takes a similar position on the idea of trust and social capital. He too laments the all encompassing approach to social capital employed by some groups of scholars. He notes one definition that:

Includes not only the structure of networks and social relations, but behavioural dispositions (such as trust, reciprocity, honesty) and institutional quality measures (such as “rule of law”, “contract enforceability”, “civil liberties” etc.) (Woolcock, 2001: 12).

Woolcock prefers a narrower, sociological definition of social capital. His definition sees social capital as the norms and networks that facilitate collective action (Woolcock, 2001: 13). He argues that any definition should focus on the sources of social capital rather than its consequences. That is, the focus should be on what social capital is rather than what it does. This eliminates an entity such as trust from the definition – trust is more accurately understood as an outcome of social capital. Woolcock also argues that social capital makes the most sense as a sociological or relational variable than a psychological

(individual) or political (institutional/national) one. The concepts of bonding and bridging also enter into Woolcock's concept of social capital. However, the focus of these two ideas is much narrower than Putnam's use of the terms. For Woolcock bonding social capital deals with ties between family and close friends while bridging social capital refers to the looser ties between acquaintances and colleagues. He also adopts a third, vertical, dimension advanced by Fox and Heller – that of linking social capital. This form of capital is the ability to leverage resources, ideas and information from formal institutions beyond the community (Woolcock, 2001: 13). Finally, though this particular definition of social capital is narrow and sociological it is important to keep in mind the role of institutional context.

Woolcock makes some excellent points regarding some of the major confusions surrounding definitions of social capital. His insistence that social capital should be perceived in terms of what it is rather than what it does is particularly insightful. However, the narrowness of his definitions of the types of social capital belie his developmental approach, and his focus on social capital as a societal phenomenon ignores the extent to which individual agency can play a role in building ties (or linking them). Furthermore, though he does define what social capital is he gives no indication of how it is created or expanded.

Edward Glaeser does take the individual into account in his definition of social capital. He argues, like Woolcock, that most research looks at theory and evidence of the effects of social capital rather than its origins or causes. Often social capital is seen as an aggregate variable – as the norms and networks of a particular community – but the

decision to invest in social capital are made by individuals, not communities (Glaeser, 2001). He defines social capital at the individual level as:

a set of social attributes possessed by an individual – including charisma, contacts and linguistic skill – that increase the returns to that individual in his or her dealings with others (Glaeser, 2001: 35).

This contrasts with what he calls the economists definition of social capital as a set of resources of a community that increases the welfare of that community. By acknowledging the importance of individual agency in contributing to stocks of social capital Glaeser brings us closer to the concept of civic capital. However, he focuses on one locus of social capital (the individual) at the expense of the other (community). Furthermore, his definition comes very close to that of human capital (also an individual as well as collective trait).

The problem of scale is a difficult issue to overcome in defining social capital. At what level of analysis should discussions of social capital take place? Part of the problem is that social capital, according to a survey of the above definitions, can be a characteristic of an individual (their preferences for cooperation or charisma, for example), a specific group (an ethnic group or family unit), a community, a city or a nation and so on – all of which are legitimate. A robust definition of social capital should be able to account for dynamics at many scales. One of the ways to accomplish this is to acknowledge the role of individuals and define the scope of bonding ties loosely. Social capital involves ties between individuals, but the basis of those ties can vary considerably. Storper argues that bonding social capital occurs at the community level and that bridging involves ties between communities (Storper, 2004). Communities are “a

form of collective life in which [individuals] are tied together through interpersonal contacts, informal relationships, and particularistic affinities, interests or similarities” (8).

The critical distinction between this and other definitions of bonded groups is that it is not restricted to kinship or homogeneous group ties. Rather, Storper contends that strong interpersonal networks exist within professional associations that are not necessarily related to the concept of trust at all, but rather shared norms of professional performance. Communities, by definition bring together individuals with at least some difference in preference and who have the capacity for individual reflection about their preferences, and yet who are held together for collective action even in the face of some such differences (Storper, 2004). This formulation accounts for a wide variety of different types of ties and groups in society, and even allows for a community to be made up of several other communities. Furthermore, it is not territorially bounded in that a community can occur at a local, national or international scale. Finally, this definition does not require the formal institutionalization of ties – for example, within an association. Communities can be institutionalized, as with industry associations, but they can also be informal communities of identity or cognition.

A further qualification on the notions of community and social capital is necessary. Peter Maskell, in his discussion of social capital distinguishes between the benefits of networks and the benefits of social capital. Networks are made up of individuals within a community, but do not necessarily include *all* of the members of the community. Networks, he argues, exist for the benefit of specific members but social capital is an asset of the entire community (Maskell, 2000: 117). This is an important distinction to keep in mind when evaluating the role of networks in producing social

capital. Tight and inward looking networks are not unequivocally examples of social capital at work.

The definitions and formulations of social capital reviewed above tend to lack a degree of conceptual precision. This is understandable given the wide range of social factors social capital has been used to unpack. Here we present a more nuanced and applicable approach to social capital in regional economic development and governance. The concept of civic capital builds on previous work on social capital, uniting it with the literature on civic entrepreneurs (Henton et al. 1997).

Civic capital consists interpersonal networks and solidarity within a community based on a shared identity, expectations or goals and *tied to a specific region or locality*. It is comprised of formal or informal networks between individual community members, between communities, or between community and the state. Civic capital acknowledges the critical role of local leaders in intensifying and formalizing collaborative networks within and between communities. Civic entrepreneurs can bond members of a community to coalesce and formalize coalitions based on shared identities and interests. However, their most important role is in *bridging* the gap between communities and between the local governments and community actors. Civic entrepreneurs understand the importance of collaboration, in their bridging role they bring business, the community and government together to set and achieve long-term development goals. They can emerge from any sector of society – business, government, education, community organizations etc. – but all share similar characteristics of visionary leadership, charismatic personalities, interest in building the economic region, and commitment to collaborative solutions (Henton et al, 1997). Civic entrepreneurs are individuals but it is critical to note

that there can be more than one at work within a region and that they often work in groups. These entrepreneurs help to build and intensify civic capital by “creating opportunities for people to work together on specific projects to advance their economic community” (Henton et al, 1997).

The advantages of this definition of civic capital are that it allows for individual agency through civic entrepreneurs and engagement as well as accounting for a societal dimension. It is uniquely tied to place but allows for a nuanced approach to community and networks. Finally, defining civic capital as, at its weakest a sense of solidarity or interpersonal ties enables civic capital to exist prior to agency *but also accounts for how it can be harnessed and intensified for meaningful regional governance by civic entrepreneurs.*

The following section describes the intensification of civic capital in the Waterloo region.

The Intensification of Civic Capital in the Waterloo Region

Civic capital in the Waterloo region has grown and intensified considerably over time. The process of intensification occurred most visibly in three stages. In the first two stages involved civic entrepreneurs formalizing the bonding ties within the tech community and between local governments with the creation of Communitel and CTT. As the organizations matured bridging ties began forming with other community actors. The third stage built bridges between associations, between local and regional governments and economic and social actors through multi-stakeholder associations such as the Prosperity Forum. This section details the evolution of civic capital through these three

stages. However, it is important to note that there are other important examples of civic capital and entrepreneurs at work in the region, from the founding of the University of Waterloo to the recent philanthropic turn.

The University of Waterloo

Civic capital in the Waterloo region has always been relatively strong. The small and homogenous cultural community founded in the late 19th century lent itself to a strong community spirit which evolved into a strong entrepreneurial spirit as the region industrialized (Nelles, et al, 2005). The origins of the University of Waterloo reveal the first and most visible outcomes of local civic capital. Its precursor, the Waterloo Lutheran College, was established in Kitchener in 1924. Although the college did not contribute to the progress of high technology development in that era – it was an arts college associated with a seminary – its progeny, the Associate Faculties, played a key role as a precursor to the University of Waterloo and several of the key actors in the University of Waterloo story were educated there. Significantly, the college was created and located at the insistence of local business leaders and its maintenance (both financially and academically) became a genuine community project. The Waterloo College project indicates the extent to which the two communities of Kitchener and Waterloo had developed a common regional and progressive identity based on local growth and its Lutheran origins a product of the local cultural community.

After WWII local business leaders played a key role in addressing the needs of the community and the country during the Cold War. In 1956 Canada's leading businessmen, scientists and educators convened the National Conference on Engineering,

Scientific and Technical Manpower at St. Andrews-by-the-Sea, New Brunswick to discuss the extent of Canada's technical and engineering manpower shortage and to consider and recommend remedial action (McLaughlin 1997). Their conclusion warned that "the problem of the universities has become an emergency of grave concern to the certain disadvantage of our progress as a nation, and can only be solved by energetic and immediate assistance and cooperation of all governments in Canada, of business and industry and of private benefactors" (Axelrod 1982, 24). This signalled a rapprochement in the previously distant relationship between industry and higher education - a new collaborative engagement in the crafting and support of the postsecondary educational system. Significantly, the members of the industrial community in Kitchener-Waterloo already enjoyed a close relationship with Waterloo Lutheran College through their membership on the Board of Governors and anticipated both the demands of the national economy for trained technical manpower and trends in the employment requirements of the local economy. A movement was underway for a math and science intensive institution of higher education, and this was realized in the form of the University of Waterloo, founded in 1957.

It was no coincidence that on August 27th, two weeks before the National Conference was set to commence, Ira Needles (president of BF Goodrich (Canada) and chairman on the Board of Governors for the newly created Associate Faculties of Waterloo Lutheran College) addressed this specific issue in a speech to his local Rotary Club. Recognizing the technical manpower shortage and the growing needs of industry, but also cognizant of the financial limitations and lack of experience many educational institutions faced, Needles proposed a unique solution in the form of *The Waterloo Plan*.

This plan called for a new type of education to be offered on a cooperative basis with industry. This proposal became the basis for the University of Waterloo's highly successful cooperative education program, widely regarded as the best university co-op program in North American and a significant asset to the region.

While this example is certainly indicative of the collaborative and entrepreneurial approach to local governance and the power of local leadership, it is not, strictly speaking, a pure example of civic capital. The business leaders in this case collaborated more with provincial and national levels of government than local. And while the impetus for the founding of the University of Waterloo was certainly related to the idea of a strong local economy and as a means to address industrial skills shortages most negotiations related to the future of the nation.

Canada's Technology Triangle to CTT Inc.: The Creation and Marketing of a Regional Economic Community

The creation of Canada's Technology Triangle (CTT) was the first concrete step towards the institutionalization of a regional economic community. Initiated in 1987 the creation of Canada's Technology Triangle united the cities of Cambridge, Kitchener, Waterloo and Guelph in a partnership to collaborate on selected issues of economic development in the region. The partnership was initiated by the economic development officers of these municipalities who had been competing for inward investment and realized the dynamism and potential of the region's economy. CTT would coordinate the promotional efforts of the region as well as engage in branding exercises to increase the area's international profile (Leibovitz, 2000). While the first decade of CTT's existence

revealed that collaboration doesn't immediately erase the resentments or concerns of the member municipalities, in the past decade CTT has evolved to expand its regional vision and embrace new partners from business, community and education.

The perception in the region was that CTT was relatively successful in its limited role of regional promoter but that the political actors found it difficult to come together on other regional goals (Leibovitz, 2000: 55; Leibovitz, 2003). One city official recalled the character of collaboration as consisting of "a lot of turf protection" even though all four local councils officially consented to the partnership. Over time attitudes have changed:

Now there were some people on our council who were less than supportive of CTT but I think that ended up being because of their personality issue and certain dynamics and certain circumstances. Today that scepticism has diminished significantly and I would have to say that there is full support there once more for the organization (Local government official).

"Full support" for CTT didn't grow overnight, and it was the combination of institutional reform and the addition of new actors that contributed to the attitudinal turnaround.

Several other attempts at institutionalizing regional governance, such as the Regional Municipality of Waterloo's Task Force on Economic Development where the regional government attempted to take on a coordinative role, and Kitchener's Team Kitchener project, though ultimately failures ended up solidifying the notion that regional collaboration was going to be necessary to grow in the future. During the late 1990s the Greater Kitchener-Waterloo Chamber of Commerce began agitating for a public-private partnership for economic development in the CTT region. These plans eventually came to fruition in the form of CTTAN, or Canada's Technology Triangle Accelerator Network. In 1996 the federal government initiated the Canada Community Investment Programme,

a project that offered funds for community organizations that would support the creation of start-up funds for small businesses. The Waterloo region, lacking significant venture capital financing, was an ideal candidate for such funding, provided that it could ensure a commitment from private actors to provide matching funds and strategic leadership. CTTAN represents the first time since the establishment of CTT that private actors and government officials were involved in a collaborative project.

Following the creation of CTTAN CTT became more depoliticized and more regional in character. The mayor of each municipality was formally a member of CTT. However, the convention today is to delegate this role to economic development officials of the Chief Administrative Officer (CAO) of the municipality. This has also reduced the tension between the municipalities. In 1999, CTT Inc. (or Economic Development in Canada's Technology Triangle) was reformed as a not-for-profit, private-public economic development organization marketing the Waterloo Region.² At that time the municipality of Guelph quit the association to rely on its own Economic Development department. CTT Inc. is still primarily a marketing corporation. However, its vision has expanded to include issues of regional economic development such as land and infrastructure development. A most recent project has been the establishment and marketing of the new Research and Technology Park in partnership with the University of Waterloo, the Government of Canada, Province of Ontario, the Region of Waterloo, the City of Waterloo, and Communitech. Despite this wide range of development roles

² CTT Inc. has several corporate as well as community partners (including local Chambers of Commerce). The Board of Directors of the corporation is made up of community members from all facets of the economy – from tech, manufacturing, insurance, and business services firms, all three high education institutions, and local governments.

CTT Inc. is wary of stepping on local toes and acknowledges the role that local economic development officials and offices play:

Our mandate is to market to bring others into the region and that includes early stage financing and talented people, but in those latter two cases the networks that will really reach, and I make the connection here, we will usually turn to other organizations who have those networks to do it rather than to duplicate it. The other point and distinction to make is the three cities, Cambridge, Kitchener and Waterloo. They have economic development departments with whom we interface exceptionally closely with whom we share full information confidentially. They have the prime responsibility for so called business retention, that is the companies who are already here. But, we on an ad hoc basis, do become involved with business retention in the sense of having networks outside the region and therefore being well positioned to help in terms of companies who are here who may have parentage outside the region (CTT Inc. official).

One of the most often heard critiques of CTT Inc and its work in the region is that it tends to benefit Waterloo the most out of all the member municipalities. Certainly, if benefits were accruing to one municipality more than others there could be other explanations than favouritism on the part of the marketing corporation. However, there is apparently little basis for this accusation as the success stories listed on the CTT Inc. website show a relatively even distribution of firm locations (check this – just a marketing ploy?).

The evolution of Canada's Technology Triangle demonstrates the extent to which civic capital has intensified in the region. From a loose and narrowly based marketing partnership the ties between municipalities have deepened. The breadth of local partners and board members reveals the bridges that have been built between the various communities, institutions and associations in the region. Indeed there has been a large degree of cross-fertilization as CTT Inc. is a member of several of its partner associations – such as Communtech. The civic entrepreneurs who helped build this collaborative partnership were the economic development officials who recognized that combining the

strengths of each community and becoming a regional economy could secure a brighter collective future than constant competition.

Communitech: The industrial association that became a local leader

Communitech is a member-based association driving the growth and success of Waterloo Region's tech sector through a vibrant network of leadership, connections and promotion. Like CTT Inc. it was founded with relatively narrow goals designed to support the tech community and became a leading local association in regional economic governance and development.

Communitech was established in 1997, though its roots stretch back to the early 1990s to an informal group of twelve CEOs whose goal was to facilitate the exchange of ideas and improve networking relations between high technology companies (Leibovitz, 2003). Its original mandate was to support the needs of the relatively small number of high technology firms in the region at the time – there are almost 450 such firms in the region today. The association currently supports the tech community with a number of services such as Peer2Peer networking events developed to provide a forum to discuss best practices for industry leaders (CEOs, CIOs and CTOs), Management and technical professionals. It provides a Tech Directory, holds workshops and conferences, clinics on financial and legal issues, and even government relations. While this sounds more like network benefits than civic capital Communitech plays a much larger role in supporting non-members in the tech community as well as local economic governance.

Communitech's current mandate is to lead, connect and promote. As an organization it is committed to providing sector-level leadership on issues that affect the

technology community. It is involved in issues of infrastructure, recruitment, access to venture capital and early-stage financing and building management capacity. In this capacity it is a member of the Advisory Council for the Center for Business, Entrepreneurship and Technology at the University of Waterloo – centre designed to build on and expand the entrepreneurial initiatives at the University Waterloo. The program is designed to create leaders who can understand, mobilize and drive technology in rapidly changing and innovative business environments. CBET offers tailored curricula for those wishing to combine their entrepreneurial instincts with the business knowledge necessary to take ideas to the commercialization stage. Through these and other partnerships – with the two universities and colleges, the Research and Technology Park, and the Accelerator Centre at UW – Communitech plays an active role in defining and providing entrepreneurial education and helps companies to capitalize on technology developed in regional universities. Communitech is also a partner on the Waterloo Region Recruitment Council to promote the region to potential employees.

Communitech connects its members to industry partners, services, market research and intelligence, financing and education. It also works to promote the region. Its government relations program is designed to build on already close relations with governments at the municipal level and develop relationships with federal and provincial governments. Communitech's involvement with local governance is evident through its involvement in local community associations, events and task forces. It is on the Board of Directors of the local Symphony Association, on the Board of Advisors for K-W Oktoberfest. It is an advisory member of CTT Inc. on the Intelligent Community Task Force, Physician Recruitment Task Force and the Prosperity Council. It also counts

among its members government officials from all levels of government, from local Chambers of Commerce, the universities and other community groups. This is further evidence of the cross-pollination between associations that has been occurring in the region and evidence that Leibovitz' claims of associational distance are generally incorrect. Far from being a typical technology association, Communitech has become a leader in the economic governance of the community whose benefits spread far beyond the network of high tech firms that comprise it.

The Communitech case is clearly one in which civic entrepreneurs, in the form of local business leaders, came together to formalize ties within the tech community. Once established these same entrepreneurs (and others within the organization) built ties with government and community associations to support local economic development and local *community* development. One could even go so far as to say that the association itself – led, of course by individuals within it – plays the role of a civic entrepreneur.

The Prosperity Council: Collaboration for Growth

The Prosperity Council is a relatively new venture in regional governance. Where the creation of the CTT brought governments closer together and Communitech brought industry members together both of these associations have partnered with local governments and associations to formulate a coherent regional vision.

According to its website the Prosperity Council is: “a federation formed to collectively create an environment that supports opportunities for prosperity in Waterloo region”. The Council is comprised of representatives of its founding partners: the Greater Kitchener Waterloo Chamber, Cambridge Chamber, CTT Inc. and Communitech

Technology Association. Together these organizations represent more than 3000 businesses in Waterloo region. Its goals are to build a collaborative regional vision; brand and market the region as one successful area for business, arts and lifestyle; enhance regional health institutions; strengthen local post-secondary institutions; and create and fund a regional arts and culture development and promotion body. There are currently six task forces staffed voluntarily by community members – one for each of the five goals and a task force on regional growth management strategies.

It is still early but indications thus far suggest that the Prosperity Council is an effective bridge between interests and communities in the region and an effective institution of regional governance.

Local Angels: Developmental Philanthropy

Civic capital is all about ties between individuals within and between communities. However, there are civic entrepreneurs in the Waterloo region acting alone towards regional economic development. These entrepreneurs are investing their money in the development of the community and in unexpected ways. While not purely an example of civic capital it is worth noting that these are the community leaders and civic entrepreneurs that are acting in other areas of regional governance, and are a significant asset of the region.

Some of the region's leading business people are investing surplus millions into projects completely unrelated to their own companies for the purpose of developing Waterloo as a leading centre of advanced thinking for centuries to come. Jim Balsillie, from Research in Motion (RIM), donated \$20 million to the new Centre for International

Governance and Innovation (CIGI) – an international politics think tank in Waterloo. Mike Lazaridis, Mike Barnstijn and his wife contributed another \$13 million to the project. The centre aims to be a key meeting place for serious thinking about the future of international governance. Its most recent work has been on the future of United Nations reform.

In announcing the donation Balsillie commented that “we’re making a stupid amount of money and we want to do something constructive with it” (Wells, 2005). Many high tech entrepreneurs have the same problem and have similar attitudes about what to do with their enormous surplus of cash – spend it on developing the region. And the region will be the richer for it. Mike Lazaridis’ largest project to date has been the Perimeter Institute for Theoretical Physics. The institute studies advanced quantum mechanics and string theory, miles away from the mobile networking basis of RIMs wealth. In the past three years the centre has built an impressive reputation and is orienting itself to become one of the top institutes in the world for the study of theoretical physics. More recently Lazaridis contributed \$33 million towards the University of Waterloo’s Institute for Quantum Computing, a project that seeks to apply theoretical physics to next generation computers. Lazaridis explains the motivation behind these types of donations:

One of the great things about philanthropy is that [...] you can change the world one community at a time. Pick your community, if it’s got all the ingredients that make sense to you. And this is an amazing community. We’ve got less than 100,000 people and we’ve got two universities and a community college. And not just any universities: we have, like, the top university in Canada. It’s the first and most successful co-op school in Canada. Computer engineering. Computer science. It’s the largest math faculty in Canada (Mike Lazaridis, quoted in Wells, 2005).

A pride in their community and the recognition that it, and the individuals there, have so much potential to do and be even more. To them Waterloo isn't a small town near Toronto, it's a place that can make a difference in the world, a place that can be innovative in everything that it does, even philanthropy.

This trend of developmental philanthropy exists on a much smaller scale throughout the community. Successful entrepreneurs have started an angel financing network to fund and mentor local entrepreneurs. Shrewd in their lending they aim to develop local entrepreneurial talent and innovation, putting their money to work keeping the entrepreneurial spirit that permeates the region alive. Is it sustainable? Levels of regional firm formations have stayed relatively stable for the past couple of years. The critical point is not that these angels are investing money, although it is significant, but that they are also investing their knowledge and interest into growing something locally and sharing the benefit of their experiences.

Conclusion

There's something special about the Waterloo region. In this paper we argue that it is the civic capital that enables regional economic governance. While the region has exhibited some barriers to associative governance in the past the evidence presented above suggest that regional governance is evolving through increased civic engagement and capital. Ties within and between local communities have intensified and regional collaboration has increased. And while a certain mythology permeates the region this mythology is part of the common perception of the region that links and unites actors for economic governance.

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