THE WORLD URBAN FORUM 2006

Vancouver Working Group Discussion Paper

The Resilient

City

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Aussi disponible en français

Turning Ideas into Action

In preparation for the 2006 United Nations World Urban Forum (WUF), the Vancouver Working Group (VWG) was created as a partnership of public and private agencies and civil society. It was mandated to initiate a series of research inquiries resulting in the *Vancouver Working Group Discussion Papers for the World Urban Forum.* These papers were prepared by members of the VWG with relevant experience and well-developed resources. It is hoped that these papers will contribute to the development of a thematic framework for WUF 2006 by articulating the concept and content of urban sustainability.

WUF will focus on urbanization as an all-encompassing global phenomenon and attempt to recommend effective actions to achieve a sustainable process of global urban transformation by balancing social, economic, environmental and political goals: *Turning Ideas into Action.*

The Vancouver Working Group Discussion Papers for the World Urban Forum are open-ended segments of a conceptual whole. Each of them will strive towards sustainability thereby transforming urban life into a productive, inclusive and environmentally balanced range of activities. These segments taken together will characterize sustainable human settlements. Sustainable urbanization can only be achieved through a mosaic of sustainable components that will add up to more than the sum of their parts.

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FOREWORD

This paper is part of *Turning Ideas into Action*, a themed series created in preparation for the 2006 World Urban Forum. Together, this series forms a mosaic that sheds light on a common focus: the city. On a global scale, cities have become the dominant form of human settlement, socially, economically, environmentally and politically. The papers begin to examine how cities can continue to be dynamic and inclusive places in which to live and thrive. By illustrating explorations of the city with powerful stories of promising practices, the papers emphasize the assets from which cities draw their strength, and highlight dynamic participatory processes in action. Research for each paper draws on extensive experience in planning and managing cities. Selected lessons provide knowledge to achieve locally relevant solutions and supportive policies at the regional, national and global levels. They demonstrate the complexities of how cities evolve and transform, and challenge assumptions that are often taken for granted. Finally, the papers encourage the reader to view the world from different perspectives and discover successful and innovative solutions appropriate to their relevant conditions.

WUF 2006 will build on Canada's historic leadership in bringing the UN Conference on Human Settlements to Vancouver in 1976. It will also benefit from Canadian experience in improving human settlements at home and abroad. The 1976 UN meeting pioneered a participatory process of member nations and NGO's, and created a worldwide focus for human settlements issues through the establishment of the UN Centre for Human Settlements in Nairobi, now known as UN-HABITAT. WUF 2006 is part of an historic trajectory of UN Conferences and represents the 30th anniversary of HABITAT '76. These papers are intended to initiate an informed dialogue on the scope and scale of the evolving urban agenda through *Turning Ideas into Action* locally, regionally, nationally and across the world.

This paper is one of a series of discussion papers prepared in anticipation of the World Urban Forum 2006.

The papers in this series include:

The Capable City

The International Centre for Sustainable Cities

This paper examines non-traditional forms of governance with an emphasis on consensus that has emerged in a Canadian context and responds to three questions. Are there models of cooperation across jurisdictions that might provide lessons for city regions that do not require mergers? Are there models for management of global common goods – such as watersheds, that do not involve legislative powers? Are there models based on consensus and voluntary agreements across sectors that show promise for influencing decision making related to sustainability? Three Canadian cases are presented: the Greater Vancouver Regional District; the Fraser Basin Council; and the National Round Table on the Environment and Economy. The models are assessed using UN-HABITAT's criteria for good governance. The findings, along with pertinent literature and experience on governance and capacity building, yield observations and recommendations about their application to other cities.

The Ideal City

Department of Art History, Visual Art and Theory, University of British Columbia

This paper explores the history and force of ideal city planning and the related literary and visual genres of Utopian -- and Dystopian -- speculation. The Ideal City represents a highly significant aspect of human thought and endeavour, usually conceived in response to actual problems as well as intended to effect substantive improvement in the daily social lives of individual citizens. Linked to a thematic knowledge resource intended to establish an interactive website, this paper reviews the main constituents of the Ideal City tradition, examines its impact on the design of urban settlement, including across Canada and in Vancouver, and indicates how such conceptual approaches to the building of a better civic environment and society can contribute to the creation of more sustainable, habitable and civilized cities in the 21st century.

The Learning City

Simon Fraser University

The learning city is a city that approaches sustainable development as an ongoing educational process. This paper focuses particularly on the role of universities and colleges in the learning city, examining the different dimensions of sustainability education and best practices from British Columbia, across Canada and internationally. Lessons from this are applied to envisioning a new Centre for the Learning City in Vancouver's new Great Northern Way Campus.

The Livable City

The International Centre for Sustainable Cities

This paper is a case study of the Greater Vancouver Regional District (GVRD) in Canada, the host region for the World Urban Forum 2006. Drawing on the literature on livable cities and the region's efforts to bring this concept into practice, the paper poses two central questions: What key factors affect the livability of a city and how does livability relate to sustainability? Livability is defined as "quality of life" as experienced by the residents within a city or region, and the paper concentrates on a case study of

planning for Greater Vancouver including the Livable Region Strategic Plan, the Sustainable Region Initiative, and the cities^PLUS 100-year vision for the GVRD. The paper provides lessons for other cities and regions, and concludes that for Greater Vancouver, livability, sustainability and resiliency are three intertwined elements that together will define the quality of life of current and future residents.

The Planning City

The Canadian Institute of Planners

This paper looks at sustainability as a dynamic, continuous process of sharing and exchanging knowledge and experiences, and of learning through action. It contributes to this learning process by reviewing key trends and challenges that confront those responsible for planning cities in Canada and overseas. Examples of urban planning innovations and experimentations are drawn from a sample of cities and taken from the perspective of the urban planner who is usually a central actor in efforts to articulate, plan for and implement urban sustainability. The paper concludes with key findings, and offers direction about processes, structures and methods that could enhance the effort to achieve urban sustainability.

The Resilient City

Ministry of Community, Aboriginal and Women's Services, Government of British Columbia

This paper explores the resiliency of small Canadian communities dependent upon single resource industries by examining how they have coped with the economic and social pressures arising from the closure of their industries. It summarizes how they have managed their transition from communities existing to serve resource exploitation exclusively to communities based on a different, broader economy and suggests lessons from the Canadian experience that may be transferable to resource-based communities around the world.

The Secure City

Liu Institute for Global Issues, UBC

This paper focuses on three key issues: traditional pillars of urban security, threats and forces shaping cities in the 21st Century, and a research agenda to explore relationships between adaptive security, preventive security and human security. Action is called for to advance current concepts of capacity building, resilient design and adaptive planning. Integrated risk assessment that is responsive to community needs for prevention and precaution is recommended, and an enhanced role for individual responsibility and community participation to expand social capital is advocated. The Secure City sets a context for Canada's emerging national urban agenda and a policy framework for global strategies to improve human security in cities throughout the world.

The Youth Friendly City

The Environmental Youth Alliance

This paper explores what opportunities exist for the greater recognition of the rights and needs of children and youth in urban settings through a significantly enhanced role in urban governance and community building. By enabling children and youth to participate fully in their own development and environment, this paper demonstrates the potential among youth for building capacity, and for becoming insightful resources in developing strong and thriving local neighbourhoods and cities.

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EXECUTIVE SUMMARY

Small rural communities around the world share many challenges when nearby resource industries close down. Universally, industry closures come as a shock to their unprepared host communities. All are confronted by the sudden loss of jobs and the aftershocks of rapid population loss, economic upheaval, declining property values, a lack of capacity to provide services and diversify economically, and a loss of hope in the community's future.

As the host province for the World Urban Forum 2006 and with responsibility for many small resource-dependent communities, British Columbia initiated this report as a first step toward understanding the resiliency of small rural communities dependent upon single resource industries, a topic often overlooked in studies related to sustainable cities. Derived from work undertaken by a group of Canadian provincial and territorial governments beginning in 2003, this paper examines how small, rural, resource-based communities in Canada have coped with the economic and social turbulence arising from the closure of their single, dominant resource industries. The paper summarizes how resource-based Canadian communities have managed their transition from communities existing to serve resource exploitation exclusively to communities based on a broader economy.

This paper is distinct from the other papers submitted to the World Urban Forum 2006 in several important ways. The other papers in the series are concerned with cities in the context of growth and development and, in particular, with making cities more sustainable by developing theme-specific urban planning models that would improve upon characteristics many cities already have, such as security, learning and liveability. Their attention is focussed on large urban centres and on proposing ideal models of sustainable cities by building on what has worked in cities that are doing things right: cities able to go from strength to strength. Similarly, most research on industrialization is dedicated to the study of industrial impacts on larger urban areas.

In contrast, this paper focuses on the impacts of declining industry on rural communities, a topic that receives less attention from urban planners. It concentrates on the lived experiences of small rural communities in decline because of the sudden shock of an industry closure. These towns are struggling to avoid complete collapse and would be more likely than not to define sustainability as mere survival. The paper is also rooted in experience rather than theory, focusing on what community stakeholders actually did to save their towns from dying and suggesting some approaches or strategies that could be replicated by communities facing a similar crisis, whether in Canada or around the world.

The authors recognize that the impact of a resource industry closure on a community exists on a continuum with the closure of manufacturing industries and of natural disasters, like hurricanes or earthquakes, and political calamities, like war. It is also worth noting that rural resource-industry communities share much in common with the less dramatic decline of those rural communities based exclusively in agriculture. For all of

these communities, the challenge is similar: building local capacity so that cities and communities can better plan for, respond to and manage the consequences of natural or human-caused events that might otherwise overwhelm them. Some of the understanding reached about the response of resource communities to industry closure may be more broadly applicable to communities facing the closure of other types of industries or to those surprised by sudden, larger-scale crises caused by natural events or human actions. Some countries may choose to replicate strategies used to address Canadian problems insofar as they apply to their unique social, environmental, economic and political context.

Canada's experiences with rural resource-based communities facing industry closure have taught Canadian community stakeholders many valuable lessons about how to manage the transition from industry closure to community recovery. Researchers believe that four lessons form the core of the Canadian experience:

1. Anticipating and planning for industry closure should be a normal event in the life cycle of a resource industry, instead of waiting until a closure event occurs and acting only in response to it.

2. Restructuring resource-based communities after an industry closure requires collaborative efforts between all stakeholders.

3. Recovery is best facilitated by implementing a wide range of actions, including: planning economic diversification strategies; providing industry incentives; maintaining public services during a period of adjustment; stabilizing municipal finances, administration and service delivery; providing worker support; and maintaining community morale.

4. The potential for community sustainability is maximized by providing an appropriate level of time-limited financial support to resource-based communities in transition and by working together to develop a coordinated strategy for managing local revenues and expenditures while spreading investments over time.

This paper does not presume to apply wholesale a Canadian model of resilient resource-based communities to towns and regions around the globe facing similar challenges. Rather, it attempts to draw more attention to the need to think about declining rural communities in new ways and begin a dialogue in which countries and communities can share their experiences, learn from each other and replicate appropriate strategies. The authors of this paper hope that it will serve as the beginning of a dialogue on rural decline so that rural communities around the world learn from each other about how they can become more resilient and sustainable.

THE SHARED EXPERIENCE OF RESOURCE-DEPENDENT COMMUNITIES

Tumbler Ridge, British Columbia, began life with the great hope of being a model resource industry town. In the mid-1970's, when coal prices and global demand were hitting record highs, British Columbia eagerly supported a $3 billion coal mining mega-project in the foothills of the Rocky Mountains to export massive amounts of coal to Japan. British Columbia had everything it needed except a workforce near the mining area: an instant town had to be built to provide mining labour. Aware of the historic Canadian industry practice of enabling helter-skelter development in boom times and then abandoning the resulting communities when the natural resource depleted, British Columbia worked with the mining companies to build Tumbler Ridge, a planned town that would provide a stable workforce for the mines and state-of-the-art infrastructure that would attract and retain a permanent, thriving population.

Planning for Tumbler Ridge began in 1976, the same year Vancouver hosted HABITAT, the first United Nations Conference on Human Settlements. Construction began in 1981 as the open pit coal mines swung into operation. Houses were built, schools opened, workers and their families moved in. The instant population of 1,200 people in 1981 rose within a couple years to 4,400 before peaking in 1991 at 4,800 people.

Even though Tumbler Ridge was a planned community with many built-in safeguards to avoid the pitfalls common to single-industry towns, foresight could not entirely insulate the town from decline. By 1991, the air was beginning to seep out of the coal mining bubble. As production volumes decreased, fewer workers were needed and families moved away. When first one mine closed in 2000, three years ahead of schedule, the shocked town went into a crisis that deepened further when the second mine closed in 2003. The population plummeted to about 1,900.

Town Hall, Tumbler Ridge, BC
Source: District of Tumbler Ridge

With the loss of more than 70% of all local jobs and 65% of the municipal tax base, Tumbler Ridge began to trace the downward arc so many towns depending on a single resource industry have known. As the population shrank, the demand for goods and services diminished, further eroding the economy and accelerating community-wide job losses. The demand for schools and teachers waned while the need for health, social and recreational services shifted to meet the needs of a smaller and on average older population. Bleak economic prospects and a glut of houses on the market caused property values to fall, eroding the tax base and reinforcing the need for service cuts. The

community members developed a mounting sense of helplessness in the face of events beyond their control. They struggled to maintain a sense of hope in the town's future.

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Tumbler Ridge's recent transition experience resembles the past and current experience of many other resource-based industry towns across Canada. Small communities that depend almost exclusively on single resource industries like mining, forestry, fishing, agriculture or energy are particularly vulnerable to resource depletion, the cyclical fluctuations of commodity prices, world events and government policy that combine to impact industrial operations at the local level. Small towns face the fearful prospect of industry closure and with it the disappearance of vital jobs which leads to population loss, economic and social decline, and a debilitating loss of hope in the future. It is a pattern that has been repeated in resource-based industry towns across Canada.

Far from being unique, the Canadian experience has been repeated around the globe. North, south, east and west – from the United States to Ukraine, from Spain to South Africa, from Australia to China and Japan – resource-dependent towns are struggling to survive the shocks and aftershocks of industry closures. The global trend of urbanization, in which people living in rural communities migrate away gradually from small towns and rural places to find jobs, better economic prospects and educational opportunities, has been accelerated by sudden industry failures that hasten the decline of resource-dependent rural areas.

Around the world, small resource-dependent communities face a dire future when their major employer closes its doors. **Kok Zhangak**, in southern Kyrgyzstan, is one such community. Left imperilled by the 1991 bankruptcy of the local coal mine, Kok Zhangak is a shadow of its former self. Founded in 1943, the community quickly grew to a population of 20,000 as the local mine produced up to 1 million tonnes of coal per year. Today, its population has shrunk and the people are poor. In an area where the average income is $20 US per month, Kok Zhangak has unemployment rate of more than 70%. What little work there is involves working in illegal and highly dangerous makeshift mines using only pickaxes and shovels, or in demolishing buildings to sell for scrap. There is no public transportation, power outages are frequent and the water supply for many people comes from irrigation ditches. Apartments sell for between $100 and $150 US. Officials estimate that the area has coal reserves to last hundreds of years; the difficulty appears to be not in supply but in finding and getting access to markets. The community is working with the national government to develop markets and to diversify into manufacturing and agriculture. But despite being located near the beautiful Tien Shan mountains, there seems to be little prospect of developing an alternative economy based in tourism. (Solovyov, 2004)

Globally, all small towns facing an unexpected industry closure must deal with similar issues. Dependent for so long on a single industry and a few spin-off businesses and services that provide jobs, these communities have had their oxygen cut off and are

gasping for air. Expecting that the quality of town life dependent on a mine, fisheries, a lumber mill or farming should always remain the same and go on forever, they are unprepared for change. They fail – or have been unable because of a lack of resource options – to lay the foundation for a more robust economy by diversifying into new industries and businesses that would sustain their communities in the absence of their primary industry.

When their single industry dramatically diminishes, these communities begin to implode. **Peterhead, Scotland** is an example of this chronology of events. The collapse of the North Sea cod fishery and over-fishing of other species of whitefish threatens Peterhead's economic future. As the largest whitefish port in Europe, 50 kilometres north of Aberdeen, fishing has been Peterhead's economic mainstay since 55 AD when a tribe of Picts built sod huts near the harbour and made their livelihood from the sea. In modern times, more than 100,000 tonnes of whitefish have been processed every year in Peterhead's four harbours. However, international landings of North Sea cod dropped from a high of 341,000 tonnes in 1972 to a new low of only 41,000 tonnes in 2002. Over the years, bans on the cod and haddock fishery have been imposed and lifted again, causing the economy of this town of 18,000 to oscillate. Currently, scientists are recommending a ban on all cod and haddock catches in the North Sea and in March of 2004 the British government imposed a 13% reduction in the whitefish fishing fleet in 2004. With an economy dominated by fishing, Peterhead is attempting to improve its attractiveness to tourists but has developed few other economic options to date. Today, the entire Scottish fleet dedicated to whitefish fishing has been reduced from 290 in 2001 to just 120 in 2004, putting the livelihood of Peterhead's 865 fisherman and thousands of fish processing and indirect jobs at risk. Peterhead is now attempting to diversify its economy to attract tourism. (McCarthy 2002)

Unemployed workers, scrambling to find new jobs to support themselves and their families, usually leave small towns like Peterhead in search of jobs in similar occupations elsewhere. Youth looking for a brighter future leave for the bigger cities in hope of finding work or an education that will lead to employment. They almost never return. They leave behind a much smaller, older population that has less need of schools and education but greater need for social and health services. Those who remain are usually of an age to make finding new employment difficult. Since it is usually the most educated and skilled workers who leave, those left behind have less capacity to find work or to support the community in its attempt to recover from an industry closure and to diversify the economy. Doctors, teachers, dentists and other skilled professionals migrate to more convivial surroundings – meaning fewer services are available for those who remain and making it more difficult for overworked service delivery providers to cope.

The economic losses caused by massive worker layoffs are worsened by an inevitable reduction in housing values. Newly unemployed workers who may no longer be able to pay for their homes and mortgages and who may need to relocate to find jobs now find that they own houses worth a fraction of their value prior to the industry closure. Furthermore, they usually have a very difficult time selling their homes because the

bottom has dropped out of the market and no one wants to move into homes in a town with a debatable future.

As the economy hollows out, the smaller, poorer population has a harder time paying for services, either through taxes or directly. As a result, the availability and quality of services and infrastructure declines further, making it more difficult to stop the population from haemorrhaging further as they seek these services elsewhere. These dwindling services make it harder for the community to attract new residents who could help the economy develop.

This vicious circle can be compounded by environmental decay, especially for towns based on non-renewable resources like metals. Environmental damage in the wake of industry closure can harm a community's prospects of economic diversification and make it unappealing to businesses and people who might otherwise think of locating in the community. Consider **Rolim de Moura**, a frontier town in the national territory of Rondonia, Brazil. A lumber boom town during the 1980's, the town was established as a rural service centre by the Brazilian government in 1975, part of the government's efforts to colonize its western region. Throughout Rondonia, roads were built and families of migrants were promised land in a 'March to the West' similar to the expansion of the frontier in the United States in the 19th century. The rain forests provided the economic incentive for tens of thousands of migrant workers who took part in slash and burn forestry on a massive scale that sacrificed less valuable tree species to harvest the prized mahogany tree. Once the land had been clearcut, the workers began subsistence farms on the nutrient-depleted, easily eroded soils. On such land, corn and wheat farms were unsustainable, so farmers moved on by clearing more rain forest and continuing to follow deforestation with quickly abandoned farms. Rolim de Moura, once a thriving city with an economy based on clearcutting, has lost more than 87% of its original rain forest in just 15 years since 1990 and, with it, all but three of its 180 sawmills, which now process the little poor quality wood that remains. Although many loggers and migrant farmers have moved on deeper into the rain forest, Rolim de Moura has been able to stabilize its population at around 37,000, albeit with reduced services, poor employment opportunities and deteriorating housing stock because it has become a centre for providing regional government services. (Forest Conservation Portal, 2004)

Faced with these types of daunting challenges, most resource-based rural communities begin to enter a spiral of decline from which, too often, they cannot pull out. It is against this backdrop that a group of Canadian ministers responsible for local government decided to examine Canada's experience with decline and recovery. In Canada, a country with a federal form of government, most responsibilities of a local or regional nature are constitutionally assigned to Canada's subnational governments, the provinces and territories. The subnational legislatures in Canada have jurisdiction over local government institutions plus jurisdiction respecting non-renewable natural resources, forestry resources and electrical energy. This amalgam of responsibilities has placed the issue of declining rural, resource-based communities into the domain of the provincial

and territorial ministers for local government. Accordingly, the ministers commissioned the Community Resiliency, Transition and Recovery Project in January 2003.

The Ministers intended that the project would provide valuable insights on the context, circumstances and actions influencing recovery – or the lack of it – in small, rural, resource-dependent communities across Canada. They also sought information that would provide a better understanding of the tools and strategies that could be replicated by other communities as they manage the transition from crisis to recovery.

Facilitated by a steering committee led by British Columbia and assisted by the Intergovernmental Committee on Urban and Regional Research (ICURR), this research project was a collaborative effort involving a number of jurisdictions from across Canada representing every region of the country. British Columbia took the lead in surveying a sample of available North American literature with support from the other provinces and territories, while ICURR used its information resources to analyze trends relevant to resource-dependent communities. Individual researchers from the provincial / territorial governments developed and analyzed 16 case studies where communities experienced a severe and in most cases immediate downturn in their local economy resulting from an industry closure. The case studies chosen represent all regions of the country and all major economic sectors: mining, fishing, forestry, energy agriculture and transportation. A steering committee comprised of British Columbia, Northwest Territories, Saskatchewan, Manitoba, Newfoundland and Labrador, and ICURR guided the process throughout. The final report, *Facing the Challenge of Industry Closure: Managing Transition in Rural Communities*, will be published in 2005. The full report is available through ICURR's Muniscope website. Information on how to obtain a copy of the report can be found at www.muniscope.ca. The following discussion of Canada's experience with resource community transition is largely derived from this work.

It is worth noting that resource-based communities facing industry closure have much in common with other communities based on single industries, such as manufacturing. As well, the plight of these communities bears some similarities to the challenges faced by communities struck by natural disasters like hurricanes and earthquakes or human-caused calamities like terrorism and war. The illustration above positions natural and human events on a continuum from

Community Resilience

Communities need to be resilient in a world of change

Natural Cause

possible categorization of negative events that would force cities (communities) to respond and adapt

Extreme Weather

Tsunami

Forest Fire

Earthquake

pest (mountain pine beetle)

Major Flooding

Crisis — Catastrophe

Industry closure in small town

AIDS

War

Landscape change

Industrial Disaster

Terrorist Event

Human Cause

crisis to catastrophe. Although these events are separated for viewing purposes, it should be recognized that the events may not be discrete and that the lines between events are permeable: some natural events have human causes and that some communities must confront more than one event simultaneously. While acknowledging that the causes and impacts of these upheavals differ significantly, it is important to recognize that all of these communities share a sense of devastation and loss when threatened by any of these events. All must face the need to overcome and adapt to the upheaval. In many cases their preparation for worst case scenarios and their response to these events will be similar to or overlap the strategies adopted by resource-dependent communities facing industry closure.

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In 2003, about 20 years after its inauguration, Tumbler Ridge faced bleak economic prospects because of the closure of its two sustaining mines. Yet the town existed in a beautiful natural setting, surrounded by renewable and non-renewable resources, and had potential to diversify its economic base through tourism, forestry, agriculture, coal, oil and gas. Though the town was remote from any major population centre, many people found the town attractive, with its modern housing stock and infrastructure, safe small town character and well-protected public services. Strong, positive local leadership and a recent history of collaboration with other regional communities strengthened economic development opportunities, developed a robust sense of identity and encouraged volunteerism.

Tumbler Ridge still has its challenges. Access to markets is not easy, while its poor telecommunications infrastructure makes e-commerce and e-learning difficult. Nevertheless, local government leaders have acted to restore confidence in the town. All levels of government have united to implement a transition plan – selling surplus housing, retiring infrastructure debt, preserving public services in the face of turbulence, and working to broaden town revenues.

Since 2003, new residents have been attracted to Tumbler Ridge because of its beautiful location and low house prices. Today, the opening of the Dillon mine 90 kilometres from Tumbler Ridge coupled with rapidly rising coal prices and the promise of new natural gas exploration in the area have attracted many new residents and created such a demand for housing that prices have tripled since 2001. By all accounts, Tumbler Ridge, British Columbia, will begin to prosper once again with an economy that includes coal but has expanded towards a more diversified and sustainable economy with considerable hope for the future.

THE CANADIAN EXPERIENCE

As a country rich in natural resources, Canada has many communities[1] that depend solely on resource extraction industries for their economic and social survival. Canada's huge geographic expanse means not only that the country has a great abundance of these resources but also that they are dispersed in rural, and often remote, locations across the country.

Canadian resource-based communities share many common characteristics. Almost all began as towns for the express purpose of providing a convenient labour force to a specific industry such as mining, forestry, fishing, energy or agriculture. Most of these communities depend solely on one single industry for jobs and for their economic sustainability. Few communities have managed to diversify their economies by developing new resource-based or non-resource industries and the few spin-off jobs available can only last while the population is large enough and financially stable enough to support them. As a result, they are vulnerable to the fortunes of the dominant industry and to economic factors beyond their control, including resource exhaustion, economic restructuring within an industry, shifts and fluctuations in world commodity markets, and government policy decisions

While these factors influence all communities in Canada, rural communities – especially remote rural communities – feel these impacts most acutely. Dominated as they are by a single industry, these small communities cannot easily absorb the blows to their economy, tax base and social structure when their main source of jobs and income suddenly shuts down. Among many impacts, industry closures in Canada cause:

- irreversible, direct job loss and the resulting loss of indirect industry and service sector employment
- rapid population decline that creates further losses in employment and significant cuts in public services
- decline of residential, industrial and commercial property values, eroding the tax base and making further reductions in local services inescapable
- social dysfunction, including crime and increased substance abuse, and
- a sense of helplessness and a loss of hope in the community's future.

Most resource-dependent communities in Canada have populations ranging from a few hundred to a few thousand. They tend to be located in rural areas or remotely in the Canadian north or along the Pacific and Atlantic coasts. Most are located on minor roads, although some, like the former lumber milling town of Tahsis, British Columbia, are located inaccessibly at the very end of that road. Some resource communities, like the fishing community of Great Harbour Deep in Newfoundland and Labrador or
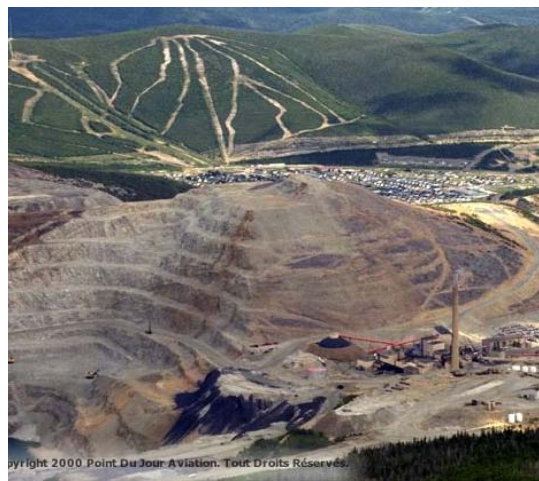
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[1] This report recognizes the uniqueness of individual communities and that there are many ways to define community. Within this paper, the term 'community' is used to mean rural and small town places located across Canada.

Saskatchewan's Uranium City, are so remote they can only be reached by air or water during periods of good weather

Despite participating in different industries, most resource-dependent towns in Canada have had first-hand experience with the 'boom-bust' cycle so prevalent in resource towns in Canada and around the world. Historically, most resource industry towns in Canada came into being either as company towns owned and administered by the industry, or as towns with public governments that nevertheless had an almost exclusive focus on providing workers and services to the resource industry. While the industry was productive, new residents would flock to the town hoping to obtain lucrative jobs and the town would expand rapidly as long as the industry thrived. Population growth would be accompanied by growth in support services, new small businesses, housing and other infrastructure. Unfortunately, these boom times usually only last as long as the resource could be easily exploited or as long as the global demand and prices for the resources were high. When this situation changes and forces the industry to shut down temporarily or permanently, the boom goes bust: workers and their families leave, auxiliary businesses close up, support services vanish as the demand for them and the supporting tax base wither away.

The repeating pattern of temporary industry closures followed by short-term or seasonal start-ups is so familiar it could almost be considered a national tradition. Over the past two centuries, uncounted hundreds upon hundreds of resource-dependent towns in Canada have sprung up, faltered and died. Some industries, particularly those based on non-renewable resources like mining, failed in a long, slow death, flickering like a candle in a series of temporary shut-downs and start-ups until finally sputtering out. When the mine had given up its last nugget or found its last dollar of profit, the company would simply shut down and move on. The town

Noranda Copper Mine and Smelter, Murdochville, QC
Source: *Point du Jour Aviation Ltée*, Jean-Marie Cossette

was abandoned; the workers and their families were left to fend for themselves by relocating, usually to the next mining prospect, for as long as it might last. These supply-side cycles were considered normal and closures believed to be inevitable by workers and political and community leaders. As long as were responsible for all aspects of town life, no one expected the town to continue after company involvement ceased. A boom town could become a ghost town almost overnight, leaving only abandoned shops and boarded up housing as witnesses to a town's existence.

Today, Canadian resource-dependent towns are less likely to be exclusively focussed on supporting the local industry and, instead, have expectations of longevity even if the

industry leaves. Many single-industry communities are now municipally incorporated with elected councils, their own revenue sources and the independent capacity to deliver local services. (Unlike local governments in many other countries, Canadian municipalities are self-financed through taxation and other revenues.) Some, like Tumbler Ridge, were conceived as planned communities that would incorporate preparations for economic and social stability instead of just springing up haphazardly. The net result has been the creation of greater sense of permanence in these places and the heightened expectation of workers, residents and leaders that a new future for their community will be realized when industry closes.

Now usually living in communities with conventional local governments, residents tend to have much higher hopes for survival and do not view community closure as the inevitable result of an industry shut-down. Less willing than previously to accept boom-bust cycles, they may, as in Inuvik NT, be willing to stay in the community until the cyclical demand for their industrial commodity rises, if the supply of those resources has not yet been depleted. Local residents of resource-dependent towns invest considerable social capital into the life of their communities and do not want to see this lost. Particularly where there is a strong community identity, they believe that something can – and should – be done to save jobs and support newly unemployed workers and their families. They want adequate services and stabilized municipal budgets. They hope that a way can be found to make the transition from a past that depends on a single, large employer to a future based on a different economy. Unionization, precedents of government intervention in industrial and economic crises, the provision of greater social supports from government, high service expectations, and new technologies are just a few of the many factors that raise community expectations for transition and recovery.

Trends Affecting Canadian Resource-Dependent Communities

Like most countries around the world, Canada has experienced a clear and fundamental population shift away from rural areas and towards its cities within the last decade, especially in regions of the country where communities rely on single resource industries. Although Canada's overall population rose by 4% and urban areas grew by 6.4% between 1996 and 2001, rural and small town areas, apart from those adjacent to cities, saw their population decrease by 4.7%. In particular, youth are migrating out of rural areas to pursue educational, job and lifestyle opportunities, causing a rise in the median age of people in rural communities and reducing their capacity to develop economic and social strengths. Low levels of in-migration to small towns and rural areas are insufficient to redress these population and capacity losses.

The primary resource sector accounted for 7.1% of Canada's gross domestic product in 1981 but only 5.8% in 2002. The primary sector represented roughly 60% of total Canadian commodity exports in 1981, but has accounted for between 30% and 40% of Canadian commodity exports since 1993. Agriculture, forestry, fishing and hunting have declined most rapidly, while mining, oil and gas exploration have been more stable.

Between 1987 and 1999, employment in agriculture, mining, and fishing declined across Canada. Forestry employment grew until 1995, but has declined since. The decline in primary resource sector employment has occurred in all Canadian regions, with Québec, Ontario and the Maritimes showing the highest rates of loss.

As a major player in world minerals and metals markets with 128 mostly remote communities depending on mining for their economic wellbeing, Canada placed first globally in 1998 for the production of potash and uranium, second for nickel, zinc and cadmium, third for aluminium, platinum-group metals, titanium concentrates and diamonds, and fourth in copper, gold, molybdenum and salt. Canada is also the world's third-largest producer of natural gas and the tenth-largest producer of petroleum. Such a heavy economic dependency on extracting natural resources, leaves Canada vulnerable to world price fluctuations that directly impact resource communities.

Government policies and international trade practices also play a defining role in determining the survival of small, single-industry communities. For example, Canada's agriculture sector, particularly on the Prairies, has been drastically affected by protectionist agricultural policies of the US Congress and by the US response a minor 'mad cow' (BSE) scare. The ongoing US/Canada softwood lumber dispute has had a severe impact on the more than 300 Canadian communities dependent on the forest industry. Fisheries closures because of declining stocks on Canada's Atlantic and Pacific coasts have impacted nearly 1,500 coastal communities and caused employment in this industry to plummet over the past several years.

Canada's many economic changes have had an impact on rural places and small towns across the country. While employment in the primary resource sector has declined since 1987, there has been significant growth in the other employment sectors. Thus, rural and small towns are showing some signs of diversification. In 1987, the primary resource sector accounted for a little over 19% of total employment; in 1999, the share had dropped to 15.4%. Although there has been some growth in the high-value-added sectors usually associated with the knowledge economy in rural and small towns, these sectors still lag far behind in terms of their share of the total employment in comparison to urban areas.

Factors Influencing Community Transition

Canada's geography has often determined the future of its communities. Primarily, this dominant influence reveals itself through the natural resources available to support a community's economy. Just as geographic features created the conditions needed to make the town's departing mine, lumber mill or fish plant viable for a time, so too, geography plays an important role in determining whether other economic opportunities are available to replace the departing industry. If a mining town has no possibility of creating jobs in other resource industries like forestry, fishing or agriculture, it has fewer alternatives for recovery. Communities located in scenic settings, in an appealing climate, or near recreational facilities like national parks have some options for promoting tourism

or retirement living as a replacement for the departing industry. Those that are located in unappealing surroundings or so remotely located that access is too difficult have few options to develop their economic base.
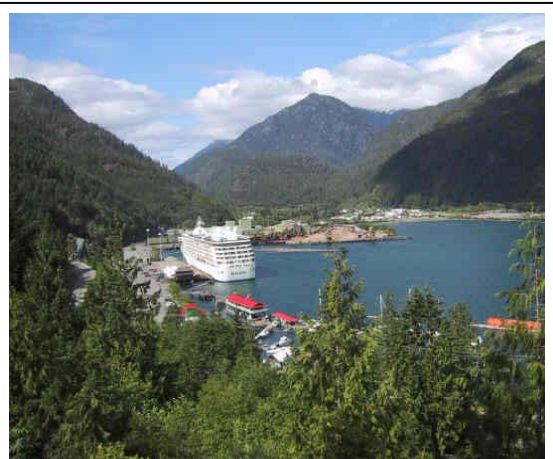
Road access and proximity to other communities can also be a significant factor in supporting community recovery. Remote Canadian communities accessible only by air or water, or communities accessible only seasonally, face significant challenges in sustaining their population, infrastructure, services and economic strength. Communities that are relatively close to other settlements or larger towns – and are connected to these places by road – have more potential to re-create themselves because of better access to markets and services or by becoming bedroom communities to nearby urban centres. They can offer lower housing prices and attractive lifestyle options while retaining access to services and amenities found in larger cities. On the downside, roads have the potential to bleed away business from small communities because residents will be willing to travel to larger urban centres to access better or cheaper retail markets and other services that can be found there.

Like roads, new technologies such as the internet can have both a positive and negative impact on the recovery of small communities in Canada. The internet can overcome some barriers in service delivery, such as providing health information or educational services online, supporting small communities as they strive to develop the infrastructure and amenities that will make them more attractive to industries and families as places to relocate. It also creates the potential for knowledge-based industries to locate in rural areas because location no longer matters for industries that rely primarily on communications and the exchange of information.

Because small communities are generally more affordable places to do business than urban centres, they may become more attractive to these knowledge-based industries. However, businesses that use the internet to market physical products will still face the costs of shipping physical goods in and out of small communities. If they are located away from major highways, ports or airports, the costs and logistical issues around shipping may remain a prohibitive barrier to competition with similar businesses located in centres with more efficient transportation. The tendency remains for knowledge-based industries to locate in larger and medium-sized urban centres because these locations give employees greater access to amenities, a higher quality of life and educational and social opportunities. As well, these new

Tahsis, BC
Source: Village of Tahsis

technologies may not lead to local entrepreneurship and may encourage remote service delivery over local delivery, negatively impacting the local economy.

Recovery in small Canadian towns is influenced by demographics. Both the population's size and its make-up influence how well a community manages to recover from an industry closure. Small Canadian populations often have a strong sense of community and identity, leading to a determined resolve to survive an industry shut-down. On the other hand, these small communities may face challenges because they are not able to draw on the same talent pool as larger communities. The out-migration of youth and many of the most experienced workers and volunteers could mean that there are fewer potential community and civic leaders and a greater reliance on unskilled volunteers. Small communities may face difficulties keeping services like schools going because of the small numbers of children living there, making the community less attractive to families seeking these services. If the departing industry has relied on a transient workforce, these workers may not have developed an attachment to the community and might be less interested in supporting community efforts to recover. In these situations, greater pressure and responsibility falls on the shoulders of local officials who have to take on multiple roles.

Many Canadian communities cannot control whether or not the departing industry rehabilitates its industrial site through an environmental clean-up, although national or subnational governments may take a role here. This issue is of concern particularly in mining communities where the industrial activities often leave behind unsightly pits, toxic wastes or other blemishes on the aesthetic appeal of the region. If the departing company does not deal with this, communities left with the problem may find it difficult to encourage land redevelopment. Concerns may arise and persist about public health issues making it difficult for the community to retain and attract new residents: "Actual or suspected contamination can create a formidable barrier to community revitalization, particularly in small, rural towns with limited resources" (Wells 2002, 23).

Research on American efforts in the 1990's to help Pacific Northwestern forestry communities recover from the negative affects of land use policy decisions, shows that smaller communities tended to lack basic infrastructure like housing, water and sewer services, making their transition much more costly. Between 1994 and 1997, U.S. federal agencies spent a combined $391 million on community infrastructure (Mullins et al. 2001, 32). In Canada, many forestry communities lack adequate roads and telecommunications infrastructure. Obviously, communities with up-to-date services will be better positioned than others to re-create themselves and require less assistance from senior levels of government.

The factors mentioned above do not represent an exhaustive list of conditions influencing the recovery of resource-dependent communities in Canada. Instead, they underscore the fact that communities facing transition not only have to deal with the closure event itself, but can also be faced with factors beyond their control that could determine whether or not their transition management efforts are successful.

Patterns in Responding to a Closure Crisis

Research conducted for this paper demonstrated that resource-dependent towns responded to industry closures in three phases. In the first phase, in which the community reacted to the immediate crisis of closure, stakeholders vented their anger and expressed their grief at the loss of the industry while taking emergency actions to provide food and emotional and financial support to workers and families who had suddenly lost their primary income. In the second stage, about one year after the industry's shut-down, the town begins to normalize and rebuild a sense of identity. In the third phase of long-term planning, about three to five years after the industry has left, the town usually begins to set long-term goals and plans to attract new industry and businesses and find ways to maintain or improve services to become appealing to potential new residents.

In an effort to explore these phases further by finding the common ground between the diverse communities facing the closure of their major industry, the case study research conducted for this paper[2] maintained a pragmatic focus on what key actors actually did when faced with this dilemma. To this end, the research reviewed the activities of five major stakeholders: the national government, the subnational (provincial and territorial) governments, the local governments, the departing industry and community organizations. Moving on from a review of what each of these actors did, these results were analyzed to determine which actions or combination of actions had an impact on each community's transition management outcomes. Out of this analysis, researchers were able to identify a series of replicable practices for each of the five actors. The following sections summarize the contributions of each of the five actors to community transition in Canadian communities. A more detailed description can be found in the paper *Facing the Challenge of Industry Closure: Managing Transition in Rural Communities* on the ICURR website, www.muniscope.ca.

The National Response

Although policy choices made by Canada's national government in the best interest of the entire country (such as the 1992 closure of the Atlantic cod fishery to allow fish stocks the chance to recover from over-fishing) have sometimes contributed to the economic decline of small resource-dependent communities and regions, every case study demonstrates that the national government played a constructive role in community transition and recovery. Actions of the national government include providing services and often funding, and/or collaborating with subnational and local governments and other actors to stabilize the community and find options to improve its future economic prospects. In particular, the national government participated in and funded economic development partnerships essential to identifying and exploring opportunities, pulling together resources and supporting new economic development initiatives. Special employee assistance programs provided much-needed aid in relation to income support,

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[2] See Appendix 1 for short summaries of each of the 16 Canadian case studies, all crafted during 2003 by staff from provincial and territorial ministries responsible for municipal government.

job training and relocation, which buffered the economic hardships experienced by suddenly unemployed workers. Continued provision of national services eased the social and economic impacts of closure on communities. The national government has tended to be better than private industry at cleaning up the environmental damage caused by industrial activities, although some cite deficiencies in the federal government's reclamation of radioactive sites from uranium mines and nuclear laboratories.

The Subnational Response (Provinces and Territories)

With jurisdiction over systems of local government, Canada's ten provinces and three territories have played a significant role in providing resource-dependent communities with guidance and support when they are challenged with a crisis related to an industry closure. However, in general, subnational governments failed to anticipate industry closures and their impacts and, as a result, often failed to put measures in place to lessen these impacts. Once closure occurred, in contrast, sub-national governments became very active in providing community support by:

- maintaining existing levels of health care, education and social services before adjusting them in accordance with the community's population decline
- collaborating with all community stakeholders to manage transition
- providing counselling and training for displaced workers and other local residents
- providing grants for economic development projects
- providing municipal debt relief or tax incentives that would attract new businesses
- taking a regional approach wherever possible to address shared economic and service delivery challenges on a regional basis
- providing relocation assistance to community residents when entire communities were closed down as a last resort.

Response of Local Governments

Local governments cannot and do not act alone but they do play a central role in managing a community's transition from dependence on a sole industry to reliance on other economic ventures. Because local governments are in the best position to lead the community at all stages of the transition, they must develop and exercise their strengths in leadership before a crisis occurs since this capacity will not materialize on short notice.

Like all other actors, local governments in Canada have been almost universally caught off-guard and unprepared by an industry's closure. Most failed to engage in formal pre-planning for closure to ensure the community's sustainability. However, they are usually governments to become actively involved in managing transition because they are the most directly affected and have the unique, on-the-ground ability to liaise with, and ensure effective communication between, the departing industry, its former employees, local businesses and citizens. A review of the case studies revealed that the role and

actions of local governments are unexpectedly consistent. Specifically, most local governments:

- showed local leadership and mobilized quickly to respond to closure announcements
- took steps to manage the impact of closure on their municipal operations
- collaborated with other governments or other organizations at some point in their transition, often in support of community economic development activities
- boosted community morale and provided a sense of direction
- supported specific community objectives, such as buying out local sawmills, arranging the sale of local homes or developing tourism infrastructure
- developed joint economic strategies and shared service delivery costs to benefit whole regions affected by an industry closure
- stabilized municipal revenues by adjusting property taxes or providing tax incentives to attract new industry
- adjusted service delivery levels to meet changing community needs

Despite the broad range of geographic regions and industry types represented in the case studies, they reveal similar patterns of action on the part of local governments.

Response of the Departing Industry

Most industries in Canada failed to give adequate warning of closure and few provided any grace period for communities to adjust to their new circumstances. Sudden announcements and poor ongoing communication between the industry and the community made a difficult situation worse. Most companies met the bare minimum of the legal obligations imposed by labour laws and environmental regulations but only a few went beyond these to voluntarily provide extra employee benefits or support the community in its attempts to recover from the closure crisis. However, some industries continued to pay property taxes for a limited period while others sold or donated industrial assets to the community. Although most departing industries in Canada would claim to have met environmental reclamation regulations stipulated by government, few communities have been satisfied with industry's efforts.

Support to employees varied widely across the case studies, ranging from none whatsoever to generous severance pay, retirement packages, 100% home buyouts, retraining and job placement services. Usually, home buyouts became the most contentious issue: in some cases workers had to abandon homes or felt victimized by the low dollar value of buy-backs, while in others, the company paid the full value of homes at market value prior to the industry's closure. The level of support provided varied according to the financial depth, ownership and public profile of the departing industry. Crown corporations and international organizations have deeper pockets than many small industries, as well as a reputation to uphold, making it more likely that they will provide well for workers and community transition. However, few did more than was legally

mandated, suggesting that government standards and regulations are crucial to ensure workers receive fair levels of support following an industry closure.

The case studies suggest that industry support for community transition, although helpful and important, is not the determining factor for transition outcomes once the decision to close the industry has been made. The evidence is that industry has limited influence over community transition and that governments have a more vital role to play. In fact, effective government action appears capable of producing successful outcomes even when faced with industries whose contribution to post-closure transition is weak or non-existent. The departing industry is best engaged in community transition and recovery before a crisis or shutdown occurs at a time when it is able to use its strengths to collaborate with the community and all levels of government to develop a community transition plan in the event of an eventual industry closure. By developing a corporate culture of community responsibility early and demonstrating it continuously, industry can work with community members on an ongoing basis to build the community's capacity to continue in the industry's absence. This continuous interaction with the community will leave a legacy of community capacity that will outlive the industry and help support the community through its transition to sustainability.

Response of Community Organizations

Because remote and rural communities have a long history of self-reliance, they depend on unique combinations of local groups to add to community resources and boost community morale during times of transition. Unions, aboriginal organizations, religious groups, educational institutions, and economic development organizations are often the first responders to a closure crisis, providing immediate relief to displaced workers and their families even before governments have gotten involved. They are able to lessen the immediate financial and emotional effects of job loss, income reduction and other economic aftershocks by providing such things as food banks and financial counselling and assistance. They usually become key players in rebuilding the town's economy and regaining a sense of direction and community spirit.

Summary of Common Themes

Work Together Long Before Industry's Closure Announcement

Without exception, industry closures in Canadian resource-dependent communities have come as a shock to the community and its residents. Almost all industry closures were sudden and unexpected. Sometimes, as in the case of Uranium City, the closure was unanticipated because preceding years of industrial investment had permitted workers and residents to assume that heavy investment was a sign of the mine's – and therefore the community's – continuing viability. However, in most cases, the warning signs were present but ignored. Years of falling commodity prices that eventually forced the closing of the mines in Tumbler Ridge or rumours of environmental disaster that affected the fishing communities of Great Harbour Deep, NL and Canso, NS were ignored in the vain

hope that the industry would simply continue on. Like the lingering death of a chronically ill loved one, hopes for a miraculous reprieve never diminished and the shock of death remained profound. Even in the rare instances where there was some advance warning, leaders in all levels of government, workers and community citizens were taken by surprise and were unprepared for the closure's impacts on the community and on the lives of the individuals affected.

The primary lesson to be learned is that industries and communities should begin to work together while time and resources are available to prepare for eventual closure. This work should not begin the day the doors close – it has to start as early as possible. Plans should be made for the eventual closure even as plans are being made to begin industrial operations. Governments should encourage regionalization of service networks where possible, and help prepare for a coordinated regional response to a closure event. The departing industry and community groups can forge a long-term relationship in developing the kind of community cohesion and networks of volunteer organizations that, once in place, will outlive the industry and help the community to weather the turbulence of transition.

Provide Earliest Possible Warning of Industry Closure

It is vital that resource-dependent communities be given as much warning as possible of an industry closure. Although often not believed by workers and community leaders, early warning of industry closure is better than no warning at all. Early warnings may be discounted by community members, but they at least have the potential to trigger advance planning for transition, even if these opportunities are sometimes missed. Agencies of the national and subnational governments should serve as role models for industry by giving maximum notice of closure prior to the event.

In a similar vein, the national and subnational governments should attempt to anticipate industry closures by keeping abreast of all factors influencing industry operations, such as industry trends, commodity prices, the impacts of decisions made by government and international bodies. They should also identify remote communities at risk of industry closure and work strategically with local governments and industry to anticipate possible closures. However, care must be taken to avoid having such precautionary activity backfire, which would be the case if the activity were interpreted in the community as a clear signal that governments were beginning wind-up planning. The impacts of national or subnational policies on resource industries should be discussed with industry and local governments and

Inuvik
Source: Municipal and Community Affairs, Northwest Territories

community leaders before they are implemented so that remedial strategies and actions can be put in place proactively to address any negative policy impacts. Resource industries should be encouraged to work with their communities and all levels of government to anticipate and announce closures long before the actual event to maximize the community's adjustment capacity.

It should be noted that when industry closure or significant downsizing occurs, local leaders and residents often strive to apply political pressure that might persuade a company to reverse its decision. This visceral reaction fails to recognize that industry operations are cyclical: some last longer than others but few can be sustained indefinitely. When closure comes, industry will want and need to move on and will not always able to support the impacted community. For these reasons, all actors should put more energy into adjusting to the inevitable rather than trying to delay or reverse it. Meadow Lake and Ogema, Saskatchewan, where community stakeholders cooperated to buy closing industries (sawmill and rail line, respectively) show that there are rare exceptions – but only when they have clear, realistic and manageable options for finding a new way for the industry to operate. This is an area where governments can play a key role in providing resources to help a community to investigate this potential to reach a decision in a short period of time.

Determine the Factors that Influence Recovery in a Specific Community

No single condition determines whether or not a community will recover after an industry closure. Because all communities exist within unique circumstances, a complex interplay of factors and actor actions influence transition management. The research revealed that geography is often a dominant factor determining whether or not a community is able to weather an industry shut-down. Geographic factors influencing recovery include:

- the availability of other economic opportunities or natural amenities (like scenery, weather) for development
- local amenities and services
- proximity to nearby communities
- year-round access by major means of transportation, especially roads
- proximity to highways, ports, railways, airports for access to markets

These geographic factors are difficult to change, although there is some potential to invest in transportation infrastructure. Other factors influencing a community's transition can be changed. These include:

- developing forward-looking political leadership
- an entrepreneurial spirit and a positive, 'can-do' attitude able to address dependency
- regional collaboration and inter-relationships
- collaboration among and between all governments and actors
- extent of tax base diversification

- attractive services and infrastructure

- pre-crisis planning

Respond to Industry Closure through Collaboration Between All Actors

Because of the unique circumstances of each community and because of the complex interplay between factors influencing transition yet out of the lead actors' control, it is impossible to isolate one actor and give it credit for the community's transition and sustainable recovery. In every case study, ongoing collaboration between all actors at all stages of transition, coupled with a multifaceted response, ensures the effective coordination of resources and programs to maximize the opportunities for successful transition management. As part of this collaboration, it is important that each actor recognizes that all have a kind of leadership role to play. For instance, the key actors can each lead in the following ways:

- *national and subnational governments:* set policy direction and prepare regions and communities for impacts

- *subnational governments:* coordinate collaboration among and funding from all actors

- *local governments:* manage local issues arising from closure; inject leadership

- *departing industries:* communicate intentions clearly and in a timely way and early on, and be responsible community citizens by being accessible and supportive and by participating in community priorities

- *community organizations:* provide practical support

Discover the Unique Advantages and Opportunities of Each Community

Community stakeholders should resist the urge to seek panaceas in the vain hope that they will solve the economic and social damage caused by an industry closure. There are no quick fixes and no cure-alls. Although looking for a fast and apparently simple solution to complex problems is a natural reaction in a crisis, communities must overcome this tendency and recognize not only that no single solution is enough to overcome the problems created by an industry closure but that solutions need to be home-grown and tailored specifically to the community. As a starting point, they must do everything possible to identify and assess on the assets of their specific place – such as the quality of the environment, natural beauty, amenities, services, tax advantages, and infrastructure. Such an assessment will serve as the basis for developing multiple solutions that capitalize on each community's unique combination of assets. It will also position the community to brand itself in ways that make it appealing to new residents and new businesses and to position itself favourably compared to other communities.

Internet access serves as an example of the type of panacea small communities seek, believing that its advantages are the magic key that will unlock new prosperity. Some community leaders have pinned their hopes on internet access because it allows new

businesses based on information exchange to spring up without regard to geographic barriers such as remote or end-of-road locations. In short, the internet had offered the hope that location didn't matter. Despite its globalizing advantages, the internet has not resulted in the windfall of opportunities once expected. Communities have found that space and distance still matter to suppliers of physical goods and services even if sold over the internet. As well, they have found that consumers simply do not care whether their purchase originates in a specific remote community, a different one, or a large urban centre, as long as they get the price and quality they are looking for. This means that internet-based businesses and individuals may not remain indifferent to place but instead may make their choice of location on the basis of lifestyle and community amenities. The double-edged nature of the internet means that small communities will need to be more competitive with each other to make themselves attractive to potential businesses and individuals who can choose to locate anywhere. As well, the internet alone is not enough: communities must also coordinate communications and transportation infrastructures to ensure local produced goods sold on the internet can reach wider markets.

Implement a Range of Actions

It is impossible to identify single actions that are essential to successful transition management because transition management depends on many complex and interrelated factors and on the combination of strengths brought to the task by all actors. Despite this, it is possible to identify a range of actions that are helpful, including planning and implementing economic strategies; providing incentives for industry and new resident relocation to communities; maintaining basic service levels; stabilizing municipal debts revenues and expenditures; providing worker support; and maintaining high community morale. Working with their partners, communities need to develop a plan to map out all of the range of actions and strategies they will need to succeed in transition recovery.

Provide and Manage Financial Resources

Managing toward favourable transition outcomes usually costs money, the application of which must be managed over a defined period of time. Unemployed workers need fair severance packages. Local governments need to replace lost property tax revenues, consolidate services and reduce debts. Some level of local infrastructure must be maintained or improved and industrial sites must be reclaimed to attract new industry and residents. Implementing economic development strategies, providing incentives and adjusting to industry closure requires significant and stable financial resources.

For these reasons, managing a transition cannot be accomplished without significant investments and/or financial adjustments on the part of all governments, community members and, where possible, the departing industry. All actors should be prepared to assess these financial needs realistically and step in to fill the gaps caused by industry closure. They need, in short, to buy time for the implementation of a long-term recovery strategy.

All levels of government and other actors need to work together to develop a coordinated strategy for managing costs and expenditures. Wherever possible, strategies should be developed to invest money wisely and efficiently and to defray expenditures over time to minimize the financial impacts of industry closures. Rather than simply throwing money long-term at communities to solve problems, investments should be made rationally and wisely in an effort to make sure past investments are not lost and to position the community for new opportunities. Communities need a financial plan, developed before closure occurs and regularly updated as conditions change.

Define Transition Management Success Individually for Each Community

The research conducted for this paper demonstrates that transition management is more of an art than a science, more qualitative than quantitative. A measure of transition management success that works for one community may not fit the unique circumstances of another. Sometimes, successful transition management can be identified as resulting in a growing population, expanding tax base and thriving new businesses, as in Meadow Lake, SK. In other cases, as in Great Harbour Deep, amicable community closure may be considered a success. Because of the nebulous, vague character of success, it is vital that all actors work together to determine what successful transition management looks like for each individual community. By defining transition management success individually and through an inclusive process, it is more likely that it can be achieved.

Accept Community Closures as Sometimes the Best Transition Management Option

Just as industry closures must be accepted as a natural occurrence in resource-based communities, particularly those based on non-renewable resources, sometimes community closure may be a viable option within a successful transition management process. While generally considered a last resort after all other options have been exhausted, community closure may indeed be in the best interests of the residents and all levels of government. This would be the case particularly if the community had no practical options for economic development, the population and tax base eroded significantly, and the costs of community maintenance exceeded the costs of community closure and the relocation of its citizens. Ideally, all community stakeholders would come to an early agreement that the community has no alternatives except closure and make the closure decision promptly. A
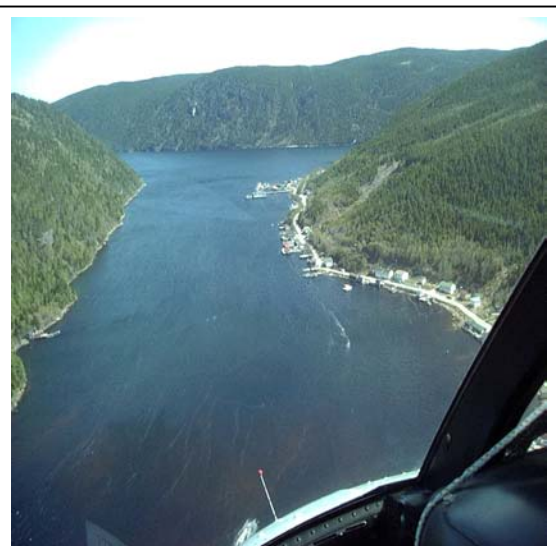
Great Harbour Deep, NL
Source: Municipal and Provincial Affairs, Newfoundland and Labrador

clear decision about the community's future is also necessary so that fair mechanisms for issues like service withdrawal, home-owner compensation and relocation packages can be designed and delivered in a timely manner.

Implement Replicable Practices

The research findings demonstrated that no single actor's activities determined the success or failure of a community's transition management efforts. Instead, researchers found that communities managed transition best when all actors collaborated and worked together cooperatively to manage the community's transition from a single-industry town to one with a smaller but, hopefully, more diverse economy. The following discussion highlights the actions of each of the five major actors identified by the case studies as having a significant role in community transition and recovery. These suggested actions arise out of the Canadian experience and may not be universally valid; however, global communities may find that by adapting these roles and activities to their economic, environmental, political and social context they may be able to replicate and adapt them to each community's unique circumstances.

The **national government** plays an important role in managing a resource-dependent community's transition by maintaining core federal services in regions and communities impacted by an industry closure and by providing additional, time-limited transition services as necessary. Further, as the primary policy-maker for the country, the national government should analyze the impacts of national policy on a regional and/or community level and consult with subnational, regional and local governments, as well as community residents, before making policy decisions affecting them. The national government should also ensure that it has laws and regulations in place to ensure that the departing industry provides fair severance compensation to its workers and meets expectations for sound environmental reclamation of industrial sites. Where the national government owns the departing industry, it should model good corporate behaviour by providing as much advance notice of facility closure as possible to provide the maximum time for adjustment and ensure that its agencies fulfill all environmental and aesthetic cleanup responsibilities when withdrawing operations from communities.

Where **subnational governments** (such as provinces, states, cantons or territories) or national governments have jurisdiction over municipalities, they should provide municipalities with greater flexibility in the way they operate and greater powers so that they can be more responsive to economic crises and lead the development and implementation of transition plans. As well, subnational governments should encourage municipalities to work together, on a regional basis wherever possible, to find joint solutions and capitalize on regional strengths and opportunities. Subnational governments should also continue to provide core services or additional services to provide appropriate levels of transition support for a period of time.

While local industry is still strong, the **local government** should make plans to develop and mobilize the local economy. It should provide front-line leadership to determine the

community's most sustainable future direction and to coordinate planning and collaboration to achieve community goals. Self-financing local governments should strive to maintain their property tax and revenue base to ensure the financial resources remain to sustain service levels. One of the most vital roles of local government is its leadership in communicating positive messages during transition about the community to the community and the country to keep up community morale and maximize the community's potential to attract new business and residents.

Recognizing that most resources have a naturally limited life cycle, **departing resource industries** should work with community leaders to plan in advance for resource depletion and industry closure rather than suddenly announcing a closure and leaving the community feeling abandoned. Well before closure, the industry should work with community leaders to establish clear mechanisms for industry supports, such as retirement packages, home buyouts, severance, training and relocation to ease the transition and manage worker expectations. From its inception, the departing industry should work with the community to develop a legacy of community capacity and build a strong sense of community identity and high morale. The departing industry should also honour its obligations to address the environmental hazards and aesthetic impact of industry activities on communities, particularly for industries involving radioactivity, chemical wastes, open pit mining and clear cutting.

Community organizations, such as unions, churches, aboriginal organizations and volunteer groups, should work to ease the closure crisis by providing practical support and plan for immediate financial and social assistance to the community. Together they could work to build community capacity and morale. They should also participate in the development of business plans, new market opportunities and economic development strategies.

HOPE FOR RESOURCE-BASED COMMUNITIES

Around the world, resource-dependent communities are vulnerable to industry closures that devastate their economies and social structures. Whether they depend on fishing, mining, forestry, agriculture or energy, these towns are subject to resource depletion, cyclical shifts in global commodity markets, economic restructuring and changes in government policy that make them prone to boom-bust cycles or threatened with a final industry closure. They share the same plight because most tend to rely too heavily on a single industry for jobs and economic viability rather than diversifying or broadening their economic base. As a result, industry closures around the world have similar effects on rural communities: catastrophic job losses, a crippled economy, the social upheaval caused by the flight of residents to better opportunities elsewhere, declining property values, and a struggle to maintain service levels and the local infrastructure.
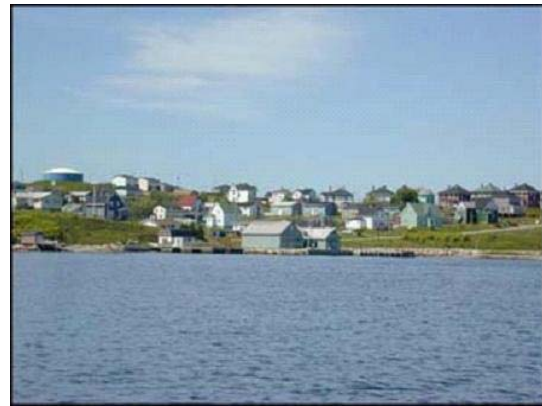
Canso, NS
Source: Town of Canso

Industry closures are accelerating rural depopulation and hastening rural decline while at the same time increasing population, economic and social pressures on urban centres that become the destination of choice for the rural population.

Despite different political, economic and social structures, communities around the world may find that they can benefit from learning more about each other's experiences in addressing the crisis of industry closure in small communities. As industry closures touch almost every aspect of rural and small town life, communities can share their stories to better understand these changes. They can begin a dialogue that leads to positive actions that meet the challenges and take advantage of the latent opportunities created by these changes. This dialogue could become a vital part of a larger restructuring process because it will complement the traditional urban planning focus on the pressing issues of urbanization and urban industrialization. Paying more attention to managing the transition of rural communities could ease some urban pressures while improving the economic sustainability of rural regions. Strategies for managing resource community transition may also be applicable to larger scale natural and human-caused disasters, such as floods or civil wars.

The research done for this paper has focussed primarily on the Canadian experience, teaching community stakeholders many valuable lessons about how to manage the transition from industry closure to community recovery. Through this research, Canadians have learned that a constellation of factors, ranging from geography and access to roads to demographics and the availability of high technology, can have an influence on whether or not their rural communities can recover and thrive after

experiencing an industry closure. The research underscored the uniqueness of each community and the individuality of each community's response, yet found that the shared nature of the crisis led naturally to a shared range of ways to manage community transition management strategies. In turn, analysis of the management strategies employed in Canada the led to the development of common themes useful in supporting the transition management of many Canadian communities regardless of the factors influencing recovery, the resource industry involved or the community's location. For example, the research found that all communities could benefit by planning for industry closure prior to the event, receiving early warning of closure, determining the factors that could influence recovery, supporting collaboration between all actors, implementing a range of actions, providing time-limited financial resources and defining transition management success individually for each community, among other measures.

The recognition that lessons learned are partially or wholly replicable between communities in Canada has sparked an interest in the potential for replication beyond Canada's borders for the benefit of the global community. Clearly, not all of Canada's strategies can be applied wholesale to rural communities around the world facing similar challenges. While the challenges may indeed bear a resemblance, the capacity to respond will vary considerably from country to country – governmental systems differ, underlying economic conditions widely diverge, social structures are not the same. Nevertheless, some of Canada's learning may provide valuable insights and could be replicated or adopted in some form by other jurisdictions to support their communities as they address their own unique circumstances and needs.

In particular, researchers believe that four strategies form the core of the Canadian experience. In the following, the four strategies will be defined and will then be illustrated as they were applied in the case of Tumbler Ridge, British Columbia, over the period from the town's inception in 1981 to today:

Effective transition management anticipates and plans for industry closure as a normal event in the life cycle of industry. Resource-based industries, particularly those focussed on non-renewable resources have a natural life that depends on shifting global markets and ends when the resource is depleted or the costs of extraction outweigh economic viability. Community stakeholders should recognize this from the inception of the industry and begin planning for shut-down even as the industry is starting up. Instead of responding to a closure announcement, actors should expect it and prepare for it as a normal event in the industry's life. This pushes forward the time-frame for transition management actions from the post-announcement to the pre-announcement phase of the recovery cycle and acts as a catalyst for earlier economic diversification. It will also reduce the shock and trauma of industry closure by setting in place mechanisms to support workers and the community, and by preparing economic and social alternatives that contribute to community stability.

Provincial decision-makers made a series of key policy and design decisions as they planned Tumbler Ridge before its founding to weather the cyclical nature of the world demand for coal. These planners:

- **Established a local government framework for the town from its inception:** Using British Columbia's 'instant town' legislation, planners established Tumbler Ridge as a municipality with a fully elected council and conventional political, administrative and social relationships to avoid the problems of the company town model in which a town survived only at the whim of the company. Tumbler Ridge was designed to function as the central town in a larger surrounding territory. This choice of a single townsite avoided the creation of several smaller settlements that would have had the character of worker-oriented campsites or dormitories rather than of a genuine town with accumulating social capital. The regional town concept allowed planners to choose the most advantageous location for the town and to exercise care in community planning.

- **Prepared a comprehensive plan that anticipated the eventual decline of the coal resource:** Town planners recognized that the demand for a resource commodity like coal is cyclical and that the supply of the resource itself would eventually run out. With this in mind, they made decisions that would support the town's stability. One such decision involved creating large municipal boundaries that encompassed the industry sites. This unusual step meant that the industry paid municipal property taxes while in operation, contributing substantially to municipal revenues that could be used to provide services or saved as contingency funds during an economic downturn. Planners also appointed a social planning director to incubate the community's social capital by developing the social networks and organizations vital to a healthy community.

- **Established functioning land, housing and commercial markets in the town:** Planners used a mixed model for development, assigning roles to the government, company and private sectors. In doing so, they ensured that Tumbler Ridge had a functioning property market where home and land owners had a stake in both property values and the community, making them more inclined to remain in town during an economic downturn. The local government had control over raw land and therefore considerable influence over the town's growth and development. This paradigm avoided the company town model in which a company owns the housing stock and rents it to workers who, in turn, develop little attachment to the community because of their lack of property ownership.

- **Planned to deliver provincial government infrastructure and services:** The provincial government's infrastructure decisions determined much of the town's character. For example, British Columbia decided to ensure that Tumbler Ridge was not located at the end of a single road; instead it can be accessed from two directions. Additionally, they worked to establish a rail connection so that coal could be shipped to ports and markets. Important provincial services, such as schooling and health services, were made available as residents began to arrive and have been offered in the town ever since, giving Tumbler Ridge instant credibility and remaining as an attraction to new residents.

- **Managed risks:** Looking ahead to a future decline of the coal industry, British Columbia entered into an agreement with coal companies to guarantee some of the government's investments in the community. For example, the companies guaranteed the town's infrastructure debt without having to directly pay for it. Also, in a fairly innovative move, the government established a contingency fund, put away for a later day as a buffer against a downturn in the coal market.

Restructuring resource-based communities after an industry closure requires collaborative efforts between all stakeholders. This study recognizes that every country exercises jurisdictional authority uniquely and Canada's federal model, where jurisdiction and power is constitutionally divided among national and subnational parliaments, is not globally applicable. However, all can adhere to the principle that resource-based communities in transition are best supported through the collaborative efforts of all stakeholders rather than over-emphasizing the influence of single actors taking action independently. Keeping in mind the uniqueness of individual countries' jurisdictional complexity, this report suggests that transition management responsibilities could be broken out in the following pattern in a collaborative effort to support resource-based communities in transition:

- *national governments:* set policy direction and prepare regions/communities for impacts

- *subnational governments:* facilitate planning; help communities anticipate and prepare for industry closure and coordinate collaboration and funding from all actors

- *local governments:* encourage and support collaboration on behalf of the local community, while taking responsibility for managing local issues arising from closure

- *departing industries:* communicate intentions clearly and provide support to directly impacted workers and the community

- *community organizations:* provide practical support

Comprehensive planning for Tumbler Ridge provided the community with a bank of physical, social and political assets to enable a successful restructuring after the closure of the major industries. The community had nearly 20 years of experience with effective local government with strong administrative and political leadership. It had built strong extra-local support through its close political, administrative, social and economic connections to other communities in northeastern British Columbia. The quality of the community facilities and the high levels of social cohesion meant that there was a strong core of people who were committed to the community and who wanted to stay in spite of the loss of the major employer. They were willing to work with local elected officials to engage senior governments, develop a transition plan and implement it.

All levels of government collaborated to form a Community Revitalization Task Force to identify and develop economic opportunities. Of particular note, the task force worked to maintain a stable population and property tax base by acquiring surplus housing through the Canada Mortgage and Housing Corporation and the company, then selling it through a housing corporation established by the district. Together, they developed a community

transition plan, and hired consultants to determine ways in which the economy could be diversified. The town also reached collaborative agreements with the Municipal Finance Authority to retire the town's debt and with the provincial government to maintain the town's infrastructure and service levels. These actions were facilitated by the contingency fund established at the town's inception.

Implement a Wide Range of Actions. Although industry closure is usually a sudden and often unexpected event, managing a community's transition to recovery is a complex process that takes many years. There are no quick fixes and no simple, single pathways to success. Instead, communities around the world facing similar dilemmas can adopt an interrelated range of actions that support transition management and recovery, including the following:

- planning and implementing economic diversification strategies
- providing incentives for industry and resident relocation to communities
- determining and maintaining an appropriate level of public services during a period of adjustment
- stabilizing municipal finance, administration and local service delivery
- providing worker support, and
- maintaining high community morale

Tumbler Ridge's early planning for diversification reaped many benefits during its recent economic downturn, laying the foundation for a wide range of actions aimed at balancing local government revenues and expenditures while continuing to make Tumbler Ridge an attractive place to locate. A key initiative has been marketing the community as a place to live and invest. This has involved a financial strategy founded on stabilizing property tax revenues by marketing virtually all of the community's surplus housing stock to maintain 100% occupancy, retiring the municipal debt so that 47% more revenues can be fully dedicated to providing attractive services, and developing an economic diversification strategy that expands the initial focus beyond coal to tourism, oil and gas, and regional service provision.

Protecting municipal services and reaching an agreement with the province and the federal government to maintain other services have been important actions needed to ensure the town remains attractive to new residents and communicates its will to become sustainable. As well, the town developed the infrastructure necessary for future economic diversification, such as the airport and an industrial park, and enhanced amenities such as a community swimming pool and a golf course to make the town attractive to continuing and new residents.

All stakeholders must expect to provide an appropriate level of time-limited financial support to resource-based communities in transition. In most cases, an industry closure will have a significant financial impact on a community in lost employment income that would be spent locally and lost municipal taxation. This is

especially so in countries, like Canada, where local governments are supported largely by own-source revenues. Short-term financial investments from all stakeholders can allow a community time to adjust without creating an unhealthy dependence on outside financial resources. These investments could honour the community's past contributions to the region's or country's economic vitality, ensure that previous investments are not lost and support communities to take advantage of new opportunities, reach their full potential and break out of a culture of dependence over the long-term. All levels of government need to work together to develop a coordinated strategy for managing local revenues and expenditures while spreading investments over time.

In Tumbler Ridge, the key to financial solvency lay in ensuring stable property taxes, eliminating $10 million in long term capital debt and convincing the provincial government to honour its 20-year commitment to maintain a contingency fund established in anticipation of a downturn in the coal industry. The community was convinced that if it received this level of support it would be able to maintain its legacy of high quality services and take advantage of economic opportunities without senior government subsidies. This is now paying dividends as the community is now experiencing growth as a base for oil and gas exploration and development and the revival of the coal industry.

Next Steps

This research project came into being because of the interest and initiative shown by the Ministers responsible for local government in Canada who wanted more information on how small, resource-dependent communities manage their transition following an industry closure. The authors of this paper hope that the results of this work will encourage other countries to resolve to better understand the dynamics of community transition within their own context. As well, communities undergoing a continuum of experiences including the closure of resource or manufacturing industries, natural disaster and human-caused catastrophes might also find areas of overlap as they contribute their own experiences to this dialogue. These combined efforts could be used as the basis for discussion at subsequent sessions of the World Urban Forum.

Renewed Hope

Rural and urban communities both share the dilemma of needing to achieve sustainability within the context of rapid change, yet rural communities have, so far, been left behind in most discussions of sustainability. This paper is a first step in building interest in rural sustainability, an issue that has received less attention than it should. As communities around the world are confronted with shared questions about how to survive industry closures and succeed despite them, there exist many opportunities to share solutions by opening a dialogue about rural sustainability. Communities and countries can offer their stories and lessons learned so that others can build on this collective wisdom to find practical solutions of their own and contribute new ideas that would, in turn, be helpful to

others. As this dialogue gains momentum, more can be done to give resource-dependent towns hope for the future so that they can thrive and prosper as resilient communities.

APPENDIX 1: CASE STUDY SUMMARIES

Northern Canada

Faro

Remotely located far northeast of Whitehorse, Faro is one of only 8 municipalities in the Yukon. Created to provide a workforce for mining, Faro was once the Yukon's economic powerhouse, producing 10% of the world's zinc and 12-15% of the Yukon's GDP. Suffering from a series of mine closures and re-openings under new ownership beginning in 1981, the final crisis came in 1998 when the Anvil Range lead-zinc mine suddenly closed and went into receivership.

With the closure, half of the town's workforce lost their jobs, related industries suffered, and the population fell from about 925 to just 250 by 2000. The town faced a disappearing livelihood, a crumbling tax base and a much smaller population. However, the severity of the crisis was reduced because of the territorial government's significant financial support, and its efforts to ensure generous worker severance and retraining packages and preserve mining assets. As well, a strong local government has used its community plan and a vibrant volunteer spirit to aggressively promote economic diversification.

Unlike most other Yukon communities that are shrinking in a difficult economy, Faro has rebounded since the mine closure because of modest economic diversification in service, tourism and home-based jobs. The population grew to 380 by 2002. Improving social conditions, well developed infrastructure and enthusiastic volunteer participation in community development are positive attributes that will help Faro in the future. While fewer health, social and financial services, and a smaller school-aged population are challenges to be overcome. Perhaps the greatest challenge lies in finding $50-200 million for the mine's environmental reclamation but, once obtained, these funds will provide many jobs for several years.

Inuvik

Incorporated as the first planned community north of the Arctic Circle, Inuvik lies at the end of the Dempster Highway near the Beaufort Sea coastline. Since 1954, the town has served as the region's administrative centre. Inuvik had no single crisis, but its economy lurched in fits and starts, along with the oil industry's interest in developing regional oil and gas fields and the Mackenzie Valley pipeline, for more than 25 years. Despite these economic shifts, Inuvik's population maintained slow growth and is now 3,000, only slightly below its 1976 peak.

As a regional administrative centre, with half of all jobs in the public sector, Inuvik has been less sensitive to industry shutdowns than other remote communities – downturns do not seem to have thrown the community into crisis. The local government, pioneering Aboriginal governments and business corporations have actively diversified the economy

and created a blueprint for successful economic partnerships between local peoples and industry in the NWT. The town's remoteness and severe climate already require it to be self-sufficient in providing many goods and services, ensuring a robust economic base, strong infrastructure and good social, education and health services.

Inuvik will never entirely overcome its remote location, harsh climate, fragile environment and high cost of infrastructure that combine increase industry costs and hinder year-round transportation and access to markets. However, Inuvik has the capacity needed to maintain a stable and successful transition as the oil and gas industry continues to fluctuate.

Western Canada

Grande Cache

Located on an isolated mountain plateau in northwestern Alberta, Grande Cache's economy has always depended heavily on the coal industry. Following downsizing of mining operations in 1982, the Smoky River Coal Mine closed in 2000, employment in mining dropped from 28.5% in 1996 to 8.4% in 2001

The mine closure had a significant impact on Grande Cache, although the mine accounted for less than 30% of all local jobs. The population dropped from 4,441 to 3,828 between 1996 and 2001, about 13.4%. Most people leaving the town had young families. Housing starts decreased and employment in all sectors except transportation and utilities declined. Average incomes declined 6.5% and the unemployment rate became 12.3% compared to Alberta's overall rate of 5.2%.

The community benefited from decisive local and provincial government actions to support workers, existing opportunities to expand activities in forestry, corrections and tourism, as well as stable property tax revenues combined to ensure that Grande Cache has been able to stabilize and recover. As well, Grande Cache expects to benefit from expanding oil and gas exploration in the region and the tentative re-opening of the coal mine under new ownership. However, it must also address setbacks such as the recent layoff of most of the 125 Weyerhauser mill workers because of the softwood lumber dispute.

Granisle

Granisle is a small, remote community in northern British Columbia. It was incorporated in 1971 to house miners working at a pair of Noranda copper mines. The mines operated successfully for about a decade but low copper prices in the early 1980's caused a significant scaling-back in mine production. The mines were operated erratically until 1992 when closed permanently. Thus, Granisle experienced about a decade of economic turmoil, downsizing and uncertainty.

Consequently, between 1982 and 1985 the town's population plummeted. From a peak nearing 1600 persons, the population fell to under 600 by 1985. After a brief recovery in

the late 1980's, the permanent closure of the mine resulted in a further population decline: to just over 500 persons in 1993 and falling to the ±400 range in 1996. This is perhaps a quarter of the peak population in the town. The demographics of the town have also changed, switching from a younger age structure when mining dominated the economy to an older age structure today. The town's civic government continues to function despite the challenges of the past years.

The transition challenge for Granisle was severe. After about a decade of uncertainty, the town's original raison d'être, to serve as a mining service centre, was entirely eliminated. Attempts to diversify have not been aided by the town's northern locale and remoteness -- 1.5 hours distant from Smithers (itself less than 6000 population).

Logan Lake

Logan lake is a small community in southern interior, close to Kamloops (BC's 12th largest city) and within easy reach of the large commercial centres in the Fraser Valley and the Okanagan. The region's economy has long been influenced by copper and molybdenum mining, and even today Logan Lake is home to Teck Cominco's Highland Valley Mine, the largest copper mine in Canada and is one of the largest copper mining / concentrating operations in the world. The operation is expected to be exhausted by 2009.

Logan Lake boomed in the 1980-82 period, its population soaring from about 1500 to 3000. A shocking event in 1984, when molybdenum markets collapsed, was the closure, without warning and with poor post-closure follow-up by the company, of the former Highmont Mine. Nor were other mining operations in the area immune to the economic challenges of the mid-1980's. Consequently, Logan Lake began to shrink: from just under 3,000 in 1982 to 2,000 by 1986. Since then, the population rebounded somewhat and now appears to have settled in at near 2300 (albeit somewhat older) persons. The town is already looking ahead to 2009 when the existing mine operation may close.

While the Highmont Mine closed in 1984, left intact were mining operations that were consolidated in 1986 to form the Highland Valley partnership that exists today. Logan Lake was and is still a mining service centre and continues to receive property tax revenue from the mining company. Thus, Logan Lake experienced a comparatively minor contraction challenge in the 1980's and can expect to face a more severe challenge some years hence when the economic life of current operations is reached. Logan Lake is an interesting case both retrospectively, in relation to its handling of the boom-bust cycle from 1980 to 1986, and prospectively, in relation to transition planning in anticipation of the complete cessation of mine operations five years from now.

Meadow Lake

Established as a trading post on the northern fringe of Saskatchewan in 1799, Meadow Lake went into crisis when the provincially-owned sawmill threatened to close in 1988 after operating sporadically with frequent shutdowns since 1981.

Sensing that the operation might be sold, sawmill employees joined with the Meadow Lake Tribal Council to buy the mill, and saved 300 direct and indirect jobs. For the past 15 years, the sawmill has offered stable, year-round jobs with few layoff or shutdowns. Local economic activities have expanded to include the world's first zero-effluent pulp mill and more than 120 independent forestry companies. The town's population never fell during the transition period and has since risen from 7,000 during the crisis to about 8,800 in 2002, an increase of almost 20% and sharply contrary to provincial population trends. Housing starts average about 12 annually and have increased 45% in the past 10 years. Average earnings have increased 20-40% for Aboriginal people and 40-60% for non-Aboriginal people. Although general unemployment remains high at 14%, Aboriginal workforce participation has increased from 33% to 58% between 1981 and 2001.

Although Meadow Lake's diversifying economy remains forestry-dependent, its robust recovery appears to be allowing it to weather recent downturns and layoffs in the forestry industry caused by the softwood lumber dispute.

Ogema

Located in a mixed farming and ranching area south of Regina, Ogema began a slow but continual decline in the 1970's as the agricultural economy weakened. The CPR's rationalization in the 1990's left Ogema isolated from large centres and reduced its strategic role as a regional service provider. The crisis came in 1996 when the CPR closed the 114 km Pangman-Assiniboia branch line that ran through Ogema. This led to the closure of local grain elevators and other businesses, effectively shutting down all industry and threatening services like schools. Over 20 years, the population fell from 441 in 1981 to 292 in 2001.

The community has no long-term debt and its tax base increased 38% between 1997 and 2001. Ogema's population has grown to 325, still well below levels before the railway closure but trends indicate the population will continue to grow.

Despite the initial shock of losing almost all of its infrastructure, Ogema's transition has been smoother than most because it has continued its historical association with the railway and agriculture while expanding into new areas like hog farming. Setting broader horizons and capitalizing on its central location in southern Saskatchewan, it has redefined itself on a regional basis. The town has recognized the need to expand recreational, health and educational services to help its population stabilize and grow. Ogema appears to be a town in control of its destiny.

Pinawa

Pinawa was established in 1960 as a planned community to house employees of Atomic Energy of Canada's (AECL) nuclear research centre 120 km east of Winnipeg. Without advance warning, the federal government announced in 1996 that the lab would close.

Once the largest federal laboratory in western Canada with 1,100 employees at its peak in 1991, AECL now has only about 30 employees still working in Pinawa.

Pinawa's transition has been less traumatic than most, partly because the closure was gradual. Despite the closure, the population dropped only 10% from 1,670 to 1,500 residents. Generous early retirement and 100% home buyout packages to lab employees eased the pain considerably. AECL continues to pay a grant-in-lieu that provides 50% of the municipal tax base to support the local government to maintain municipal services, thus avoiding a fiscal crisis and reducing the closure's impact. Although federal-provincial efforts to privatize the lab failed, new high-tech companies have been attracted to Pinawa because of its scientific background and facilities. Superb infrastructure has made Pinawa an attractive commuter community to Winnipeg (linked by a series of highways and two-lane roads.

Pinawa's greatest transition challenges remain the specialization of its workforce and the negative pubic perceptions of the nuclear industry. Should AECL reduce its grant-in-lieu, Pinawa's tax base would be severely eroded as would its ability to support services.

Tahsis

Incorporated as a municipality in 1970, the Village of Tahsis is a small and remote forest dependent community on the west coast of Vancouver Island. In 2001 the local lumber mill – that had supplied over half of the local jobs and tax base – permanently closed. This put a lot of stress on mill workers and their families who had already been impacted by the sporadic operation of the mill in preceding years before closure. Many have decided to leave the community to work and live elsewhere.

For its part the municipality continues to work hard to adjust to the change, working in collaboration with the province and the federal government. The significant loss of taxation expected in 2004, along with the demand from residents to maintain all local services (recreation in particular) will create operational challenges for the village. But this will be aided by the fact that the municipality has low debt and significant financial reserves.

While Tahsis has stabilized from the loss of the lumber mill (population exodus has stopped), the municipality and the community still has work to do to create a more diverse, albeit smaller, local economy. The community will always be challenged by its remoteness, but its natural setting, abundant resources and continually improving gravel road connection to Gold River (63 kms away) and the rest of the island are strengths to build on.

Tumbler Ridge

Founded as a planned mining town in 1981 as part of a huge economic initiative to export coal to Japan, Tumbler Ridge is located in the northeastern Rocky Mountain foothills. The town was thrown into crisis when the Quintette mine closed without warning three years ahead of schedule. Its stability was compromised further when the Bullmoose open

pit mine closed in 2003, although the town had three years advance warning of this closure. The population reached a low of 1,931 from is 1991 peak of 4,800.

Tumbler Ridge was hit very hard by the closure of the two mines, which provided 70% of all local jobs and 65% of the municipal tax base. Despite such huge losses, the transition has been easier than for most resource-dependent communities because of actions that stabilized the population quickly. The combination of excellent housing stock owned and re-sold by the town, modern infrastructure, entrepreneurial local leadership for a debt-free municipality and provincial grants and resource revenue sharing opportunities have allowed Tumbler Ridge to survive the crisis and begin to grow again. Tumbler Ridge's population has now rebounded to 2,200 and may be as high as 3,000, unofficially. A recently opened coal mine and nearby natural gas exploration have spurred a new wave of economic prosperity in Tumbler Ridge.

While it will never overcome its geographic isolation, Tumbler Ridge has the benefit of being part of a region with diverse economic opportunities in oil and gas, tourism, forestry and agriculture. Most of these activities (current and potential) exist within the town's huge municipal boundary to ensure that future economic development contributes to municipal taxation revenues to pay for expanding service delivery. Tumbler Ridge also has the advantage of political support from local leaders in adjacent communities who believe that the survival of the community is important to the entire region.

Uranium City

Accessible year-round by air only, Uranium City sprang up in the remote northwestern corner of Saskatchewan in 1952 to exploit Canada's largest uranium field. By 1959, the town had 12 mines and 3 mills but they were closed one by one over the next two decades. After investing $100 million over five years in mining operations, Eldorado Mining unexpectedly closed its last mine in 1981 because of limited military needs and declining ore quality.

The surprise overnight closure of the last mine led to an immediate, devastating and permanent economic crisis. The population immediately plummeted from 2,000 to 400 and now hovers between 150 and 200. The environmental hazards created by uranium mining further undermined the town's viability. With no economic alternatives to uranium mining and no adequate transportation links, it has been impossible for this isolated northern community to overcome geography to diversify its economy. Salvage operations on abandoned properties are the largest local business.

In 1984, the municipality ceased to exist and has played no official role in the region's future. The province manages Uranium City as a northern settlement and provides health, education and social services but remaining residents worry the province will withdraw these or even basic utility services altogether.

Central Canada

Murdochville

Murdochville lies in the heart of the impoverished and depopulating Gaspé Peninsula. It's economy has depended primarily on the sporadic operation of Noranda's copper mine and smelter and has few options to develop tourism, fishing or logging industries common in the rest of the Gaspé. After two decades of decline, the mine's permanent closure in 1999 and the smelter's closure in 2002 was devastating to the community, costing 300 jobs, wiping out incomes for most of the 1,171 population, causing a 30% population drop over 10 years. Property values plummeted 65% and municipal tax revenues dropped 70%.

Murdochville's transition has been particularly difficult. Not only has there been massive job and population loss, disagreement between the different levels of government has made it difficult to find a way forward. While the local government has favoured community closure in the past, the current provincial government wants the town to survive. Murdochville's future prospects could be bright if it can overcome the loss of hope on the part of residents, lack of local political agreement and the difficulty in attracting new businesses.

Elliot Lake

Located halfway between Sudbury and Sault Ste. Marie, Elliot Lake was a prosperous uranium mining town with a peak population of 24,887 in 1959. Mining has been in decline since 1966 when a key market, the United States, decided to meet its demand domestically. The town collapsed to a population of 6,664 but gradually increased during the 1970's because of federal plans for Candu reactors and Ontario Hydro's interest in inexpensive energy sources. Anticipating a population of 30,000, the town invested heavily to expand its infrastructure. However, uranium prices dropped 75% during the 1980's and the mines closed one after another. The last mine closed in 1996. Elliot Lake's population has now stabilized at 13,590.

Elliot Lake's transition away from being a mining town has spanned three decades and has significantly changed the community. Access federal/provincial funds for economic diversification helped the community adjust along with its proximity to the Trans-Canada Highway.

Elliot Lake's long-term prospects for continuing as a smaller town with excellent and abundant infrastructure are good. High costs of municipal services and the limited incomes of retirees attracted to live there may limit recovery potential. It's huge supply of housing stock offers new residents high quality, low cost housing but has also served to depress the housing market and tax base.

Atlantic Canada

Bishop's Falls

Bishop's Falls served as the head office of the provincially-run Newfoundland Railway and as the major railway service centre in central Newfoundland. Bishop's Falls' transition crisis of difficult job losses extended over several decades until the final railway closure in 1988 under the federal government's $800 million 'roads for rails' deal. The psychological impact of losing its historic railway identity was as difficult as losing the last 75 railway jobs, and the population of 4,300 began to fall by 8.8% to 3,800, a rate just slightly more than the provincial average.

Faced with a choice between leaving the province and finding local jobs, most residents chose to stay. This kind of community spirit greatly eased the transition by retaining population and the property tax base. Other advantages for the community in managing through transition included access to federal/provincial economic diversification funding, abundant hydro power and growing regional demands for services. Because roads replaced rail lines, Bishop's Falls did not lose the advantages of its central location and port links, allowing it to attract light manufacturing industry.

Canso

Founded by Basque fisherman in 1604, Canso is a small fishing community on the northeastern coast of Nova Scotia. The unexpected collapse of the once lucrative Atlantic fishery in the 1990's shocked Canso and caused great economic hardship, as well as destroying its 400-year sense of identity. Unemployment nearly doubled to 31.7% between 1990 and 2001 and the population declined 19% from 1,228 to 992. Adding to regional difficulties, Canso's Seafreez Foods fish processing plant shut down in 2002, costing 200 more jobs in Canso and the region. Half of these employees did not qualify for employment insurance (EI) and the benefits of the other half ran out in Spring 2003.

Canso's transition challenge was severe but lessened by timely and effective federal/provincial action to create short-term jobs, re-open the Seafreeze plant in May 2003 and promote tourism based on the town's 400-year history and local beauty. Having stabilized the fish processing industry, the town is actively developing further economic opportunities through sustainable tourism, preparing for the development of offshore oil and gas, and in setting up wind turbine farms.

Despite these steps, Canso continues to have high unemployment and must depend on fluctuating but potentially lucrative shrimp and crab markets or on the uncertain potential of petrochemical exploration. Canso's other challenges remain its small tax base and its continued dependency on funds from other levels of government for large infrastructure projects.

Great Harbour Deep

Great Harbour Deep was an extremely isolated coastal community accessible by ferry only six months a year or by an occasional airplane. Depending exclusively on seasonal employment in cod and salmon fishing/processing, the town was hit hard by the 1992 province-wide closure of the cod fishery. Great Harbour Deep's landed catch decreased forty-fold by 2001 and the processing plant closed. The town's population dwindled from a peak of 245 in 1986 to 135 by 2001. The loss of tax base made it impossible to balance the budget and meet debt payments.

Great Harbour Deep could not overcome its remoteness and lack of economic diversification options, despite an attempt to open a fishing lodge. Finding no options for economic diversification, the local and provincial governments agreed to shut the town down. Long-term benefits, such as providing residents with better access to services and job opportunities, also favoured relocation. Homeowners were offered relocation packages and the town was declared evacuated by December 2002.

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