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Regional Economic Development in British Columbia:

Innovation and Renewal for BC's Two Economies

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Regional Economic Development in British Columbia: Innovation and Renewal for BC's Two Economies¹

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I. Overview: Two BC Economies and The Challenges They Face

a. The Two Economies Defined

British Columbia spans vast land and water areas with diverse climatic, social and economic regions. Despite this diversity, it is possible to roughly divide BC into two quite distinct economies: a generally prosperous and diversified Southwestern British Columbia from Hope to Vancouver, including Vancouver Island from about Qualicum Beach to Victoria; and the rest of BC, which is typically struggling to find its way in the face of global competition and a series of shocks to its largely resource-based economies.² This paper addresses briefly the challenges each of these quite different economies faces and offers strategies that address these challenges. It also documents a variety of economic successes across the BC, not just in the Southwest, illustrating in the process that there is great opportunity for regions willing to break with the past and follow new, exciting and clearly uncertain futures.

b. The Challenges Each Economy Faces

Given the significant economic differences that exist across these two regions, the challenges and opportunities each face are generally quite different. Here we outline these differences as a basis for developing strategies subsequently.

i. Southwestern BC Economic Challenges

Southwestern BC is in transition from one of Canada's principal metropolitan economies to an international metropolitan economy. This transition has been

¹ The author wishes to express his gratitude and thanks to TELUS for its financial and research support in writing this paper. The author greatly appreciated the opportunity to develop his thoughts on regional development in British Columbia more fully and have them form the basis for a broader public dialogue on the issues and opportunities facing all of the province's regions. The resulting discussion in this paper solely reflects the views of the author and in no way that of TELUS. All remaining errors, accordingly reside with the author.

² This dichotomy is a generalization: parts of the BC interior are thriving such as the Okanagan, Nelson, and Fernie; through decline from structural change and global competition is the general rule.

underway for decades, catalyzed significantly by EXPO '86 and is evidenced by: major international immigration inflows; Vancouver International Airport (YVR) and Port of Vancouver (VPC) as major trans-Pacific and international gateways; growing international student population; international tourism; and by the increasing international profile in research and development and university education.

This transition and the growth it has brought create major challenges in maintaining and enhancing: urban infrastructure; environmental quality; the quality and quantity of public services; and broadly defined quality of life. Proposed solutions include better bus, ferry and rail rapid transit and urban highways to facilitate moving goods by truck between the numerous port sites, YVR and Highways 1 and 99. The successful bid to host the 2010 Winter Olympics will add to the challenges while also providing some of the resources needed to solve them.

Regional governance is perhaps the largest challenge being faced in the four regional districts that comprise Southwestern BC: the GVRD; the CRD; the RDN; and FCRD. In a nutshell the regional governance challenge entails making decisions at a regional level that adequately address regional challenges, often at the necessary, if regrettable, expense of one or several municipalities or neighbourhoods. Currently regional districts and regional transportation agencies have directors nominated by municipalities and thus beholden to them. Rather, directors should be independent regional fiduciaries, without municipal obligation. They should either be chosen by direct election by citizens of the relevant region, or appointed by the provincial government with clear regional fiduciary responsibilities. In either case, it must be made apparent that their role is to represent regional, not local, interests and opportunities.

ii. “Heartland” BC Economic Challenges

The “heartland” BC economy has faced a litany of well-known and publicized challenges. Whereas the Southwestern BC economy has transitioned steadily to globally competitive knowledge-based sectors, the heartland economy has been restructuring as a result of global forces, but this restructuring has not been toward new sectors but rather a devastating series of downsizings and plant closures.

The global pressures on the heartland economy include, among other things: commodity price declines and heightened competition in traditional markets; US softwood tariffs; growing environmental concerns and controls; falling private sector investment in the region; declining resource rents for business, labour, government; poor access to central Canadian capital and capital markets; depopulation; declining real incomes; Aboriginal land claim uncertainties; regulatory and red-tape; forest management and regulation problems; inadequate bandwidth in small remote communities; and declining provincial funding of education and selected services.

Facing these challenges requires focused effort by federal, provincial and local-regional governments acting with BCs business, labour and academia. Thus, we discuss here strategic and policy ideas to deal with these challenges successfully.

II. Developing Economic Strategies for the Two BC Economies

a. Strategy as Focus and Choice

British Columbia needs a strategic approach to economic policy if it is to prosper in the future. Idiosyncratic economic policies aimed at short-term issues in specific sectors (i.e., the NDP's Forest Renewal Policy) will not be any more successful than they have been in the past. What is required is a set of integrated economic strategies targeted to suit the different challenges faced by the two BC economies. Strategy has two key traits: it is targeted and focused; it entails choice.

The targeted and focused facet of strategy demands specifying clearly the issues that are of concern and developing equally specific solutions. The choice element of policy requires doing only those things that are needed to implement the targeted solutions. It demands discipline and choice, including avoiding acting outside the area of the specified solutions that deal with the targeted problems. For example, an urban transportation policy that focuses on bus, rail and ferry transportation would not simultaneously make significant investments in roads and bridges, except as required to meet the public transportation objectives.

b. Strategy as Letting Go of Past, Embracing New Futures

Good strategy making begins with a realization that the past is unlikely continue into the future. Accordingly, communities need to acknowledge that future prosperity likely lies along different paths from those of past successes. In both BC economies, future income and wealth are not likely to be based upon natural resources and the commodities that they have produced, but rather upon human resources and the ideas and knowledge that they can and will produce.

The future is rife with uncertainty and change, sources of economic, social and political stress. However, to rely on a future that follows smoothly from past economic sectors and forces or is a return to earlier times is to jeopardize future competitiveness, growth and well-being. Natural resources and commodities will clearly be an element of BC's economy going forward. They are not going to be the engines of growth that they were in the past. New engines need to be identified and seized upon with new and innovative economic strategies as set out shortly below.

III. Strategic Elements of the Future Southwestern BC Economy

Over the next decade the Southwestern BC regional economy will be very different from what it is today. These differences will be obvious and hailed by most, if not all, residents. The key defining feature of the regional economy will be its enormous diversity and the realization that its transformation has been occurring across a diverse and large number of fronts simultaneously. There will not likely be a dramatic single event that moves the region's economic structure to its future state (2010 Olympics included). Rather, the growing sectors should reinforce each other to foster needed economic change. Tourism supports transportation and logistics and is supported by it. The Health and Education sectors support each other and in

turn support and are reinforced by broad knowledge industries, notably biotech and IT.

Within each sector there is great diversity. Tourism will not only be Whistler and winter tourism or golf and summer tourism. It will include cruiseships, ecotourism, fishing, cultural tourism, and tourists destined for beautiful cities like Vancouver and Victoria. Victoria will support the growing wine and ecotourism industries on Vancouver Island and in turn be supported by them. The IT sector is also very diverse to its benefit spanning: hardware and software; wireless and fibre-based technologies, video games; new media and film; multi-media music, theatre and performance; and digital art including animation, soundscapes, and dance.

IV. Strategic Issues Facing the Heartlands

a. Strengths

Heartland strengths are numerous and diverse like the varied communities that comprise the region. Among the most obvious, relevant and malleable assets possessed by the heartland region communities are: an educated workforce; good infrastructure and public goods, including regional and university colleges; abundant land, water, energy and natural resources; great scenic beauty, leisure and recreational resources and high quality of life; good access by air, rail and roads, including international air and cargo access; and good telecommunication and information access.

These strengths need to be seen as building blocks for an integrated strategy that can reinforce each and be combined into potent economic paths for the future. They can also be strengthened through public and private investment, through immigration and through innovative means for combining these strengths.

b. Weaknesses

Virtually all of the challenges noted at the outset are weaknesses that lie beyond the control of the region (though this does not preclude strategies to respond to them). Other weaknesses can be broadly affected and changed by provincial policy. Lastly, are those weaknesses that are largely self-imposed.

Starting with those subject to provincial policy we find: Aboriginal land claim uncertainty; regulatory and red-tape uncertainty and delay; forest management and regulation problems; and inadequate bandwidth in small remote communities. Also, in pursuing the needed deficit cutting fiscal agenda, the BC government decided to rationalize some education, justice and other services they support locally.

This had the unintended affect of slowing recovery in many smaller communities by cutting funding of local, education, justice, and provincial offices. The jobs lost were among the better paying and more stable ones in each community. The loss of employment income has exacerbated the plight of these communities. Provincial commitment to use its improving fiscal capacity to address these weaknesses can help many small communities as they seek to rebuild their economies.

Four additional weaknesses that are under local and provincial control need to be stated and subsequently addressed. These four are:

1. Outmoded economic models and metaphors

Most communities in British Columbia continue to saddle themselves with limiting and outdated models about their future. These models are huge impediments to future success as they limit the search for new possibilities. They condemn communities to cling to the hope that past economic conditions will return and they will once again be prosperous. A return to the past is extremely unlikely. As a result, so long as communities cling to this faint hope, they preclude getting on with the strategic thinking and planning that are the keys to their economic rebound.

2. A rent-seeking, not rent-creating, economic culture and tradition

Among the most pernicious, widely held and least understood of the economic models is that of “rent-seeking”: the desire to obtain economic returns (to labour, capital (businesses) or land (governments)) above those available in a competitive market. These returns were available historically in BC because our resources were of higher quality and lower cost than those elsewhere. The question then arose about how these above market returns were shared by labour, business and government. There thus developed a culture of rent-seeking and rent-sharing, not rent-creation. Unfortunately, over time rents declined: we exploited the best and most accessible trees, fish, and copper. However, labour, business and government continued to argue over the allocation of these largely non-existent rents. The rent-seeking, rent-sharing model must be replaced by a rent-creating model based on sound strategic thinking and new economic ideas for the future. This is a vital and most worthwhile challenge facing the province as it reforms forest tenures and streamlines the Working Forest Initiative. Thus successes of small Nordic nations should be both instructive and supportive of provincial government efforts here.

3. Little strategic thinking and few new ideas or visions for future

As just noted, sticking to old economic ideas has precluded new ones. A most important new idea is to think strategically to identify new opportunities and means to realize them. Communities can and must engage in vigorous discussions of the possibilities that lie before them and then work together to choose those most in keeping with broader community values and aspirations.

4. Victim thinking; no local responsibility for local economic future

Closely related to the three preceding weaknesses, and perhaps a cause for them, is the deeply held belief in much of BC that we are victims of actions outside our control such as US countervailing duties or the Asian Crisis, or DF&O policies on fishing, or Ottawa’s general lack of concern for the plights of British Columbians. Whether or not these claims are true is really quite irrelevant. The reality is what it is: BC and heartland BC especially, face major challenges and threats to future prosperity. Victim thinking leads necessarily to the abdication of local, regional and provincial responsibility to face these challenges and overcome. Whining about

reality is not going to change it. Taking responsibility for our local, regional and provincial futures, where we can influence outcomes, does hold out the promise of changing those futures for the better.

c. Opportunities

Despite the serious problems being faced by the heartland, the opportunities it faces are as vast and diverse as the region itself. Let us consider two kinds of related opportunities. The first kind exploits previously untapped natural resources. The second type builds on local human resources and public goods.

Beginning with the former, the traditional heartland economic base, we find lots of opportunities that can build on natural resource development for the future. Among the resource areas that face a bright future are upstream oil and gas and “green energy” from co-generation and flow of river technologies. Much has also been written about value added agriculture (viticulture, tree fruits, ginseng, flowers, berries and the like) and the specialty products that can follow from these activities. A vigorous agri-tourism sector can also be tightly and profitably linked to such agriculture. Aquaculture, also has a strong future, not just on the enormous BC coast, but also in largely ignored BC lakes and ponds. Recent and surprising significant finds of gemstones in BC add yet another dimension to the valuable resource-base of the province’s northern and central areas.³

Finally, we come to natural resource sectors. Starting with the much buffeted forest sector, there is enormous potential despite its current problems. The key here, in my view, is to manage forests, not just fibre as we currently do. Not just beating down labour and regulatory costs, but revising the basic constructs attendant to forests as economic engines. Considerable research has been done in other parts of the world about the total value of forests producing not just fibre for lumber and pulp, but also a staggering array of nutraceuticals, food stuffs (such as pine and other fungi, diverse berries, and various roots), wildlife, ecotourism, recreation, and much more. The principal point here is that we need to conceptualize and manage forests in their totality as the complex and extraordinarily productive, if very partially understood, ecosystems that they are. Part of this rethinking has to extend to the fibre as well, a point frequently made in the past in support of value-added wood products, with which I concur wholeheartedly. Here I am thinking well beyond windows and doors, to entirely new uses of wood, including small production but highly valued woodcrafts, flooring, furniture and such.

The second natural resource sector with enormous potential is upstream oil and gas as touched on above. This sector deserves careful and energetic attention given its capacity to generate and sustain high paying jobs and economic wealth. The recent boom in Northeastern BC is sustainable according to the best current

³ See Amy Carmichael, “Longshot gemstones turn up across northern B.C.,” *Vancouver Sun*, Tuesday, September 26, 2003, pp. D1 and D5.

estimates of its natural gas reserves.⁴ Offshore oil and gas reserves are thought to be even vaster than recent discoveries in Northeastern BC.⁵ The key here of course is to ensure environmental safety, even at great cost. However, British and Norwegian experience in the violent North Sea provide optimism that technologies exist to tap these immense offshore resources while protecting our beleaguered coasts and oceans.

Moving beyond extending the traditional natural resource sector and turning to more strategic and active opportunities, we find an equally rich array, beginning with innovative provincial strategies for the region down to specific sectoral opportunities. First, the province needs to continue vigorously with current efforts to create a provincial heartland economic strategy. Given the enormous diversity of the heartland, this really needs to be carried out in two distinct and linked ways. At the provincial level, the heartland strategy should be broadly stated and really take the form of a series of guidelines and principles for community and regional strategy making across the massive heartland area. Thus, the actual crafting of community-specific strategy should be decentralized and localized. The province should act as a facilitator and provider of strategic expertise and resources, leaving to the communities the responsibility for generating alternatives, choosing preferred alternatives, and developing implementation and work plans.

Specifically, the 2010 Winter Olympics can serve as an invaluable goalpost for five-year community/regional economic development plans. For example, the regional economic consulting organization ViTAL Economy (2003) has applied a successful methodology to numerous places in the US, which could well be used in such a five-year effort here in “heartland” BC.⁶

There is a need to shift strategic foci to build both existing and new sectors on the future of human resources across the varied communities in “heartland” BC. As suggested earlier, human resources (knowledge, ideas, experience) are the keys to the future rather than the simple natural resource extraction of the past.

The foregoing are general principles that should guide and energize heartland economic strategy making. Among the specific opportunities that might be exploited through such strategy we find the following.

Growing congestion and housing costs are weakening Southwestern BC competitiveness. Heartland communities are blessed with high quality biophysical environments, high degrees of public safety, minimal if any traffic congestion, and few or none of the costs associated with recent rapid growth that characterize

⁴ See Scott Simpson, “Oil patch needs you – now,” *Vancouver Sun*, Friday, October 17, 2003, pages A1-A2, and Scott Simpson, “Alberta big winner in B.C.’s booming oil and gas industry,” *Vancouver Sun*, Saturday, October 18, 2003, pages A1-A2.

⁵ “Offshore exploration an early test for Martin,” Editorial, *Vancouver Sun*, Friday, October 17, 2003, page A18.

⁶ TELUS, for example, is prepared to sponsor province-wide workshops on the methodology in 2004.

Southwestern BC. The heartland is in a position as a result to capitalize on these weaknesses and lure appropriate economic activities out of Southwestern BC.

The old saw, every threat is an opportunity in disguise, certainly fits much of the heartland as well. For example, depopulation threatens the economic viability of many communities. It also opens up opportunities to attract new residents because of resulting abundant and low cost quality housing. This is what Tumbler Ridge in Northern BC and Gold River on Vancouver Island have both done successfully.⁷

Tourism is both highly touted and abused, as a future source of income and wealth for heartland BC. Clearly all communities cannot reinvent themselves as viable tourist meccas. However, there are still significant opportunities. Chemainus responded to the loss of its forestry lumber base with its world-renowned murals, a thriving dinner theatre, diverse restaurants, and unique niche retail activities. Similarly, Kimberley is showing that it can recover from the loss of its mining base.⁸ Aboriginal cultural experiences can also add unique and potentially powerful elements to heartland tourism.

Finally, education offers a broad set of opportunities for the heartland's diverse communities. Many communities have found it profitable and productive to add fee paying international students to their primary and secondary enrolments. Heartland regional colleges have similar opportunities as do the several University Colleges.

d. Threats

Threats abound for the heartland and are largely linked to the continuation of the weaknesses that the region confronts. Beyond the usual litany of threats (Aboriginal treaty uncertainties; US tariffs; high costs; growing global competition; etc.) lie other threats. The poor fiscal condition of the BC and local governments poses a continuing threat to the income and employment bases in the heartland and weakens the capacity of governments to invest for the future. Investment for innovation and future competitiveness is also hampered by the poor profits of resource firms.

Perhaps the biggest threat of all though is self-imposed: complacency and waiting for *good ol' times* to return. As noted throughout, good times will only return to the region through strategic and innovative thinking and action that harnesses the unique opportunities that each community and sub-region enjoys.

V. Some Community Successes and Strategies for the Future

Despite the present woes of many heartland communities, there are diverse successes. Here we review a number of these to illustrate that opportunity lies

⁷ "Town thrives thanks to online pitch: Tumbler Ridge has used technology to sell itself as a good deal," (*Business in Vancouver, CurrentZ*, March 27-April 2, 2001, p. 3)

⁸ Derrick Penner, "Kimberley shifts from mining to tourism," *Vancouver Sun*, Tuesday, February 25, 2003, p. D4.

beyond Southwestern BC and is available to any community willing challenge the future and let go of its past. The only Southwestern BC example below is Nanaimo used to illustrate the diverse successes that a small city with an eroding forestry and fishing base can achieve. The Victoria and Vancouver regions have enormous numbers of economic good news stories but have been purposely excluded from the following discussion because they are widely known to be successful. The smaller heartland or “250” communities discussed here faced more difficult and different adjustment problems, particularly to emerge from their traditional natural resource-base. Thus, they serve as exemplars to all heartland communities that they too can reinvent themselves and prosper in the future with public-private triple helix action.

a. Kamloops and the Cariboo

This region has been particularly hard hit by declines in the forestry and mining sectors. Forestry in particular still has great promise, if viewed more broadly as discussed above. Beyond forestry, opportunities abound as we see next.

1. Tourism and recreation for all four seasons

Sun Peaks attests to the success the region already enjoys as a four seasons destination as a result of a strategic vision at just one of its locales. A growing number of championship golf courses, resorts and cross-country skiing opportunities extend the picture, as does the regional headquarters of Rocky Mountaineer. Its location on the Trans-Canada and Yellowhead Highways, its rail centres, and its regional airport, position greater Kamloops for future tourism diversity and success.

2. Transportation, logistics and telecommunications

Kamloops’ strategic highway and rail location and its airport give excellent access to the rest of BC, Canada and the world. It is well placed to be a regional transportation and logistics hub for the vast area of the Cariboo/Chilcotin and its rich natural resource base. Improvements to the Trans-Canada will help as well.

Kamloops is even better connected to the world by bandwidth than it is by its strong road, rail and air links. It is the meeting point of a number of high capacity fibre optic trunks and as a result has significant potential for IT and bandwidth intensive industries. These attributes combine with Cariboo University College and other educational institutions in the region to provide a solid future for information, logistics and other technology industries. The Lottery Corporation of British Columbia adds another information and technology magnet to strengthen the region.

It is not surprising as a result, that the region houses some of British Columbia’s and Canada’s fastest growing technology companies. These include: forestry simulation software innovators Viewscapes3D Graphics Ltd. in Hundred

Mile House; and internet solutions company MediaWave Communications in Kamloops.⁹ *Profit* ranked MediaWave 6th of Canada's 50 emerging tech firms.

b. Okanagan Region

The Okanagan Region from Vernon to Osoyoos is climatically, geographically and economically diverse. It is the most prosperous and successful region by far in the heartland and may well serve as a role model and inspiration for others.

It has a growing and diverse population base that includes a growing number of younger and economically active retirees. It has also been able to attract and retain young people because of its educational institutions, its very high quality living environment, its superb recreational opportunities, and its growing and varied employment base. It is home to over 200 technology firms and yet the region's diversified and strong growth is increasingly being taken for granted in view of its broad publicity.¹⁰ However, we should all remember that 13 years ago the economic picture was gloomy: NAFTA was about to kill off the old low quality wineries; fruit growers were pushing for a marketing board; and tourism was focused on catering to traditional family summer holidays.

1. Tourism, ecotourism, agri-tourism [grapes-wines-fruits]

These closely linked sectors deserve enormous credit for reinventing themselves and renewing the economic lifeblood of the region. From roughly a dozen marginal wineries pre-NAFTA, the region now boasts over a hundred wineries producing excellent wines, and setting new international standards for Canadian wines. The region now routinely wins 75% of the awards at the annual Canadian wine festival and its wines garner international prizes as well, signified by Mission Hill's 1993 gold medal as the world's best chardonnay from a field of 226 chardonnays from around the world. With liquor sale regulatory reform, the region can now offer food and accommodation at its wineries, which are taking tourism and viticulture into new levels of excellence and diversity.

Agricultural innovation and marketing know-how are not solely the purview of the wine industry. The orchard sector recently unveiled Canada's newest apple, the Aurora Golden Gala, while a year before the Ambrosia apple was marketed. This contrasts sharply with the orchard industry's late 1980's cries for a marketing board and regulation. Sun-Rype has further extended the region's marketing prowess with

⁹ See "Hundred Mile House: Viewscape3D Graphics Ltd. Forestry software," (*BIV*, August 19-25, 2003, p. 5); "MediaWave Communications Corp.--internet solutions company," (*Sun*, Thursday, August 28, 2003, p. D4).

¹⁰ A four-part series by Michael McCullough details this growth: "Welcome to the new Kelowna--hotbed of business in B.C. Interior," *Vancouver Sun*, Friday, October 17, 2003, pages C1-C2; "Prosperity zooms in with the airlines," *Vancouver Sun*, Saturday, October 18, 2003, pages G1&G4; "Technology driving Interior's economy," Tuesday, October 21, 2003, pages D1 & D6; and "Cultivating the valley's 'Silicon Vineyard'," *Vancouver Sun*, Thursday, October 23, 2003, pages D1&D5. Also see his: "Kelowna attracts growing tech sector," *Vancouver Sun*, Wednesday, September 24, 2003, page D5.

its recent campaign to establish ORAC (oxygen radical absorbance capacity) as a benchmark for foods since many of BC's fruits have the highest ORAC ratings.¹¹

These agriculturally linked product and tourist innovations are just summer tourism starters. Add in some of the best golf courses in Canada, diverse lake and river recreational opportunities, and hiking, cycling, camping and fishing and the region from Vernon to Osoyoos will continue to be a summer playground for all. Winter sports in several superb ski resorts round out the region's tourism strength.

2. Post Secondary Education and Research

Post secondary education is a very significant and emergent component of the Okanagan region. Okanagan University College (OUC) has four campuses: one each in Vernon and Penticton and two, including its main campus, in Kelowna. Moreover, OUC technology and degree programs are increasingly linked to local firms through projects and internships bringing two-way exchange of knowledge.

High quality government research is growing robustly in the region. The National Research Council Okanagan Observatory in Penticton is a world-class astronomical research facility that is being upgraded continually. Agriculture Canada's Pacific Agri-Food Research Centre in Summerland adds to the regional research base. So does the BC Ministry of Forests Kalamalka Research Station. The research base combines with post-secondary institutions to provide a very solid climate for technology, which we consider next. The Penticton observatory and the Summerland Agri-Food station both have created local spin-off companies. The NRC has documented the home-grown wireless industry in and around its Penticton observatory. Summerland also has spun off firms in the food and wine industries.

3. Technology Industries

The technology sector is rapidly emerging as one of the region's prime economic engines for the future as noted earlier. It is centred in Kelowna but also is active in Penticton and as far north as Vernon.

Among the regions most notable technology firms is Netcentrics Corporation, an internet solutions company in Kelowna, among the fastest growing technology companies in BC. Its largest private technology firm is Kelowna Flightcraft, while Limnology Research Corporation, and Summit Environmental add strong environmental technology to the region. Indeed, such is the importance of the technology and IT sector to the Kelowna and Okanagan regional economies that the Central Okanagan Economic Development Commission recently completed its second review of the scale and importance of the sector regionally.¹²

¹¹ See Bruce Constantineau, "Juice producer wants consumers to drink up," *Vancouver Sun*, Friday, October 17, 2003, page C4.

¹² See 2003 -- *HIGH TECH STUDY (The Silicon Vineyard: Okanagan, Similkameen, Shuswap) And Benchmark Comparisons to May 2001 Study*, (Kelowna: Economic Development Commission (EDC) of the Central Okanagan And Okanagan Science & Technology Council (OSTEC)), 2003.

c. Prince Rupert

Prince Rupert is perhaps the best example of rent-seeking behaviour and the costs of getting stuck in past economic metaphors. The province has supported the perennially failing Skeena mill with at least \$400 million over the past decade.

The obsessive focus on Skeena is regrettable in many ways. It has cost hundreds of millions of dollars that could have been used in more productive ways, and sustained false hopes that the community would not have to change. Thus, Prince Rupert, frozen in time, is kept from seeking new ideas and futures, waiting for the return of past fibre-based glories. However, there are vibrant possibilities if the community were to work to identify and seize them as discussed next.

1. Pacific Port and airport to be a major Pacific Gateway

Prince Rupert is blessed with an exceptional location for 21st century global trade. It lies on the great circle route between the west coast US and Asia, some 3-3½ days closer by ship to Tokyo, Pusan, Shanghai, and Hong Kong than Los Angeles-Long Beach. It is more almost two days closer than Seattle-Tacoma. With its deep ice-free port and direct rail links to the CN system, it provides Asian firms shipping to the Chicago or New Orleans with a three day advantage over LA-Long Beach and more than a 24-hour advantage over Seattle-Tacoma. It has the potential to be a major, perhaps the major, Asia-Pacific gateway to North America. The Pacific Port and associated airport development will also allow Prince Rupert to better tap into the Alaska cruise ship market and into tourism more generally.

What stands in the way of this potential is the inability of the Port of Prince Rupert to obtain the capital it needs to fully develop its facilities including a fixed rail and road connection between Ridley Island (the location of the Port) and mainland (it must go to Treasury Board in Ottawa for approval of all of its borrowings and capital spending). It also lacks the ability to promote itself and develop the logistical support needed to become a massive international port. A new Pacific Port, created by the federal government would consolidate the Ports of Vancouver, Prince Rupert, Fraser-Surrey Docks, and the North Fraser Harbour Commission. This requires no funding from the federal government, quite the reverse since Pacific Port would have the authority to go to global capital markets to obtain needed funds to coordinate its infrastructure, marketing and management, and reach its potential.¹³

2. IT and logistics to support Pacific Port gateway functions

A port is not an old economy function. Moving containers or bulk commodities is the most obvious, but not the most important function that globally

¹³ Prince Rupert is seeking private sector support for \$50 million to overcome this capital barrier to begin to reach its potential. See Don Whitely, "Prince Rupert eyes containers," *Vancouver Sun*, Wednesday, October 22, 2003, page D5. Under the Pacific Port concept, such private sector financing could be achieved much more efficiently through capital market borrowings or equity under the aegis of the integrated Pacific Port Authority proposed here.

competitive ports perform. Information about the location and nature of the containers and commodities is every bit as important as the physical items themselves. Thus, such globally dominant ports as Hong Kong, Rotterdam and Singapore are very high tech operations loaded with the most sophisticated information technology and infrastructure. These include the most advanced logistical and operations management procedures and the mathematical programming and IT algorithms that underpin them. This takes extremely knowledgeable people and learning resources to keep them current and effective. It also takes cutting edge IT infrastructure and massive bandwidth and hardware investments to move the information needed to run the proposed Pacific Port.

3. Transportation and logistics

Transportation and logistics are ostensibly support functions for a major gateway port, railhead and airport. However, this expertise is also exportable in its own right as Singapore has shown. Thus, while beginning as an adjunct to port operations, transportation and logistics knowledge can also become a powerful economic sector for Prince Rupert. The consulting engineering sector in Vancouver is an analogous example, rising to prominence globally based on its initial support of our mining, pulp, lumber and port activities and then selling their services around the world. A final opportunity provided by Pacific Port in Prince Rupert is the IT and transportations-logistics training and education to provide knowledgeable workers and researchers who can sustain the port and keep it competitive. Again, success here in serving the evolving sector in Prince Rupert could easily be levered to sell such education and training services internationally, and also combined with similar education and training opportunities in Prince George, which are discussed below.

4. Offshore oil and gas

Drilling for offshore oil and gas is not yet a fait accompli. However, it is likely that some form of offshore oil and gas development looms in the next decade. Prince Rupert will be the major beneficiary of this development; much like St. John's, Nfld. has vis-à-vis Hibernia off the east coast of Canada. As noted earlier, the scale of the oil and gas reserves could be immense and rival those in Northeastern BC and Alberta. The scale of employment opportunities that could be created is immense, as can be the training and research opportunities were Prince Rupert to develop as the core of major offshore oil and gas exploration and development.

5. Forests

Forests have underpinned Prince Rupert to date. Yet dependence on traditional forestry has been the undoing of Prince Rupert through Skeena, not its future. However, a more robust and forward-looking forest sector does hold great promise. What is needed is the forest-not-just-fibre approach discussed earlier. With its superb forest resources, the prospect of Pacific Port to ship its products, and its port and airport to move people to and from its forests, the future of Prince Rupert's forest sector should be bright indeed.

d. Prince George

Prince George has many of the same opportunities as those faced by Prince Rupert in forestry, transportation and logistics and oil and gas. It also has significant opportunities in rural and aboriginal health and telemedicine.

1. Transportation and logistics

Prince George lies essentially at the centre of the province. It is a regional transportation centre and will become much more important once Prince Rupert develops its Pacific Port function and its oil and gas exploration and production. Prince George should also benefit from Northeastern BC oil and gas exploration and development. The CNR and former BC Railway¹⁴ intersect in Prince George, as do Highways 97 and 16, giving the city excellent rail and road access. Its airport also holds promise for future expansion and serving northern and central BC. Along with these transportation and logistics functions the presence of the University of Northern British Columbia and the College of New Caledonia offer opportunities to carry out research and training to bolster the transportation and logistics functions.

2. Northern and Aboriginal health and telemedicine

The UBC medical school expansion to include UNBC in medical education and research is a huge regional boost. It holds promise for the City to be globally recognized in Northern and Aboriginal health and using telemedicine to serve these populations. Telemedicine can also be a potent educational tool. Thus, the IT infrastructure and workers that support health care and telemedicine can be huge boons to the long-run development of the City and its environs.¹⁵

In this vein, Prince George is an excellent example of team action to bring the bandwidth needed by telemedicine and the medical school expansion. BCNET's ORAN is the province's only optical high-speed research and education network. The network owned by the Province's universities connects UBC, SFU, UVIC BCIT and UNBC. Government gave the original funding for the network. The recent drive to extend the line to UNBC was a collaboration between UBC and UNBC on the new medical program. The province and the Federal government provided some added money and TELUS provisioned the line at very reasonable costs. The city of Prince George, UNBC, and the regional Health Authority extended this network to the hospital, the library and other government facilities. Spin-off companies or those working in collaboration with UNBC at its research park get access to the network too. The City anticipates the network will expand and help attract new businesses to the region. At the very least individual researchers and entrepreneurs will be able to develop new applications on a world-class optical network in Prince George.

3. Better use of core lands for a better city

¹⁴ At the time of this writing, 2 January 2004, BC Rail has been disposed of and purchased by CNR.

¹⁵ For example, Prince George's Creation Software is already a leader in internet solutions, *Business in Vancouver, CurrentZ*, February 25-March 3, 2003, p. 3.

Prince George has an abundance of underused lands in its historic compact core, which lie adjacent to the CN tracks and provide the city with a unique chance to accommodate in the downtown core, virtually all the growth foreshadowed by the foregoing economic generators. This can enable the city to grow rapidly while also improving the quality of life by re-invigorating an urban core that has been weakened by the outward movement of retail, housing and newer activities like UNBC. The result can be a more compact, competitive and liveable community. Prince George has the advantage of being a “unicity” where city boundaries encompass virtually the whole urban area so that it can make municipal and regional decisions by itself.

e. Nanaimo

Of British Columbia’s smaller cities, Nanaimo is likely the most advantaged. Its strengths for the future are diverse as we see next. Declines in Vancouver Island forestry and fishing are more than being offset by diverse other sectors. Nanaimo also benefits from earlier amalgamation: its city borders span virtually its entire region. Thus, it has strategic and planning control of its functional region.

1. Tourism

Perhaps even to a greater extent than Victoria, Nanaimo is blessed with tourist assets. Nanaimo is strategically located virtually in the centre of Vancouver Island’s Victoria to Campbell River tourism belt. Its 800 seat Port Theatre Complex added a valuable cultural dimension to tourism and convention centre and linked 169 room hotel will further boost tourist.¹⁶ Nanaimo is served exceptionally well by ferries: Tsawwassen-Duke Point; Horseshoe Bay-Departure Bay; and the new downtown Vancouver to downtown Nanaimo Harbour Lynx service. Many low-cost floatplane flights are offered by Harbour and Baxter Air, as well as regular links from Nanaimo’s Cassidy Airport to YVR some 20 minutes away. Four season recreation and tourist attractions abound on the Island and in Nanaimo, the Island’s gateway.

2. Retail

Nanaimo boasts an exceptional array of shopping opportunities, far and away the best on Vancouver Island. It possesses the Island’s largest shopping centre (530,000 square foot Wood Grove Mall), two other regional malls and a series of stand alone big box retailers conveniently located along the Island Highway and the new Nanaimo Parkway. Its primary and secondary trade areas each includes some 140,000 people which when combined with its tertiary trade area exceed 370,000. Retail trade is Nanaimo’s largest employer, supporting and supported by tourism.

3. Education and health

Nanaimo is emerging as a vital education and health centre on Vancouver Island. Malaspina University College (MUC) is the linchpin in the regional post-secondary system. Its 2001-02 enrolment was 11,000 students, two-thirds of whom

¹⁶ On November 2, 2003, Nanaimo City Council voted to issue a Call for Proposals to complete the convention centre, armed with promises of financial support from the provincial government.

take degree or credit programs. MUC links closely with the business community via coop and research projects. It has international program ties to some 40 countries.

Nanaimo Regional General Hospital (NRGH) is also assuming the role of a major regional health care provider for central and northern Vancouver Island. A \$29 million expansion of its surgical and maternity capacity is proceeding over the next two years, which will boost its ability to serve its growing service population.

4. Technology

Technology industries are growing rapidly in the region as well. Indeed, one of Canada's fastest growing tech companies is Nanaimo's Triant Technologies.¹⁷ With its exceptionally high quality living environment, its superb ferry and air links to Vancouver, its mild climate, its cultural activities, MUC, and NGRH, Nanaimo offers technology companies an excellent low-cost location. The technology sector can be expected to grow in future as bigger cities continue to be more expensive while Nanaimo can meet the education and life-style needs of "creative workers."

5. Transportation and logistics

Nanaimo recently changed its name from the Hub City to the Harbour City. Despite the name change, it is Vancouver Island's transportation hub.

We have already mentioned its diverse and numerous air and ferry links to Vancouver and beyond. However, it also lies at the heart of the Island's road transportation system astride the new and old Island Highways. The Port of Nanaimo is also flourishing, not just forest products and bulk commodities but containers as well. As a result, Nanaimo is a major transportation and logistics centre for Vancouver Island, a function that should grow as the economy diversifies.

VI. The Triple Helix: A Model for Regional Development in BC

The triple helix notion argues that innovation, and therefore growth, in the future depends on the cooperation of business, government and academia – the three strands of the helix, particularly at the local and regional level.¹⁸ Canada has been particularly weak in such cooperation, with British Columbia weaker still. Canada ranks toward the bottom of OECD countries in innovation, the genesis of Canada's innovation initiative. A prime goal of the initiative is to enhance business and university cooperation through federal support of basic research at universities and encouragement to commercialize the resulting intellectual property. Canada's

¹⁷ "Triant Technologies Inc. – monitoring software for chip producers," *Vancouver Sun*, Wednesday, August 13, 2003, pages D1 and D2

¹⁸ See Henry Etzkowitz, "Science-based regional economic development: A triple helix of university-industry-government relations," given at *Triple Helix Øresund*, (Copenhagen: Scandinavian Academy of Management Studies), 29 November 1999. Peter Maskell, Heikki Eskelinen, Ingjaldur Hannibalsson, Anders Malmberg, and Eirik Vatne, *Competitiveness, Localised Learning and Regional Development Specialisation and Prosperity in Small Open Economies*, (London: Routledge), 1998; Maskell, Peter, "Towards a Knowledge-based Theory of the Geographical Cluster," *Industrial and Corporate Change*, Volume 10, Number 4, pp. 921-943, 2001.

private sector lags badly: there is a huge need to spark private sector investment in innovation and the related training and education that make innovation work.¹⁹

Regrettably, Canadian industry appears to be heading in the opposite direction. Virtually every telecommunication company in Canada, for instance, has exited from any commercialization of R&D efforts and in effect has outsourced that function to others, typically global players such as Nortel, Cisco, Lucent, and others.

British Columbia has been particularly weak at all levels in linking business, government and universities. Our traditional natural resource economy and the attendant rent-seeking behaviour discussed above, has not provided a fertile environment for investing in people, ideas and research and development. This needs to change quickly if we are to improve our rates of innovation, our productivity and our competitiveness.²⁰ It is essential therefore that we consciously move this sort of cooperation to the top of our public and private sector policy agendas so that we can create the triple helix links in our regions that can build and sustain the various technology and other industrial clusters that we are seeking for the future prosperity of the province and particularly of its diverse communities both in the heartland and in Southwestern British Columbia.

VII. Education, Transportation, Telecommunication, and Public Goods: Triple Helix Foundations for Both BC Economies

a. Attracting and retaining educated people are critical

In high tech they say, “our inventory goes home every night” -- their inventory being their people. So-called knowledge workers are lured and sustained by a number of factors. The first is a high quality living environment, not just the biophysical environment, but the social environment provided by first-rate public and private goods and services such as education (notably post secondary education), recreation facilities, health care, libraries, theatre and entertainment, and increasingly research capacity and infrastructure.²¹ Clean air and water, excellent interregional and urban transportation are also important here. As UBC President

¹⁹ For details see Industry Canada, *Achieving Excellence: Investing in People, Knowledge and Opportunity*, (Ottawa: Industry Canada), February 2002.

²⁰ The BC Progress Board has noted BC lags Canada and competing states of Washington and California badly on the innovation front. See BC Progress Board, *2001 Report*, 14 February 2002, and its more recent study, *Beyond Hope? Revitalizing Regional Economies: The Report of the "Project 250" Expert Panel*, Preliminary Draft, August 15th, 2002, (Vancouver: BC Progress Board).

²¹ BC trails Canada badly on several fronts with respect to post-secondary education and R&D, critical components of innovation. BC ranked 10th in private investment growth from 1991-2000. BC ranked sixth in gross capital formation as % GDP in 2000. Without investment it is difficult to innovate. Only 45% of our businesses invest in R&D, the national average is 55%, R&D as %GDP places us sixth among provinces. The percentage of businesses making claims under the Federal R&D tax credit program is worse, we currently rank 9th in the country. We perform only 7% of the R&D in Canada despite having 13% of the population. The situation is exacerbated by provincial R&D spending which is among the lowest in Canada, where we were 8th in the country: See BC Progress Board, *2001 Report*, (Vancouver: BC Progress Board), 14 February 2002. Also see *Innovation Report Card*, (Vancouver: Faculty of Commerce, University of British Columbia), Fall, 2002.

Martha Piper noted recently,²² we really need to talk about the *creative economy*, not just the knowledge economy, and creative economies require creative places that span all of the features noted here.

b. Creating new knowledge and accessing existing knowledge are musts: education and telecommunication key

Knowledge clearly drives the knowledge economy. Thus, creating new knowledge and having quick and economic access is critical to succeed in the knowledge economy. Regions must effectively educate people so that they can create new knowledge and use existing knowledge for social and economic benefit. However, the best-educated and most thoughtful citizenry will not prosper without the critical information and telecommunication infrastructure (hardware, software and cultural attitudes) necessary to generate, store and retrieve knowledge.

c. All communities can succeed given this infrastructure and a capacity to see new futures and realize them

Kelowna and the Okanagan demonstrate that all communities can succeed in the creative and knowledge economies. What they need is above all the capacity to develop new metaphors and economic visions for the future. Then they need the commitment and wherewithal to implement these visions and realize the opportunities that they have identified. Prince Rupert, for example, enjoys diverse opportunities. However, it lacks the critically important capacity to see these and mobilize community energies and resources to seize them. The \$20 million offered to help Skeena by Prince Rupert, and the energy that generated it, show strong community will and commitment. By shifting these energies to the sorts of futures identified here, I have little doubt that Prince Rupert will exceed its past glories.

VIII. Private Sector Actions for Success in a Triple Helix World

There has been such a huge gap between businesses, universities and governments that almost any effort by the private sector would be a good start. Here are four ideas to get the process of private sector involvement underway.

a. Fund local triple-helix innovation efforts and prizes

Various firms or associations could sponsor either small triple-helix efforts, or offer a prize of say \$5,000-10,000 for the best triple-helix partnership each year. For example, Weyerhaeuser might sponsor one in forestry or the environment, TELUS might do one in IT and telecommunications, and CN or the Vancouver Port Corporation or VIAA might do one in transportation and logistics. Alternatively the BC Technology Industries Association might do one, as might COFI or perhaps the Gateway Council. More than one would be better, and having separate prizes competition for Southwestern BC and for the heartland would highlight heartland efforts and promise. We should also build on past BC successes like the Advanced Systems Institute, the BC Biotech Alliance and even the BC Technology Industry

²² See Alan Daniels, "UBC president calls for a 'people climate'," *Vancouver Sun*, Wednesday, September 24, 2003, page D5.

Association, all of which are the result of triple-helix cooperation. Of course, shortages in venture capital, especially early seed funding, are hampering new technology ventures across BC and need more private sector funding as noted later. The previously mentioned ViTAL Economy methodology is another avenue to approach triple-helix regional innovation in smaller communities. The much talked about innovation clusters are triple-helix entities implicitly, but their triple-helix cooperative nature must be made explicit, not left implicit.²³

b. Transportation and telecommunications and ports/airports

The transportation and logistics sector appears at several prominent places earlier. So does the need for state-of-the-art IT and telecommunications. Accordingly, the transportation and telecommunications sectors and the major ports and airports might jointly or individually fund specific triple-helix cooperative efforts to gain new and usable insights into pressing and intractable issues. For example, Pacific Port concept will take the concerted research and policy effort of all three if it is to get launched at all, yet alone be a success. Reconceptualizing forests could be another triple-helix drawing on all three sectors to create new visions, policies and actions to extend the economic and social vitality of our forests.

c. Build bridges to academic institutions and governments

The sorts of bridges of interest here could be seminars or coffee chats between groups of academics and groups of business people to discuss the opportunities for cooperation that exist among them for issues of the day or those that loom in future. Individual businesses could host such events once a month in their head offices and include their senior decision makers and senior members of BC's academic community. What is critical is the commitment on the part of the business to ensure that its senior executives attend these on a regular basis. Similarly, members of the academy need to demonstrate their commitment through regular attendance.

d. Learn from the regional Science and Innovation Councils

Of particular relevance to heartland BC is the network of regional science and innovation councils based on the Province's regional college boundaries. These councils are made up of local industry leaders, representatives from the educational institutions and local government. They have been responsible for a lot of good work in the 8 regions where they exist. They support a good many networking events, reverse trade shows, business and technology mentoring programs. This type infrastructure takes a long time to become self-sufficient and thus needs support from government, which can and should take a long-term perspective. Indeed, much of the success in the Okanagan is linked to the strong cooperative links that have been developed through the Central Okanagan and Okanagan Science & Technology Council (OSTEC) and closely linked community economic partnerships. These councils and partnerships are the keys to success, and the failure of the Greater Vancouver Economic Partnership (GVEP) has certainly hindered the

²³ See for example, PricewaterhouseCoopers, 'An Integrated Strategy for British Columbia's Technology Clusters,' <http://www.leadingedgebc.ca/>, 2003.

Greater Vancouver region's ability to seize the enormous opportunities it has enjoyed, and continues to enjoy. In contrast, the Okanagan success is a tribute to cooperation and partnership that all can and should emulate.

e. Engage in mentoring, training and innovation across BC

Good work experience and learning opportunities is one of the major issues facing the business community and graduates from post secondary institutions. BC businesses have been improving significantly, but are still lagging in providing the mentoring and learning opportunities for students in BCs post-secondary institutions. Working with individual post secondary institutions, Faculties and faculty members to provide such experiential learning opportunities will also help build the bases for future triple-helix cooperation. Indeed, the students themselves might be the means by which such cooperation is fostered through their specific learning programs, projects and coursework.

An excellent example here is provided by the *New Ventures BC* program developed by the SFU Faculty of Business. Entrepreneurs with ideas enter the competition and as part of the program get help with business plan development, business education seminars, expert mentoring and advice. The four round competition hopes to have up to 100 participants competing for prize money of \$125,000. The program is an excellent example of the triple helix as it involves the university, both levels of government and the private sector. Initial investors and sponsors for the program were the province, the federal government and private companies such as the Bank of Montreal, Campney and Murphy, Tap Ventures and TELUS. The competition is open to BC entrepreneurs with an idea for a new product or service that involves new technology.

f. Cooperate to provide needed venture capital for BC

Turning to Venture Capital, BC lags other Canadian and American regions in attracting its share of private venture capital on a per capita basis. Per capita investment in B.C. stands at \$143 well below Ontario's \$421 and Canada's average of \$332. Changes have been made to the Province's own Venture capital program, which should provide some additional help. Other jurisdictions in Canada have been more aggressive in dealing with this issue. Quebec developed a full service model called Inno-Centre. The organization is dedicated to helping entrepreneurs start up commercial ventures by providing organizing, planning and financing for emerging firms. Government facilitated its beginnings but it is now run by the private sector. It has raised about \$40 million in financing for Quebec firms. Ontario and Alberta liked the model and now have Inno-Centre operations in their respective provinces.

IX. Governments Actions for Success in a Triple Helix World

As was the case with business, there is so much to do to build triple-helix ties, that governments too can start virtually anywhere. Here are some specific ideas.

a. Invest in people, ideas and infrastructure for innovation

British Columbia has traditionally had the highest percentage of its population with university education while also having the smallest percentage of its 18-24 year olds attending universities. This is simply not good enough for the future. There has to be a much more significant investment in education to provide educated citizens and workers for the knowledge and creativity intensive jobs that dominate the future. A specific goal here would be that over the next five years BC moves into the top five provinces in terms of the percentage of 18-24 year olds attending university. Simultaneously, the provincial support per funded university student needs to move from last among the provinces to at least the mid-point if not to the top five. This also entails significant investment in research and research infrastructure as is being done through the BC Knowledge Development Fund (BCKDF) and to raising the awareness of the importance of research and triple-helix cooperation among governments, universities and businesses.

b. Build enduring links with business and academia

The government of BC in particular, but local governments also, need to take the lead as honest brokers bringing together businesses and post-secondary institutions to consciously and aggressively foster triple-helix innovation and economic clusters. Creating a BC Triple Helix Committee or adding triple helix linkages to the Premier's Technology Advisory Committee would be useful.

c. Build *BC Inc.*, *Heartland BC Inc.*, *Vancouver Inc.*, etc.

British Columbia has also fallen behind the other provinces, particularly Alberta and Quebec, in promoting its interests in Ottawa and nationally. Our victim mindset has meant that we all too often prefer to complain rather than act in a coordinated vigorous way. In contrast, the mythical, but highly effective, *Quebec, Inc.* is a model we in BC would be well advised to emulate.

Until recently, there has been a marked absence of concerted cooperative lobbying efforts in BC, the major exception being the efforts following from the Asia Pacific Initiative that led to the Vancouver International Airport Authority and to some loosening of Ottawa's control over the Vancouver Port Corporation. That was a decade ago. We need to get business, government and academia working together on public policy efforts like Pacific Port or extending Open Skies beyond the US. Senior labour leaders should also be included. Well thought out briefs backed by carefully chosen delegations of senior provincial cabinet ministers, civil servants, business people and academics, will go a long way to capture the public policy agenda for the benefit of BC and Canada too. Such cooperation can be replicated at the Heartland, Lower Mainland, GVRD and Capital Regional District and local levels. Government must lead. Fortunately, the provincial government realizes the deficiencies of the past approach and is moving strongly to improve relations with Ottawa. This provides a solid base for governments, business, academia and labour to work together to energize a **BC Inc.** and its regional analogs across BC.

X. Summary and Conclusions

a. Summary

This discussion paper highlights a number of the challenges and opportunities that BC's two economies face. It focuses on heartland issues as these are more severe, pressing and seemingly intractable than those in Southwestern BC, which is large and varied enough to succeed without having to make dramatic economic changes of the sort required elsewhere in the province. This having been said, it must be noted that even Southwestern BC will not prosper and reach its potential without confronting and dealing with the issues it faces as set out above. The key is to be strategic, willing to adopt new economic ideas and metaphors and let go of older and increasingly dysfunctional ones. The diverse successes set out here demonstrate that any size community in any region of the province can change and prosper, despite the difficult circumstances that many of these communities face.

b. Conclusion: Cooperation among triple-helix partners is key

Every community must be part of charting its own economic future. The critical success factor is cooperation and partnership, not only between public and private sectors units, but with post-secondary institutions as well: a triple-helix partnership.

Opportunities abound throughout BC, even in seemingly disadvantaged resource-based communities such as Prince Rupert and Prince George. BC has not traditionally been good at the sorts of triple-helix links discussed here. However, there are sufficient examples emerging in the Okanagan and Prince George to show that by working together it is possible to create a much more robust future than working separately. Indeed, the Greater Vancouver region is one of the biggest laggards in this vein, rife with parochial municipal jealousies so that the GVRD as a body will not engage in regional economic strategy. The now defunct GVEP tried to fill this void, but the leadership and energy needed by the region's local governments, businesses and post-secondary institutions was not sufficient to meet the challenge. If we are to create the desired innovative sectoral clusters that are the focus of much public policy and private discussion, we must create a setting where the diverse actors in each region work together.²⁴ Successful innovation and competitiveness demand nothing less. Without greater cooperation and partnership progress will be difficult if not impossible. With it, there should be no limit to the economic prospects for BC and all of its regions.

²⁴ See excellent illustrations of the virtues of cooperation and partnership in: Maskell, Peter, Heikki Eskelinen, Ingjaldur Hannibalsson, Anders Malmberg, and Eirik Vatne, ***Competitiveness, Localised Learning and Regional Development Specialisation and Prosperity in Small Open Economies***, (London: Routledge), 1998 and Bathelt, Harald, Anders Malmberg and Peter Maskell, ***Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation***, (Copenhagen: Copenhagen Business School), September 16, 2002.

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