

Transforming Local Government Strategies for Mobile Workforces

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http://www.onthemovepartnership.ca.

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Availability

Copies of this report have been provided to municipal offices for Fort St. John, Kitimat, and the Peace River Regional District. At UNBC, reports have been posted on the website of the Canada Research Chair in Rural and Small Town Studies: http://www.unbc.ca/greg-halseth/canada-research-chair-rural-and-small-town-studies.

Project reports about this project include:

- Labour Mobility and Community Capacity: The Opportunities and Challenges for Labour Mobility in Rural and Remote Canada Executive Summary
- Labour Mobility and Community Capacity: The Opportunities and Challenges for Labour Mobility in Rural and Remote Canada – Final Report
- Labour Mobility in Northern BC: Final Report
- A Review of Socio-Economic Characteristics in Mackenzie
- A Review of Socio-Economic Characteristics in Williams Lake
- On the Move: Community Impacts of Long Distance Labour Commuting Summary Report for Mackenzie
- On the Move: Community Impacts of Long Distance Labour Commuting Summary Report for Williams Lake
- On the Move: Mitigating Impacts A Local Workers' Perspective in Williams Lake
- On the Move: Mitigating Impacts A Mobile Workers' Perspective 2013
- On the Move: Mitigating Impacts A Mobile Workers' Perspective 2015

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Transforming Local Government Strategies for Mobile Workforces

1.0 Introduction

Labour mobility presents numerous opportunities and challenges for rural and small town communities. Opportunities exist in terms of addressing needed services for workers, while also presenting the possibility for community growth and stability by attracting new residents and businesses. Challenges include impacts like burdening existing service levels that are not designed to accommodate large shadow populations, problems with housing availability and affordability, and social pressures associated with large (mostly male) transient populations. In resource-dependent regions, work camps are increasingly deployed within or adjacent to municipal boundaries. This has prompted important, but controversial, questions about local government approaches to maximize the benefits, and mitigate the negative impacts, associated with such mobile workforces.

In Canada, much of the provincial and federal government funding to municipalities is based on per capita funding, meaning that small communities often do not receive as much from state industry taxation revenues, royalties, or leases as larger communities, and leaving small local governments in difficult circumstances to address the significant demands placed on local infrastructure and services from large-scale industrial projects. These local governments also do not have the fiscal resources required through standard property taxation. As such, the purpose of this research is to learn not only about new, innovative, and entrepreneurial approaches to maximizing the benefits associated with work camps and mobile workforces, but also to learn more about how current fiscal and public policy frameworks may be hindering such efforts. The lessons learned through this research will help to inform broader structural and policy related changes that are needed within local and senior levels of government.

This research is carried out as part of the On the Move: Employment-Related Mobility in the Canadian Context (E-RGM) project. This seven year nation-wide research partnership about labour mobility was launched in 2012 and is led by Memorial University, with over 40 researchers participating from 22 universities (www.onthemovepartnership.ca). The project work reported here was carried out by a research team from the Canada Research Chair of Rural and Small Town Studies at the University of Northern British Columbia (UNBC), and the School of Resource and Environmental Management at Simon Fraser University (SFU) during the spring of 2018. In northern BC, our research was conducted with representatives of the District of Kitimat, the City of Fort. St. John, and the Peace River Regional District — all local governments with recent experiences with work camps and mobile workforces during the construction and operations phases of large-scale industrial projects.

The report is structured into five parts. Following this introduction, we provide a discussion about what is driving local governments in rural and remote regions to become entrepreneurial within the political economy context of resource-based regions. This section also explores the shift from managerialism to entrepreneurialism in local government reforms. This is followed by a brief description of our study methodology before describing the findings that explore the pressures and benefits associated with mobile workforces. In these findings, we also explore the types of local government initiatives that are entrepreneurial versus responses that are mobilized to manage issues that are perceived to be costs or impacts related to mobile workforces. Our key findings reveal a number of structural issues that are impeding entrepreneurial responses to mobile workforce issues, including inadequate information systems, limited jurisdiction, and limited engagement of local governments in approval and permitting processes. These issues are important as they entrench the dependency of local governments on insufficient senior government resources. In the final section, we explore initiatives that can be undertaken to better position local governments to undertake innovative and entrepreneurial actions as they prepare for, and respond to, pressures and opportunities associated with the influx of mobile workforces.

2.0 What is driving local governments to become entrepreneurial?

2.1 Industrial and Government Restructuring

Rural and remote resource-based regions have experienced significant industrial and public policy restructuring since the 1980s. These transformations in the political economy of resource-based regions are explored in this section as the impetus for new entrepreneurial approaches that are being considered by local governments as they seek solutions to renew their economies and better position themselves for addressing issues related to mobile workforces.

Staples-dependent towns are common in the Canadian rural landscape, with many benefitting from provincial policies that expanded resource-based development in the post-World War Two era (Markey et al., 2012). A concept first developed by Harold Innis (1933), staples theory describes the dependence of extraction driven economies (i.e. forestry, mining, and oil and gas) on the export of raw, resource-based commodities. In the post-war era, there was no impetus for these communities to pursue diversification as industries continued to export raw materials. Resource-dependent communities, however, are vulnerable through boom and bust fluctuations as demands and prices for commodities are set in countries with more advanced manufacturing infrastructure and technology (Nelsen et al., 2010).

By the 1980s, the vulnerability of these staples-dependent communities was fully exposed. Globalization intensified pressures through increased competition and more fluid flows of capital to low cost production regions. As industries consolidated their operations and adopted labour shedding technologies, resource-dependent communities received fewer jobs and local benefits (Argent, 2013; Carson, 2011). Local government industrial tax bases were susceptible by turn-key operations and uncertainty associated with international trade disputes and agreements (Gale & Gale, 2006; Markey et al., 2012). Delayed responses to address these industrial restructuring pressures increased calls for a shift from crisis management to more entrepreneurial pursuits that can nurture independence and better position communities for new pathways (Fosse, 2014).

Industrial restructuring pressures are compounded by neoliberal public policy discourses that have reshaped rural community and economic development. Neo-liberalism refers to:

Political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices (Harvey, 2005, p. 2).

Neoliberal public policy initiatives reduce senior government expenditures by closing or regionalizing services in rural regions; thereby, leaving community stakeholders to adapt to successive rounds of funding cuts and contract reforms (West, 2013).

At the same time, senior governments continue to pursue decentralization by shifting or offloading responsibilities to local government (Ateljevic, 2009), moving away "from government to non-governmental spheres of control", and mixing "government reform with

market stimuli to stimulate 'social market' processes" (Dollery et al., 2010, p. 221). These public policy discourses for rural community and economic development are based on notions of bottom-up community development to empower communities and foster an 'enterprise culture' (Herbert-Cheshire, 2000; Herbert-Cheshire & Higgins, 2004). Policy initiatives associated with decentralization, however, are not accompanied with a devolution of power and resources (Beer, 2014). In this policy environment, resource towns struggle to acquire the resources they need as industrial restructuring and neoliberal policy directives entrench their position as resource banks (Heisler & Markey, 2014; Ryser et al., 2017b). Senior governments, in fact, often simultaneously reduce or eliminate many of the key supports that local governments need to realize new development strategies. In response, researchers argue that there are no coherent state policies to renew rural communities (Herbert-Cheshire, 2000). As Connelly and Nel (2017a, p. 321) write, "state support for economically struggling rural communities in New Zealand is virtually nonexistent, with the state focusing instead on growing regions and high growth potential business sectors, reflecting New Zealand's now long-term acceptance of its neoliberal policy." Furthermore, with limited attention to reinvestment, senior governments continue to draw down the assets in rural and remote regions that were established in the post-war era, resulting in aging infrastructure pressures that are widespread across housing, business assets, physical infrastructure, and amenities (Dollery et al., 2010; Ryser et al., 2017b). In this context, rural regions are more marginalized than their urban counterparts, leaving local governments to assume a greater, more entrepreneurial role in economic development (Shone, 2011).

2.2 Mobile labour

In conjunction with these broader restructuring pressures, industries continue to transform their labour strategies and assets through the use of mobile labour. Industrial pursuits of flexible production use mobile workforces to support the year-round adoption of extended shifts and 24 hour operations, as well as access to a larger supply of qualified workers for the construction of new large-scale industrial projects (Aroca & Atienza, 2011; Barclay et al., 2013; House of Representatives, 2013). The influx of mobile workforces, however, prompts questions about local government policies and regulations as new large-scale industry projects unfold in rural and remote regions (Ryser et al., 2017a). Resource-based towns may struggle to recognize this restructured and renegotiated labour landscape and then transform planning and policy frameworks to reflect this new reality. Rural and small town places are also struggling to capture mobile workforces that can choose to live and work anywhere by strategically investing in recreation, affordable housing, and other quality of life amenities (Ryser et al., 2017b). At the same time, these local governments do not have the tax base and financial capacity to upfront the extensive infrastructure investments that are needed to support work camps and broader industrial development (Headwaters Economics, 2012; Morris, 2012). The ability to maximize opportunities and benefits from the influx of temporary mobile workforces can be further impeded by decades of infrastructure deficits (Ryser et al., 2019), leaving local governments challenged financially with limited capital funds to support amenity investments that are strategically planned to support new pathways for communities (Boswell & Crompton, 2007).

The impacts of large-scale resource development projects and large mobile workforces on local governments are well documented in developed economies (Markey & Heisler, 2010; Newell & Raimi, 2015a; Drew et al., 2017). For example, the rapid influx of mobile workforces associated with large-scale industry projects can prompt urgent and growing demand for housing and accommodations (Headwaters Economics, 2011). The scale and scope of these housing impacts stem not only from the size of the mobile workforce, but also the type of accommodation that is used to house that workforce. Housing strategies vary tremendously through many different forms of accommodation used by industry, including work crew homes, work camps, caravan parks and campgrounds, hotels, floatels, subdivision developments, and cabins (Province of Alberta, 2006; Sommers & Cullen, 1981; URS Australia, 2012; Wanjek, 2013). During the construction of large-scale industrial projects, mobile workers tend to stay in highly regulated, company controlled closed work camps that only accommodate mobile workers deployed to a specific, individual project (Beamish Consulting Ltd. & Heartwood Solutions Consulting, 2013; Haslam McKenzie & Rowley, 2013). These closed camps are commonly included in the regulatory approval process for industry projects. There are instances, however, when closed camps cannot meet the housing demands during periods of rapid construction. This can prompt the development of open camps that may accommodate mobile workers of industry proponents, contractors, and sub-contractors from multiple industry projects in a region. Open camps, however, are typically not considered during regulatory approval projects.

Building upon these housing matters are a range of socio-economic issues that can unfold. The influx of people looking for employment and the rise of displaced residents increases pressures on community services, mental health services, and food banks (Lucas, 1971; Newell & Raimi, 2015b; Tonts, 2010). Larger closed work camps typically provide their own medical staff; however, smaller closed camps and open camps do not tend to provide these supports, resulting in increased pressures on local emergency room and health care services (Ryser et al., 2018b). Alcohol and drug addiction issues also require additional bylaw, police officers, and emergency personnel (Newell & Raimi, 2015b; Ryser et al., 2018b). Further, mobile workforces impose more demands on roads, energy, waste disposal, and water infrastructure (Markey & Heisler, 2010; Ryser et al., 2017a) that must be upgraded and expanded to accommodate mobile workforces (Raimi and Newell, 2015b). Local governments can also be subjected to rising human resource costs due to difficulties retaining government staff who may be attracted to high paying industry jobs or impacted by rising housing costs; thereby, forcing local governments to pay higher salaries, housing stipends, and even purchase real estate to provide affordable housing (Province of Alberta, 2006). Local governments may also require new departments to monitor resource activities for environmental, engineering, or other regulatory issues, while expanding staff resources for road and bridge crews (Raimi & Newell, 2015b).

In this rapidly changing context, local governments often operate in "a very confusing context of transformation where the redefinition and re-positioning of the role and activities of local government seems so important, but where they continue to be hamstrung by outdated structures and legislative contexts that limit the effectiveness of their responses" (Halseth & Ryser, 2018, p. 163). As communities explore ways to respond to the challenges and opportunities associated with mobile workforces, the ability of local governments to increase revenues from industry developments is restricted by jurisdictional limitations imposed on the

property taxation powers through provincial taxation policies that cap municipal property taxes and reduce corporate tax rates¹ in order to make the province more competitive (Douglas, 2005; Markey & Heisler, 2010; Major Industrial Properties Steering Committee, 2012). In BC, for example, the provincial government has argued against "any efforts by the local government to raise industry tax rates to pay for the pressures being put onto the community's social and physical infrastructures during an economic boom" as these strategies could be seen to jeopardize proposed resource development projects (Ryser et al., 2018a, p. 4). Local government revenues typically come from property taxes, grants-in-lieu², sale of services, transfers from the provincial and federal governments, investment income, and developer contributions (Ministry of Municipal Affairs and Housing, 2018). And while Indigenous communities in Canada (and BC particularly) that have considerable power to negotiate impact benefit agreements with industry through their rights vested in the Constitution and the legal requirements for meaningful consultation (Constitution Act, 1982; Delgamuukw, 1997; Haida Nation, 2004; Tsilhqot'in, 2014; Gibson & O'Faircheallaigh, 2015), environmental impact review assessment processes do not require industry proponents to pursue similar agreements with local governments, leaving them to seek other avenues in order to obtain the resources needed due to address issues related to large mobile workforces (Heisler & Markey, 2013).

2.3 Moving from managerialism and entrepreneurialism

As local governments confront the challenges of reduced government expenditures and new policy expectations, research suggests that entrepreneurialism is replacing managerialism in the community and economic development of rural regions (Ateljevic, 2009; Mitchell, 1998; Mitchell & De Waal, 2009). Managerialism refers to the interest in "processes and responsibilities of management" where stakeholders focus on the management and fiscal conditions of strategies and contracts (Van Gramberg & Teicher, 2000, p. 478). In the case of local government, their roles and responsibilities are largely limited to 'services to property' by focusing investments and management resources on physical infrastructure, local service provision, development approvals, and planning (Coiacetto & Baker, 2005; Douglas, 2005; Drew et al., 2017).

The future resilience of communities, however, may depend upon entrepreneurial activities that will push the functions of local government in order to support independence, resilience, new pathways, and innovations (Dannestam, 2008; Skelcher, 2017). The concept of entrepreneurialism, however, has been open to many debates and definitions (Kobia and Sikalieh 2010). As Kuratko et al. (2015: 2) note, "scholars continue to debate such fundamental

¹ This has included mineral exploration tax credit programs, as well as an Industrial Property Tax Credit that reduced the provincial school property tax on major industrial and light industrial properties by 60% (Davies Transportation Consulting Inc. et al., 2011).

² A grant in lieu of taxes (GILT) is paid to compensate the fact that public facilities, such as power generating, transmission, and dam facilities, do not pay municipal property taxes (Laurie, 2013). The argument is that these payments should be compensatory for the costs attributed to major projects experienced by local governments, with specific reference to road repairs, refuse dumps and an increased need for emergency services (Skaburskis, 1988).

issues as the nature of the entrepreneur, the definition of entrepreneurship, the "theory" of entrepreneurship, the relevant unit of analysis when studying entrepreneurship, the environmental conditions that give rise to entrepreneurship, and much more". In the business literature, entrepreneurship has been linked to discovery of profitable opportunities, new ventures, economic growth, innovation, ownership, and self-employment (Audretsch et al. 2015). More recent debates have pushed theories of entrepreneurialism to explore not only venture capital and risk-taking pursuits, but issues associated with entrepreneurial culture, social enterprises, family businesses, minority entrepreneurs, and women entrepreneurs (Audretsch et al. 2015; Kobia and Sikalieh 2010). Moving beyond tasks of developing new ventures and strategic growth, these debates are increasingly exploring abilities to 'leverage' assets, such as human capital, unique products, or place-based resources, as well as opportunities to shape the entrepreneurial process through opportunities to renew regulations or develop new technologies (Kuratko et al. 2015).

With significant research focused on ventures and social enterprises, the literature, however, has been quite silent to provide a definition for local government entrepreneurialism. For the purposes of our research, entrepreneurialism within the context of local governments refers to both innovative processes or regulatory action and/or actual enterprise development to provide services or leverage economic conditions. Grant and Dollery (2010, p. 254) argue that "municipalities have to assume an economically 'maximalist' role as a general policy direction that moves beyond government intervention into the market or sponsorship of particular economic development programs". Unfortunately, many local governments that urgently need to pursue new strategic directions for their economies remain positioned to manage existing assets rather than pursue a new entrepreneurial approach to transformation (Halseth & Ryser, 2018). As a result, small towns have remained locked into long-term structural decline.

Entrepreneurialism provides one type of response to neo-liberal restructuring through the pursuit of self-reliance and risk taking activities to support growth and development while reducing dependency on senior levels of government (Dannestam, 2008; Herbert-Cheshire, 2000; Herbert-Cheshire & Higgins, 2004; Leyden & Link, 2015; Mitchell, 1998). Through entrepreneurialism, local government stakeholders may acquire an increased tax base, more control over what is developed in order to support land use planning and development strategies, and more control over the risks of development (Coiacetto & Baker, 2005; Dowall, 1990). The success of these initiatives, however, is shaped by the internal entrepreneurial capacity of municipal staff (Shearmur & Poirier, 2017), the institutional culture, as well as the availability of capital, social networks, and information networks (Malecki, 1994). An enterprise culture may need time to develop in order to understand how motivations are shaping entrepreneurial pursuits through the transformation of attitudes and readiness to take risks and adopt new practices (Day, 1998).

2.4 How are local governments being entrepreneurial?

Local government entrepreneurialism is not new and can be traced back to responses in the 1960s as local governments assumed roles as developers in order to pursue economic renewal

and diversification in deteriorating communities (Coiacetto & Baker, 2005; Robinson, 1995). Research documenting local government entrepreneurialism can be broadly grouped under four topic areas, including economic development, real estate development, service production or contracting, and e-government.

Since the 1980s, one of the first responses to the deep restructuring of resource industries in rural and remote regions has been for local governments to set up economic development offices and use tools such as property tax relief and other such incentives to lure in new businesses (Halseth & Ryser, 2018). In New Zealand, local government entrepreneurship extended to tourism developments that are guided by special committees that oversee management and business operations (Shone, 2011). Coiacetto and Baker (2005) identify several other areas where local governments are using entrepreneurialism to achieve community and economic development goals. Their research documents investments in heritage conservation through the restoration of heritage buildings and industry heritage centres; community facilities, such as airports, child care, theatres, swimming pools, medical centres, and redeveloped camping grounds; investments that combine community facilities with commercial uses such as cafes and offices; investments that combine commercial and real estate investments with multi-purpose developments; and the purchase of industrial development land to strategically support specific economic development sectors.

Local governments may also be involved with real estate development. Boswell and Crompton (2007), for example, explore how local governments are financing amenity developments by developing homes on adjacent properties. This allows local governments to benefit from gains associated with higher property prices near amenities, such as golf courses, that have long been received by developers. It also addresses concerns with accruing financial losses from residential developments that cost local governments more through spending on public services and infrastructure than tax revenues (Boswell & Crompton, 2007). By establishing an economic development corporation, local governments can partner with private sector stakeholders to jointly develop amenity-based subdivisions. Risk capital is used as a tool to capture a share of gross sale revenues from these investments; a strategy meant to mitigate skewed overhead costs that may be presented by private sector partners (Boswell & Crompton, 2007). The sale revenues and property taxes then provide the financial assets needed to eliminate debt charges from amenity and infrastructure investments. Other proactive approaches in the real estate sector include levying developer contributions for affordable housing, the formation of joint ventures and housing companies to support new housing developments, the provision of affordable or retirement housing, and the provision of housing for mining companies (Coiacetto & Baker, 2005).

In this transition from managerialism to entrepreneurialism, Oakerson (1999) further distinguishes between local service 'provision' and local service 'production', with provision focusing on the decision to provide a particular service, the quantity and quality of services delivered, and how those services are delivered through local financial resources. Production focuses on creating services that can draw upon capital or financial resources outside of a particular local government (Dollery et al., 2010). With our interest in local government entrepreneurialism, local governments may pursue 'service production' through shared service models and intergovernmental contracting to provide services on behalf of senior levels of

government or to provide local government services to other municipalities (Dollery et al., 2010).

Furthermore, local governments are using e-government concepts and practices to further their entrepreneurial interests. E-government is defined as the use of ICT to support the delivery of one-stop shop government services and democratic processes in order to strengthen more entrepreneurial approaches to community and economic development by increasing public participation and coordinated networks, all while supporting more efficient sharing of information, transactions, and convenience (Cumbie & Kar, 2016). In practice, however, e-government initiatives have been criticized for their limited ability to extend from on-line communication to on-the-ground actions due to complex bureaucracies that allow internal managerialism to persist (Chadwick & May, 2003; Scott, 2006). Municipalities may also lack the operational capacity to transform e-government initiatives into more entrepreneurial pursuits (Nasi & Frosini, 2010).

2.5 Barriers to local government entrepreneurialism

The literature that exists on local government entrepreneurialism sheds little information on broader political or structural impediments that may be impeding such strategies, particularly in rural and remote regions. This small body of literature has captured problems associated with three key issues: internal capacity, local power and politics, and inadequate senior government supports.

Starting with internal capacity, pursuits may be challenged by a lack of skills related to procurement, a risk-averse culture, and the use of different procurement models and supportive technologies (Zelenbabic, 2015). Local governments will need to start with smaller projects to test these skills and ensure adequate policies and supports are in place to address any risks and guide entrepreneurial processes (Coiacetto & Baker, 2005). Local governments may also lack the tools and structures to manage entrepreneurial investments (Coiacetto & Baker, 2005). In this case, existing financial resources may be inadequate to invest in a sustainable level of infrastructure to support local government initiatives (Shone, 2011). Furthermore, with our specific interest in local government responses to mobile workforces, local governments may not have the skills or knowledge, specifically around leveraging policy and planning frameworks, to develop entrepreneurial strategies around mobile workforces and shift rotations (Ryser et al., 2017b). This requires an investment in research, marketing, and communication to understand the needs and interests of mobile workers and their families.

Entrepreneurial pursuits can create tension for local governments that struggle to reconcile their role for regulation against ownership or entrepreneurial activities where these different roles are challenged by local politics and power. As Shone (2011, p. 165) argues, "stakeholders clearly question the ability of the council to separate its managerial responsibilities for the wider district area with its entrepreneurial aspirations". Private stakeholders may also express concerns about unfair competition and conflict of interests (Coiacetto & Baker, 2005). Broader community debates can also provide opposition to local government entrepreneurialism with concerns about the use of tax payer revenues to support risky initiatives (Shone, 2011).

Local government entrepreneurialism can become controversial, leading some to question whether such pursuits reinforce senior government strategies to continue offloading supports and reduce investments in rural regions (Halseth, 2017; Woolford & Curran, 2011). Communities may also be held "responsible for any failure to improve their own conditions because they were regarded as deficient in entrepreneurial skills or because they were reluctant to 'self-change'"; thereby, shifting the responsibility away from state structural barriers that may impede entrepreneurial approaches (Herbert-Cheshire, 2000, p. 210). This stems from the "tension between an emerging business-like orientation and the compliant behaviour driven by current intergovernmental relations" (Van Gramberg & Teicher 2000, p. 490). Government reforms may also be highly prescriptive and impede more entrepreneurial approaches within local government (Van Gramberg & Teicher, 2000). As Halseth (2017, p. 5) argues, "while senior government has instructed communities to be more entrepreneurial in searching for economic opportunities and attracting new business ventures, it has at the same time removed many of the critical supports necessary to help communities secure those new economic activities or businesses". If senior governments continue to devolve responsibilities to local government, this devolution should be accompanied with the ability to increase municipality-based revenues and reduce senior government monitoring and regulations about how municipal funds are allocated (Grant & Dollery, 2010).

2.6 Research gaps

Limited research attention has been paid to municipal entrepreneurship (Shearmur & Poirier, 2017). Instead, research in public administration has focused on the role of the public sector "as a facilitator of private sector innovation" (Shearmur & Poirier 2017, p. 720) to improve economic performance (Leyden & Link, 2015) or as an enabler of local development (Bryant, 1989) rather than a stakeholder actively pursuing innovation and entrepreneurship on its own. As senior governments continue to reduce funding programs and offload responsibilities, it is crucial to examine what steps local governments will need to implement an effective entrepreneurial strategy to address challenges and opportunities associated with mobile workforces.

3.0 Methodology

This research examines issues relevant to local government strategies as they confront opportunities and challenges associated with mobile workforces. The purpose is to explore how local governments are working to capture more benefits from mobile workforces through entrepreneurial approaches to community development and attraction and retention strategies. Data and information for this report was conducted using a variety of methods, including document analysis and qualitative key informant interviews.

3.1 Case studies

Our research draws upon the unique circumstances and experiences of three case study sites, including Fort St. John, Kitimat, and the Peace River Regional District (Figure 1).

Kitimat

Kitimat is a municipality, or local government territory, located in the northwest region of BC, with a population of 8,131 and 240 square kilometres of territory (Statistics Canada 2016). Terrace, the closest regional centre, is approximately a 45 minute drive away. More recent large-large scale industrial projects associated with Rio Tinto's Kitimat Modernization Project and LNG projects prompted the influx of large mobile workforces that were accommodated in residential and commercial assets throughout the community and through the development of a number of work camps. These work camp facilities were located within the boundaries of the municipality, largely operating as closed camp sites in an industrial zone close to construction projects. The expansion of industrial construction opportunities also prompted the development of two open camps, one camp with 650+ rooms located on the edge of the downtown core that is operated by Civeo and a second that will be operated by Horizons North near the gateway of the community. Horizon North's new facility, however, will depart from standard open lodge developments by not only constructing an open lodge for project workers, but the development will also contain a new Marriott hotel, commercial space for offices, retailers, restaurants, and other services, and a 27 acre residential development (see www.horizonnorth.ca). This development is scheduled to open in 2019.

Fort St. John

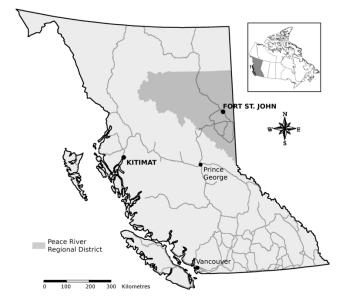
Located in the northeast region of BC, Fort St. John is a municipality consisting of 20,155 residents but with just 22.69 square kilometres (Statistics Canada 2016). It is surrounded by rural, unincorporated areas that are served by the Peace River Regional District. The City of Fort St. John does not have any work camps operating within its municipal boundaries; however, there are many work camps nearby in the surrounding rural areas that accommodate workers engaged in hydro, oil and gas, mining, forestry activities. This includes the Two Rivers Lodging Camp that provides lodging for mobile workers at BC Hydro's Site C Project and is located adjacent to the municipality. Mobile workers are also extensively accommodated in hotels,

campgrounds, and rental properties throughout the community. As industries frequently book block rooms at local hotel facilities, some in local government perceive these hotel facilities to be a non-traditional form of work camp accommodations.

Peace River Regional District

The Peace River Regional District delivers local government services for several unincorporated rural communities with a combined population of 62,942 and covers a large territory of 117,387.55 square kilometres (Statistics Canada, 2016). It is unclear how many open and closed camps exist within this vast territory due to the absence of a central registry for open and closed camps across different economic sectors and due to the limited jurisdiction that the regional district has to monitor the planning, operations, and decommissioning of camps. These issues will be explored in further detail below.

Figure 1: Study Sites



3.2 Interview participants

Using an in-depth qualitative interview methodology, our research team spoke with a total of 18 key informant participants from our three case studies of local government jurisdictions in BC. Drawing upon contacts accessible through publically available lists, these included elected leaders, chief administrative officers, economic development officers, and planners in selected communities and rural regions that were experiencing a substantial influx of large mobile workforces associated with industrial development projects. As such, participating local government stakeholders were selected for their potential to provide information that can help to better understand the strategies and actions undertaken to maximize benefits from work camps and mobile workforces within or adjacent to their communities, while ensuring

adequate resources are obtained to help local governments address the accelerating costs for infrastructure and services associated with large mobile workforces.

Interview Questions

This report is a summary of key issues identified from our key informant interviews with local government stakeholders. A detailed description of questions asked in each section of the interview guide is provided in the appendices (Appendix D). In general, participants were asked questions about:

- Key pressures and opportunities for local governments as a result of work camps and mobile workforces;
- Any agreements that were negotiated with industry, work camp proponents, or senior governments to address any issues prior to, during, or after the presence of mobile workforces;
- The renewal of local government regulations, bylaws, and investment strategies to obtain and allocate additional resources for infrastructure and services;
- Any initiatives pursued by local government to facilitate private sector engagement with work camps and mobile workforces;
- How provincial and federal regulations, policies, or structures impacted the local government's ability to pursue new innovative or entrepreneurial approaches to maximize benefits from work camps and industrial development; and
- Changes that are needed to better position local governments to maximize benefits associated with work camps, mobile workforces, and large-scale industrial projects.

3.3 Analysis

Following each interview, summary notes were provided to participants for review. Once a final summary file was completed, latent and manifest content analysis was done to identify, code, and categorize patterns and themes that emerged from open-ended questions (Neuendorf, 2016). To improve reliability, members of the research team worked together to code and categorize themes in order to develop a common coding approach. As new themes emerged, they were evaluated across the team during the course of multiple rounds of coding. To complete the manifest content analysis, the research team consolidated information about how senior government policies were shaping infrastructure arrangements for rural non-profits based on a range of topic areas. By highlighting key words, researchers were able to create a series of categories and sub-categories (Andersen & Svensson, 2012). Through latent content analysis, deeper meanings and connections across the themes were explored.

4.0 Findings

While local government entrepreneurialism is increasingly being pursued as a strategy to renew community and economic development, the use of entrepreneurial strategies to address opportunities and challenges associated with mobile workforces in rural and remote regions is less understood. In our findings, we explore nine key topic areas that will help to develop a better understanding of the processes and structures that are shaping pressures and entrepreneurialism amongst local governments in these mobile environments. For the purposes of our research, we view pressures associated with mobile workforces as potential motivators to explore entrepreneurial strategies to address these constraints.

4.1 Information structures

Entrepreneurial Mechanisms: Information Structures

Develop a new template to obtain more information to assess challenges and opportunities related to mobile workforces and related accommodations.

Incorporate work camp assessment template into bylaws and official community plan.

Develop a central registry for mobile work camps.

Local governments struggle to make good policies to support entrepreneurial strategies associated with mobile workforces due to a lack of good information. In particular, information about the size and location of mobile workforces is important to guide appropriate planning and investment strategies. In 2012, 1,809 industry-related work camps were estimated to be operating in northern BC (Beamish Consulting Ltd. & Heartwood Solutions Consulting, 2013; Northern Health, 2012). Insufficient information structures, however, are making it difficult for local governments to assess the costs and economic benefits that mobile workforces may provide. These challenges are partially driven by an absence of reporting standards for work camp operators, making it difficult for local governments to understand how many work camps are in the region, the size of mobile workforces, and whether they are designated as open versus closed camps.

To obtain more information about mobile workforces and related accommodations, the Peace River Regional District (PRRD) has a new template to assess mobile workforce issues (see Appendix A). It provides a starting point for the local government to ask questions about the types of accommodations used for mobile workforces (i.e. camps, hotels, crew houses, etc.), the location of work camp facilities, and how work camp operators will manage their water and sewage needs. This also provides an opportunity to engage in conversations about emergency plans and whether RCMP authorities have been informed about the camp. Furthermore,

questions are asked about communication plans due to limited cell phone and Internet coverage throughout the rural region. The template allows the local government to understand potential impacts on nearby facilities and services by understanding the types of recreational facilities and health care services that will be provided on-site. There are also questions about travel plans and transportation routes in order to understand if mobile workforces will pose additional pressures that need to be communicated with airport facilities. The PRRD is currently working to incorporate the work camp assessment template into their bylaws and draft Official Community Plan.

Despite these efforts, there is no mechanism or process in place for provincial or federal authorities to inform local governments or other senior government agencies that a camp has been approved, as well as to track the status (i.e. location, size, operations, and closures) of work camps after they have been approved (Northern Health, 2012). At the federal level, work camps associated with pipeline projects that cross multiple provincial jurisdictions are regulated through the National Energy Board. In BC, three main provincial agencies are responsible for the approval of work camps, including the Ministry of Forests, Lands, and Natural Resource Operations; the BC Oil and Gas Commission; and Front Counter BC. Once a work camp has been approved, work camp operators are required to work with several other government agencies (i.e. Ministry of Environment, Worksafe BC, BC Environmental Assessment, Health, the Agricultural Land Commission, Ministry of Transportation, etc.). Coordination and sharing of information across these government agencies has been limited (Beamish Consulting Ltd. & Heartwood Solutions Consulting, 2013). As a result, effective information management systems are undermined by the absence of a one-stop shop for work camps to register and report in one location. Such information has important implications for planning and infrastructure, as well as supporting local, regional, and provincial emergency plans.

Northern Health temporarily pursued an initiative to develop a central registry for mobile workforce camps. However, the initiative did not have adequate financial or human resources to support it. The initiative was exacerbated by incomplete and outdated information about work camps. There was also a lack of interest and capacity to track and monitor work camps located in isolated rural areas.

4.2 Negotiating agreements

Entrepreneurial Mechanisms: Negotiating Agreements

Negotiations for Fair Share Agreements and the Peace River Agreement to improve direct access to the industrial tax base for local governments.

Completed negotiations for the Community Measures Agreement to address the impacts and opportunities related to mobile workforces engaged with BC Hydro's Site C Project.

With inadequate resources to address the pressures stemming from large shadow populations, communities are seeking other ways to acquire the necessary fiscal resources to guide service and infrastructure investments that will support community and economic development. The ability of local governments to increase revenues, however, is restricted by jurisdictional limitations imposed on property taxation powers (Markey & Heisler, 2010). As noted earlier, impact benefit agreements have largely been a tool solely used by First Nations communities as they affirm their constitutional rights (O'Faircheallaigh, 2013); thereby, any pursuits by local governments to pursue such endeavours is largely grounded in their ability to leverage political pressure and in principles around corporate social responsibility (Ryser et al., 2019; Tuulentie et al., 2019). Any negotiations and agreements with industry and work camp proponents can better position local governments to address issues and pursue opportunities related to mobile workforces. These initiatives will only be effective if resources are strategically used to diversify economic development opportunities and break dependency by securing ways to stabilize long-term resources. Otherwise, negotiations may only replace a reliance on senior government grants with industry resources.

Fair Share Agreements and the Peace River Agreement

Within the broader dialogue about community impact benefit agreements and other related negotiations that may be pursued by local governments, there has been tremendous interest in the Fair Share Agreements and the Peace River Agreement. These are not resource royalty sharing agreements; however, but rather a mechanism to provide local governments in the Peace River Region with access to a tax base that other local governments already have. While most local governments have direct access to an industrial tax base through mines and forestry mills that are located within their municipal boundaries, these agreements were intended to provide municipalities in the Peace River Region with access to a disconnected industrial tax base due to the dispersed nature of oil, gas, and pipeline activities in the surrounding rural regions (Ryser et al., 2019). Two of our study sites, including the City of Fort St. John and the Peace River Regional District, were signatories of these agreements based on negotiations with the Province of British Columbia.

The initial Fair Share Agreement (1994) provided \$4 million in provincial non-property tax revenues to the Peace River region's local governments to support community infrastructure development as well as help to mitigate infrastructure impacts from the industry (Markey & Heisler, 2010). The distribution of revenues was based on the industrial assessment in the region, population levels, and then indexed to growth in the rural industrial tax base. Fair Share was modified twice with the third iteration providing \$20 million per year, but with an embedded lift mechanism reaching \$46 million in 2015 (Heisler & Markey, 2013). In 2015, the new Peace River Agreement (PRA) was finalized. The 20 year agreement provided \$50 million per year, with a two percent lift for inflation. These funds are distributed to communities strictly on a per capita basis, with a population decline resulting in a lower share of funds regardless of industry activity in the surrounding area. These revenues allowed communities to address aging physical infrastructure, much of which dated back to World War Two and had

never been replaced. Investments were also made in roads, intersections, sidewalks, sustainable or renewable energy infrastructure, community halls, protection service infrastructure, and some recreational facilities. Under these agreements, these revenues are restricted to spending on capital improvements. No emergency or legacy fund investments are permitted (Ryser et al., 2019). These agreements are not designed or intended to address broader community impacts associated with large-scale industrial development or to provide local governments with the flexibility to pursue more entrepreneurial or innovative initiatives that may unfold through mobile workforces.

Northwest BC Resource Benefits Alliance

Since 2014, 21 local governments have been working together through the Northwest BC Resource Benefits Alliance. Municipal membership covers an extensive territory from Vanderhoof in the Regional District of Bulkley Nechako to communities located in the North Coast Regional District and the Regional District of Kitimat-Stikine. With an estimated \$600 million in infrastructure needs, the goal is to negotiate a funding agreement with the provincial government to retain more benefits from resource development activities that can be invested in economic and community development (Northwest BC Resource Benefits Alliance 2019).

The alliance has documented a number of challenges during its short history (Northwest BC Resource Benefits Alliance 2019). Despite Liberal party election promises to develop a NWBC revenue sharing agreement in 2013, the alliance was not successful in negotiating any arrangement with the Province. In 2014, the alliance was advised that the Province was ready to negotiate. By April 2015, however, the provincial government withdrew from negotiations, calling the process premature. In January 2017, the alliance continued to invest in research and delivered a case report to the Province. Despite these investments in research to move beyond any premature state, the provincial government advised the RBA that the report was under review. As the provincial election in 2017 approached, the Province continued to defer negotiations, and eventually said no to any revenue sharing agreement.

Following the 2017 provincial election, the alliance engaged in negotiations with the new NDP provincial government. The Province supported this engagement by providing \$300,000 in 2018 to allow RBA stakeholders to work with industry, labour, business, First Nations, and community service sectors and reaffirming its commitment to revenue sharing with the Northwest Region (Northwest BC Resource Benefits Alliance). As discussions continue, the Province announced a \$100 million northern capital and planning grant to move initiatives to address aging physical and social infrastructure in the region forward.

When local government stakeholders were asked to describe any negotiations or agreements with industry as they prepared for the influx of mobile workforces, only one agreement was described. This is significant given the long history of large-scale resource development in these

regions. Below, we describe the circumstances and outcomes that emerged from negotiations for the Community Measures Agreement before engaging in a broader discussion of the barriers that are impeding the ability of local governments to negotiate additional measures as they prepare for, and respond to, the influx of large mobile workforces.

Community Measures Agreement

In 2016, the City of Fort St. John and BC Hydro signed the Community Measures Agreement to provide predictable and stable fiscal resources to address the impacts associated with the Site C Hydro Project. The agreement emerged from the City's participation in the environmental review assessment process where local government leaders advocated for a community measures agreement to address the impacts and costs associated with a mobile shadow population. These costs are not reflected in per capita funding models that guide the distribution of fiscal resources from senior levels of government to community stakeholders. It is important to note that the City does not view such negotiations as a community impact 'benefit' agreement, choosing instead to emphasize language around measures to reflect the additional costs, as opposed to perceived benefits, that are often incurred by local governments.

The ability to negotiate an agreement with BC Hydro should be distinguished from other industry negotiations. BC Hydro is a Crown corporation, meaning that it is owned by the government and citizens in British Columbia. The agreement provides \$1 million per year to the City of Fort St. John during the construction of the Site C project. The CMA provides investments in 50 housing units, childcare, and RCMP support. The agreement also contains fiscal provisions to support non-profit agencies, as well as to connect mobile workers with recreational amenities in the community (see Appendix B). These investments will be discussed in more detail in other sections of this report.

Barriers to negotiations

Building upon debates about community impact benefit agreements and corporate social responsibility, local government stakeholders argue that they lack the capacity and jurisdiction to engage in such negotiations. In lieu of agreements, local governments pursue senior government grants to support housing and infrastructure investments. This demonstrates how local governments may remain entrenched in their dependency on senior levels of government and managerial pathways as they encounter mobile workforces.

Local governments in this study, however, did not negotiate additional resources to manage the growth of camps through their planning departments, community services, environmental services, and GIS departments. Despite industry offers to contribute funds for extra municipal staff, for example, the District of Kitimat uses their own municipal budget to fund two extra RCMP officers and two extra staff for the fire department to support building inspections. The District of Kitimat felt it was important to avoid any misconceptions associated with having staff paid by industry.

Compared to their urban counterparts, regional district stakeholders struggle to negotiate agreements for additional resources. In rural areas, oil and gas companies are purchasing farm land or moving onto Crown land where the PRRD has limited power or jurisdiction to address the pressures of these camps. The PRRD must then advocate provincial stakeholders to put pressure on work camp proponents. The PRRD is currently pursuing a Community Measures Agreement with BC Hydro through closed meetings; however, many rural residents are also organizing their own meetings with industry and work camp proponents. The benefits that some residents are negotiating are not deemed to address the breadth of impacts on their property. Other residents do not feel they have the rights to negotiate any agreements with proponents.

Moving forward, a legacy fund is being developed to benefit regional communities in the Peace River Region; the distribution of revenues from this fund will be shaped by the impact and proximity to the Site C dam. This legacy fund, however, is not anticipated to generate revenue for at least another 7 years. As such, strategies to guide the investment of revenues obtained through this fund will be pursued once the fund begins to generate revenue. New conversations are also emerging to develop a Peace Trust that would provide the region with stable long-term resources and the flexibility to use those resources according to the aspirations of these communities.

4.3 Economic development

Entrepreneurial Mechanisms: Economic Development

Advocate for local content practices through environmental impact assessment processes.

Connect work camp operators with local businesses and share information about procurement requirements.

Deliver business to business sessions with industry and work camp proponents.

Promote "Move Up Here" strategy to encourage mobile workers to relocate to the community.

Develop by-law to provide tax exemptions for renovated commercial buildings to improve the attractiveness of the community for mobile workers considering relocation.

Promote NDIT's façade improvement program that is supported with local government matching funds.

Local governments are increasingly playing an important role to strengthen economic

development benefits associated with resource development. Their efforts focus on supporting boot camps for industry procurement, building relationships with industry proponents and main contractors, and advocating for, and promoting, local content practices through environmental impact assessment processes.

Local governments, however, struggle to reconcile the lack of benefits that may be realized from mobile workforces. On the one hand, the presence of mobile workers support economic development through the patronization of grocery stores, restaurants, and stores in Kitimat and Fort St. John. Some businesses extended their hours to accommodate shift schedules of mobile workforces; although, limited business hours of operation are constricting opportunities to connect mobile workforces with local businesses outside of their long shift rotation schedule. As noted earlier, some stakeholders argue that a number of hotel units function as camps as industry reserves blocks of rooms for mobile workers. The hotel industry, however, can also be volatile due to fluctuations in commodity prices that interrupt mobile work opportunities. High vacancy rates during downturns are contrasted with low vacancy rates during busier periods that can push out tourist traffic or family and friends visiting the community.

Work camps also use some local suppliers and businesses for groceries, catering, hair salon services, equipment parts, hauling water, and sewage disposal. Stakeholders argue, however, that project proponents often bring supplies and groceries from distant large urban centres. They may also hire different contractors resulting in different camps using many different subcontractors to address aspects of their operations (i.e. water, catering, cleaning, etc.). This makes it difficult to acquire full and accurate information about the extent to which local businesses are benefitting from opportunities associated with the influx of mobile workforces.

The breadth of economic development benefits for unincorporated rural areas is even more limited as most camps are self-contained with private dining, recreational, and entertainment facilities. Furthermore, with larger workforce camps, nearby residential access to the Internet diminishes as they share bandwidth. This not only affects residents' use of the Internet for personal interests, but also the capacity of people to operate businesses or work from home.

There are no connections or arrangements for mobile workforces to use rural community centres, with a possibility to generate revenue for those facilities. There is still a strong interest in these rural areas to have separation between camps and residential areas. Rural property owners, however, are benefitting from financial payments received by industry to permit access to their land.

Local Government Initiatives to Engage the Private Sector

To further explore entrepreneurial approaches adopted by local governments, stakeholders were asked to discuss initiatives pursued by local government to facilitate private sector engagement with mobile workforces. While many First Nations communities have developed strong business relationships, contracts, and joint ventures to deliver goods and services to mobile workforces, these opportunities have been facilitated through community impact

benefit agreements in traditional territories. The power of Indigenous communities to negotiate community impact agreements is vested in their constitutional rights for meaningful consultation (Constitution Act, 1982; Delgamuukw, 1997; Haida Nation, 2004; Tsilhqot'in, 2014). Industries, however, are not required to develop community impact agreements with municipalities and local content policies have been considered a potential form of tariff by industry proponents if local businesses are not competitive (Creed & Kordvani, 2013; Nordas et al., 2003; Tordo et al., 2013). In this context, encouraging industries to acquire a social license to operate or practice corporate social responsibility with communities in these rural regions has been their only option (Tuulentie et al., 2019).

In our study, local government efforts focus on ensuring work camp operators are connected with local businesses and sharing information about procurement and contract requirements. There are also business to business sessions with industry and work camp proponents to encourage local hiring. Local government efforts to bolster support for local business, however, are stifled by three key barriers, including a lack of adequate resources and structures to facilitate private sector engagement, limited information about awarded contracts, and the dissolution of local contracts. Each of these issues will be explored further below.

There are concerns that local governments do not have adequate resources and structures in place to deploy initiatives to facilitate private sector engagement with mobile workforces. For example, the North Peace Economic Development Commission no longer exists to lead and support economic development in the region. In lieu of this commission, the City of Fort St. John has an economic development department. Through the local government, a *Move Up Here* strategy (moveuphere.ca) encourages people commuting for short-term work to move to the community. The strategy focuses on promoting its sunny climate, young population, breadth of services, high household incomes, and affordable home purchase prices. A void remains to sustain economic development efforts in the surrounding rural areas. Rural stakeholders also felt that municipalities benefit more from such efforts as their businesses are registered with the chamber of commerce.

Despite local procurement processes, local governments struggle to know the proportion and value of contracts awarded to local businesses. Furthermore, there is no requirement for subcontractors of project proponents to collect data on their own use of mobile versus local workforces or their use of local businesses. This makes it difficult for local government staff and leaders to monitor the success of their efforts to build the capacity of local businesses to compete for contracts and to develop relationships between industry proponents and the private sector.

After scaling up with investments in personnel, equipment, and infrastructure to meet the scale of contract requirements, local businesses have had contracts dissolved, leaving the viability of these local businesses at risk. Unfortunately, local governments struggle to acquire information about why contracts with local businesses were cancelled in order to develop a strategy to address any capacity issues and strengthen the competitiveness of the local business sector.

Renewal of Commercial Infrastructure

Much of the existing commercial infrastructure is aging rapidly from initial investments that were made in the post-war era. Expanded business through the provision of goods and services to mobile workforces is prompting renovations to commercial buildings. New local government regulations and guidelines are also supporting the renewal of commercial infrastructure. In addition to renewing downtown revitalization guidelines, the District of Kitimat supported the transformation of commercial infrastructure by reducing property taxes for renovated commercial buildings in 2013. A new bylaw offers "a five-year tax exemption on the increase in assessed value to a maximum of \$2,000,000" on Class 6 buildings³ where at least \$25,000 or more in exterior improvements have been made (District of Kitimat, 2013). However, there has been limited use of this program as the District received two applications, both to support renovations for accommodation facilities. Instead, more local businesses have been using a façade program delivered through the Northern Development Initiatives Trust. This program provides up to \$20,000 to each local government, with local governments approving up to 50% or a maximum of \$5,000 for each project. In 2017, four commercial façade renovation projects in Kitimat received a combined \$17,000 through this program⁴. For small business leaders, tax exemptions are not perceived as significant of an incentive compared to the funds offered through the NDIT program, which provide small business owners with a higher rate of return.

Immobility Strategies

As more communities develop immobility strategies to become source communities for mobile workers, local governments find it challenging to recruit and retain these same mobile workers. Immobility strategies refer to community and economic development pursuits that lead people and capital to remain in place (Ryser et al., 2017b). It can provide opportunities to entice mobile workers to locate their families in a particular regional centre to reduce the impacts of mobility on their family and social networks. There is a general sense, though, that mobile workers need to be engaged in the community in order to facilitate opportunities for recruitment and retention.

As a part of these strategies, local governments are confronting deficiencies to make them healthy, enticing communities to attract and retain mobile workers and their families. In Fort St. John, there are concerns that the community lacks parks and programmable spaces to make it a healthy community. Local government staff are looking to other jurisdictions, such as Lethbridge, that require developers to develop a park prior to building a subdivision. Provincial regulations are currently affecting the capacity of local government staff to nurture these investments to support healthy communities. In BC, subdivision regulations require up to a maximum 5% allocation for green spaces. This is lower than Alberta where provincial

³ Class 6 buildings is a category used by BC Assessment to refer to retail buildings, warehouses, and accommodation businesses.

⁴ In Kitimat, the Kitimat Lodge, What's in Store, Rosario's restaurant, the Eagle Theatre, and the Nechako Centre have all benefitted from NDIT's façade program.

regulations allow municipalities to require up to 10% (Randall Conrad & Associates Ltd., 2006), with the potential to increase green spaces up to 15% for apartment buildings allocated for municipal purposes.

Immobility strategies are also being affected by the limited application of scenic highway regulations that are designed to provide buffer areas between highway and industrial or commercial development outside of municipalities. Instead, work camps and industrial developments continue to be developed along highway corridors; thereby, impacting tourism and resident quality of life experiences. These deficiencies in the application of such regulations impede local government initiatives to beautify gateway corridors through provisions in the OCP and other municipal tools.

4.4 Housing

Entrepreneurial Mechanisms: Housing

Deliver five year forgiveable loan program to encourage the development of affordable and accessible secondary suites.

Retool zoning bylaws to encourage more densification in new subdivisions.

Negotiated an additional 50 housing unit assets through the Community Measures Agreement.

Negotiated an additional 20 RV stalls to be developed through the Community Measures Agreement.

Engaged in negotiations to transfer lands to Haisla to support the development of the Haisla Town Centre, with municipality retaining property taxes from new development.

Introduce a density bonusing scheme through a new bylaw to obtain amenity contributions from work camps for an affordable housing fund.

Adopt new guidelines to encourage mobile workforces to block book local motels and avoid rental accommodations when vacancy rates exceed 5%.

Allow mobile workforce lodges within the community to introduce workers to local amenities and services as a strategy to recruit and retain workers and families beyond the construction period.

Adopt regulations for higher standards for exterior finishes of mobile workforce accommodations.

In an era where mobile workers can increasingly choose where they want to live, housing can play a fundamental role to long-term community development strategies that are striving to strengthen the resilience and diversification of local economies beyond the construction of large-scale industrial projects. Even though housing policy and public housing provision falls under provincial government jurisdiction, public policy changes meant that fewer fiscal resources are allocated to housing programs (Ryser et al., forthcoming). This is prompting local governments to play a larger role to address housing issues in their communities.

The influx of large mobile workforces is intensifying demand for housing both within communities and in the surrounding rural areas. This generates considerable opportunities to renovate aging housing assets in these communities. Homeowners and investors, for example, benefit from housing sales as industry purchases crew houses for mobile workers. Long-term executive and management staff are encouraged to purchase homes and live within the community. In some rural areas, property owners conducted negotiations for work camps to construct driveways that will support future developments on their properties.

High demands for housing sales and rentals, however, not only affect non-industry households but also the stability of community and economic sectors that support the long-term diversification and renewal of these communities. Local governments can also be challenged to recruit and retain staff due to increasing rental costs and housing sale prices. These housing pressures are exacerbated by the provision of living out allowances offered by industry proponents or their contractors. Opportunities to earn revenue from mobile workforces prompt renovictions for more vulnerable, low-income households who are unaware of their tenancy rights. There is a lack of housing options to reflect the range of incomes and employment sectors, the needs of an aging population, and the needs for the next generation workforce.

With the influx of large mobile workforces, local governments struggle to manage a series of challenges that unfold through commercial accommodations. Slumlords provide housing for vulnerable residents, but local governments are not equipped with the appropriate inspection guidelines for older motels. Secondly, expanded activity in residential and hotel construction prompts concerns about overdevelopment and the potential to have higher vacancy rates and deteriorating assets in the post-construction phase. Furthermore, fluctuations in hotel vacancies are unpredictable and can affect the ability of family and friends to visit residents in these communities.

Local governments face challenges to strategically direct housing investments to reflect local priorities. In response, local governments have renewed policies to support the development of secondary suites, affordable housing programs, use of commercial and rental accommodations in the community, and work camp facilities. Some of these initiatives are designed to leverage and strategically direct private investments. Other initiatives are used to 'manage' housing issues.

Secondary suites

In our study, all local governments permit the development of secondary suites to address housing pressures. In rural areas, for example, secondary suites and multiple dwellings are common where there are many farm parcels. In Kitimat, a lack of suitable housing for an aging population and influx of mobile workers prompted the local government to promote a forgiveable loan program to encourage the development of affordable and accessible secondary suites. This program provides a five year forgivable loan via a grant agreement with the District. Unfortunately, no homeowners or investors have used the forgiveable loan program to develop affordable secondary suites. Three potential issues may be affecting the success of this program. First, stakeholders suggest that there may be a reluctance to develop secondary suites that are often used for aging parents as older residents often leave the community in their retirement years. In some cases, homeowners are reclaiming secondary suites for their family. Secondly, the program was rolled out during the later stages of Rio Tinto's Kitimat Modernization Project. As vacancy rates started to increase again, home owners may be reluctant to invest in renovations that are not perceived to generate sufficient returns. Furthermore, few may have pursued these incentives due to the extent of paperwork that needed to be completed. The District of Kitimat, however, is experiencing more success by retooling their zoning bylaws to encourage more densification. In this case, half of the development of a new subdivision was retained as R1A while the other half permitted townhouse developments.

District of Kitimat Secondary Suite Incentive Program	
Type of Secondary Suite	Allowable Forgivable Loan
Any suite	\$2,500
Level 1 affordable ⁵	\$5,000
Level 2 affordable ⁶	\$7,500
Any suite that is accessible for disabled ⁷	\$2,500 (bonus)

Source: District of Kitimat, n.d.

Negotiated agreements for additional housing assets

Negotiated agreements with industry and work camp proponents can prepare local governments to address housing issues related to mobile workforces. Some argue that they lack the capacity and jurisdiction to engage in such negotiations. In lieu of any agreements to specifically address housing issues, local governments rely on senior government grants to support housing studies and investments. This demonstrates one way in which local governments may remain entrenched in their dependency on senior levels of government and continue to 'manage' housing pressures as they encounter mobile workforces.

⁵ According to Canada Mortgage and Housing Corporation, Level 1 affordable units cost no more than \$645 for a bachelor, \$750 for 1 bedroom, \$900 for 2 bedrooms, and \$950 for 3 or more bedrooms (District of Kitimat, n.d.).

⁶ According to CMHC, Level 2 affordable units cost no more than \$575 for a bachelor, \$685 for 1 bedroom, \$815 for 2 bedrooms, and \$873 for 3 or more bedrooms (District of Kitimat, n.d.).

⁷ Accessible units must meet BC Housing Design Guidelines and Construction Standards (District of Kitimat, n.d.).

This recently changed in Fort St. John when the local government signed the Community Measures Agreement with BC Hydro⁸. Through this agreement, BC Hydro agreed to provide an additional 50 housing units that were intended to absorb BC Hydro workers in order to avoid distorting the housing market. This includes 10 units to support affordable housing; although, these units will not be ready until 2019. In practice, however, BC Hydro workers and staff were accommodated in the Two Rivers Lodge camp facility that is adjacent to the community. There are now questions about whether BC Hydro and BC Housing will develop and promote the additional 40 units as market versus social housing that are no longer needed to accommodate BC Hydro workers. In this case, the City and the industry proponent had different expectations about implementing the agreement. These different expectations are reflected in different perceptions behind the intent of the clause versus the execution or implementation of the clause. The City assumed the units would be developed prior to the maximum capacity of workers engaged with the project. The project proponent, however, assumed the units would be developed as part of the obligation of the project. Roughly an additional 20 RV stalls were also developed at Peace Island Park through this agreement.

The District of Kitimat did not negotiate any agreements for the provision of additional housing assets directly. However, the local government engaged in negotiations with the Haisla First Nations and the Province of British Columbia to demolish the old hospital and transfer the lands to the Haisla to support their development of the Haisla Town Centre. The new facility contains a mixture of commercial and residential development. Through this new arrangement, LNG Canada signed a ten-year lease with the Haisla Town Centre in 2015 to lease 49 units for staff and contractors based in Kitimat. The municipality benefits from property taxes associated with the new development.

Affordable housing fund

Since the 1980s senior governments are reducing their role to support and facilitate rural housing development. Provincial decisions to wait for final investment decisions and neoliberal public policies that are reluctant to make housing investments in rural and remote regions demonstrates this gap in senior government engagement (Halseth & Ryser, 2016), prompting local governments to mobilize their own responses to the local housing crisis. As provincial and federal governments continue to reduce their role in rural housing, the development of affordable housing funds may help to secure financial resources needed to support strategic investments that align with community development goals.

In our study, one out of three study sites had developed an affordable housing fund to support future public housing investments for vulnerable residents. In Kitimat, the local government introduced a density bonusing scheme through a new bylaw that would require construction camps to make amenity contributions to an affordable housing fund. The contribution can be cash or in-kind in the amount of \$500 for each unit that becomes operational (District of

⁸ Rural areas within the PRRD have not completed negotiations for their own CMAs as such processes were interrupted and postponed by elections.

Kitimat, 2014). At the time of the interviews in 2018, the fund had reached \$142,000. To access the affordable housing fund, community groups are required to develop a business plan and identify a suitable location to support affordable housing investments. Recently, the District of Kitimat pledged \$25,000 to the Tamitik Status of Women to support a second stage, transition housing project. The new facility will include TSW office space and program, low cost housing, a social enterprise (i.e. coffee shop), and a bed bug furnace⁹.

The fund has the potential to grow considerably due to several LNG pipeline and related industry facility proposals for the area. As the fund matures, the local government will be better positioned to reduce the dependency of community stakeholders on tightening senior government budgets. Such an endeavor demonstrates how this local government has been bringing together synergies between the standard planning tools and entrepreneurial leadership to address deficiencies with financial capital and housing assets in the community.

Policies guiding commercial and rental accommodations

Local government policies are used to address housing and economic development goals as large-scale industrial projects phase in and out of their construction period. As vacancy rates continue to increase following the completion of RTA's KMP, the local government in Kitimat is working to ensure a proportion of mobile workforces are using commercial and multi-family rental accommodations. The District of Kitimat adopted new guidelines where industrial proponents are encouraged to block book motels and avoid use of rental accommodations except when vacancy rates exceed 5%. To support this initiative, the District of Kitimat is looking into mechanisms to monitor vacancy rates locally that would support an internal review process to determine when and how many mobile workers can live off site in commercial and rental accommodations. To further strengthen opportunities for commercial accommodations and mitigate waste management issues, the District of Kitimat banned riverbank camping in 2019.

Work camps

Development permit processes can be strategically used to guide entrepreneurial conditions under which work camps will be awarded. In Labrador City, Newfoundland and Labrador, for example, the local government strategically uses its development permit process framework to enable it to lease land for temporary work camps that generates revenue back to the local government (Ryser et al., 2017a). In our study, local governments acquire funds through building permits for both industrial worksites and workforce accommodations, but these processes are generally designed to support the 'management' of mobile workforces.

As more places are working to become 'source' communities for mobile workforces (Ryser et al. 2017b), development permit processes and related supportive policies guiding work camp

⁹ A bed bug furnace is a heating system that is used to exterminate a bed bug infestation in mattresses in lieu of other pesticide treatments.

facilities in a community can be one component of an immobility strategy that can strengthen the recruitment and retention of new residents. In the case of Kitimat, the local government's decision to allow a mobile workforce lodge in the downtown core was driven in part by a strategy to introduce mobile workers to the community and its amenities in hopes of recruiting and retaining some of these workers and their families in the post-construction period. There are no discussions, however, about open versus closed camps as part of the Official Community Plan process. All decisions are made on a case by case basis. Higher standards for exterior finishes are required for work camp facilities located within the community. Open camp lodges are also required to connect to the walkway system. Furthermore, the local government required a \$75,000 landscape bond to manage the front of Civeo's work camp lodge.

The City of Fort St. John released a position paper that called for all staging areas and camp facilities associated with Site C to be located within municipal boundaries (City of Fort St. John 2012). The Two Rivers Lodge at Site C, however, was eventually located outside of these municipal boundaries in the Electoral Area C of the Peace River Regional District.

The potential to use development permit processes and immobility strategies as tools to further entrepreneurial strategies with mobile workforces is undermined by four prominent issues. These include the use of unclear policies that guide development permit processes; missed taxation revenues; the limited jurisdiction that local governments have in BC to use their regulatory frameworks to guide the planning, operations, and decommissioning of workforce accommodations; and outdated legislation as more camps are transitioning from closed camps to open camps.

Unclear Policies

To start, there are unclear policies defining the 'temporary' nature of work camps that are permitted. For example, the PRRD regulations permit a 30 person camp up to 6 months in certain areas across the regional district without requiring a temporary use permit or zoning change (see bylaw 1343). For work camps exceeding 30 people and beyond 6 months, the PRRD requires a temporary use permit that is valid for three years and can be extended for an additional three years. Work camp proponents also have the option to reapply at the end of that period. While the PRRD's zoning bylaw 1,000, section 36 outlines policies for temporary permits, stakeholders are concerned about the ability to consistently apply such policies if 'temporary' is not defined. Debates about defining temporary range from 6 months to more than 10 years. This issue is significant as it impacts the number of potential development permit applicants that would complete detailed information about the size, location, and operations of their facility; thereby impacting the local government's ability to assess the costs and opportunities across these work camps.

Missed Taxation Revenues

There are concerns with assessments and missed taxation revenues from work camps. The provincial authority of BC Assessment is responsible for assessing the taxation value of work

camps located on private or Crown land. During the construction phase, work camps can move around very quickly, especially when work is being completed on pipeline projects. The short duration of some work camps means that they are not assessed, resulting in lost tax revenues. The issue for municipal and regional governments is that these short-term work camps may still use local services and infrastructure without contributing to taxes to generate revenue to support that use.

Limited Jurisdiction

Secondly, local governments and regional districts lack appropriate jurisdiction to monitor the planning, development, operations, and decommissioning of work camps. This makes it difficult to understand the scale and scope of impacts that mobile workforces will have on the local governments. This issue is compounded by a lack of clarity about who is responsible for authorizing and regulating work camps in the forestry, mining, and oil and gas sectors. For example, local governments and regional districts do not have the jurisdiction or power to require permits for work camps approved through the National Energy Board. This affects work camps that are established to support pipeline projects that cross provincial jurisdictions. Local governments are able to regulate work camps located within their municipal boundaries. This becomes more complicated, however, for regional districts that govern large territories of unincorporated rural areas. As noted earlier, in BC, three main provincial agencies are responsible for approving work camps, including the Ministry of Forests, Lands, and Natural Resource Operations, Front Counter BC, and the Oil and Gas Commission. In this context, work camps can emerge without the knowledge of the regional district.

Furthermore, under unclear regulatory conditions, work camp proponents do not always apply for the necessary permits. There are camps applying for permits only after they are established and operating, and only in response to filed complaints from rural residents. While stakeholders felt that larger camps are generally good about obtaining necessary permits, there are concerns that smaller camps are less likely to do so. As local governing authorities are disconnected from these regulatory frameworks, there are limited tools to strengthen their ability to develop relationships, gather information, and work collaboratively on challenges and opportunities related to mobile workforces.

Due to their limited connection and roles within regulatory frameworks for mobile work camps, there are challenges ensuring workforce camp accommodations are located on appropriate sites. In some cases, camps are established in inappropriate zones, including occupation on ALR land. Despite local government expertise in site planning, there are also challenges ensuring camps are set back from riverbanks. This often prompts discussions with FLNRO and work camp operators to ensure infrastructure, such as fencing, is in place to mitigate potential safety concerns about mobile workers using unsafe river trails and nearby areas for recreation. Conversations around site planning must also confront potential concerns about stranded or abandoned assets for workforce accommodations that are located outside municipal boundaries that would result in deteriorating infrastructure.

Furthermore, as industries phase out their work in the area, local governments are disconnected from the regulatory processes that guide the decommissioning of work camps. As noted earlier, only the District of Kitimat and the Peace River Regional District had work camps located within their boundaries. In practice, only the Peace River Regional District requires a security deposit through cash or credit in the amount of anticipated reclamation costs. This would permit the PRRD to address reclamation tasks if they are not completed by work camp proponents (i.e. in the case of bankruptcy). Local government staff noted, however, that these issues are often dealt with by other provincial and federal jurisdictions, leaving local staff to request confirmation of decommissioning and reclamation plans. Inspections are then conducted at the beginning and end of the operations of workforce accommodations to ensure remediation has been completed. If work camps are situated on land within the ALR, the ALR Commission has remediation requirements that guide the decommissioning of camps. If work camps are not located within the ALR, the regional district will request work camps to submit their own remediation plan.

Outdated Legislation

Even though the Province recently adopted new guidelines for industrial work camps, these guidelines and regulations do not reflect changes that can take place within camps. Most notably, the status of camps can change from closed camps to open camps when there is a lack of occupants.

This is a significant issue for local governments who are concerned about the different pressures and potential costs associated with these different types of camps. Research is needed to better understand the comparable costs and opportunities associated with closed versus open camps, as well as the implications that these issues could have for local governments who may be seeking to either manage, or initiative entrepreneurial initiatives, associated with these mobile workforces.

4.5 Infrastructure

Entrepreneurial Mechanisms: Infrastructure

Encourage accommodation of mobile workers in local hotels where taxes maintain existing water and sewage infrastructure.

Acquisition of water wells that remain in unincorporated rural areas after work camps are decommissioned.

Develop new policies and user fees for bulk water stations and tank services used to support mobile workforces.

Senior levels of government and industry often wait until final investment decisions are made before implementing strategic investments, resulting in a lack of proactive support for infrastructure upgrades that often comes too late (Halseth & Ryser, 2016; Ryser et al., 2016). In this context, local governments may be pressured to invest in infrastructure before receiving increased tax revenues in order to support an influx of mobile workforces, making it difficult to strengthen community preparedness and maximize strategic investments that will better position the community moving forward. To start, local government stakeholders struggle with insufficient or incomplete infrastructure to accommodate an expanded shadow population. At the same time, much of the existing physical infrastructure is aging rapidly from initial investments that were made in the post-war era. Responding to infrastructure pressures associated with the construction of large-scale industrial projects has been a challenge for local governments when no substantial additional taxation revenue is received during this phase. Some local government stakeholders, for example, noted that they are drawing down reserves, rather than building reserves to address immediate infrastructure pressures during industrial construction and expansion.

Water Infrastructure

Local government stakeholders, however, identified several ways that mobile workforces are supporting strategic investments in, and use of, infrastructure assets. For example, improvements have been made in water infrastructure. Hotels are significant tax payers, with revenues reinvested by local government in physical infrastructure and services. In Fort St. John where water is metered, the accommodation of mobile workforces in hotels also means that their use of water and sewer systems is paid for through these hotels. Unincorporated rural areas benefit from functional water wells that remain in place after the work camp has decommissioned its operations. Local governments are also beginning to pursue more entrepreneurial approaches for water resources that are used by work camps and mobile workforces. The PRRD is developing new policies and user fees associated with bulk water stations and tank services.

Sewage Management

Unrestrictive senior government policies are affecting sewage waste management and environmental pressures for local governments. In BC, work camps can install their own lagoons. This unrestrictive policy differs from Alberta where the Land Use Secretariat does not allow temporary lagoons to be established because some camps have a temporary term of 50 years. As a result, the Wood Buffalo Regional Municipality requires all sewage waste to be transported to Fort McMurray for disposal. However, there is a sense that there are fewer issues with unauthorized solid waste disposal in BC's rural environments.

With a large unincorporated area, however, the Peace River Regional District is challenged to respond to underground markets for engineered sewer systems that are installed in more isolated work camp facilities. These systems may not be designed or approved specifically for work camp facilities. Such challenges are exacerbated by difficulties recruiting engineers to

come to these remote resource-based regions to fulfill such work.

At the same time, provincial agencies (i.e. Ministry of Environment, Northern Health Authority, Oil and Gas Commission) do not have adequate staff on the ground to routinely inspect, monitor, and permit camps. As a result, it can take up to one year for a work camp to receive a permit for their sewage system. Temporary permits are issued by the Ministry of Environment to allow camps to pump and haul sewage as they work through the process. In some cases, there are camps that do not continue to pursue this process; however, it can be politically challenging for appropriate authorities to close these work camp facilities.

Provincial funding cuts further affect the training for staff inspecting and providing permits for work camps. Training is also needed for inspectors and permitting officers to travel along industrial roads by being familiar with radio call procedures. Unfortunately, most of the training for inspections and permits is delivered in Vancouver and Victoria; thereby, reducing the interest for northern residents to pursue such training.

Some stakeholders also argued that there is a disconnect between training and certification guidelines delivered through Applied Science Technologists and Technicians of BC (ASTTBC) and the legislative authority and guidelines that are used by provincial permitting agencies, such as Northern Health. This disconnect is grounded in debates about whether or not sewage systems in work camps should be distinguished from residential systems. Some provincial agencies are increasingly viewing work camp facilities as hotels and no longer perceive that they fall within their jurisdiction.

4.6 Transportation

Entrepreneurial Mechanisms: Transportation

Negotiate with camps to accommodate sufficient bicycle storage and landscaping.

Explore opportunities to strategically develop parking stations and staging areas for mobile workforces to support entrepreneurial opportunities.

Complete transportation arrangements to connect mobile workers with local amenities and businesses.

Ensure shuttle service schedules provide routine and reliable access to local amenities and businesses.

Restructure costing arrangements to acquire more financial resources to support airport maintenance and improvements.

For local governments, the influx of large mobile workforces produces a series of speeding, parking, and traffic pressures. For stakeholders, speeding contributed to vehicle accidents and damages to property. Families have fears about children playing in close proximity to streets that experience higher volumes of traffic and accidents. Unfortunately, industry responses to speeding complaints vary, prompting frustration amongst regional residents. In rural areas, financial compensation is not deemed to be sufficient to address trespassing, speeding, and property damages that deteriorate the quality-of-life for residents who migrated to rural regions for a quiet lifestyle.

Hotels and shopping areas are not equipped with sufficient parking to cope with higher traffic volumes and larger vehicles. Gravel areas are used to accommodate overflow parking, often functioning as large vehicle parking areas. Some stakeholders in Fort St. John suggest that missed opportunities to retool parking lot policies during the early growth periods of industrial development have left local governments in a difficult position. They are unable to invoke changes on long-term existing commercial properties, but they are also unable to implement proposed changes for future developments that would be perceived to provide unfair advantages to previous developments. In Kitimat, an open-camp did not have sufficient bicycle storage and parking. This is prompting the local government to raise such issues with future work camp proponents during discussions about landscape plans.

Furthermore, high traffic volumes produce congestion on local streets and increase road repair and maintenance costs. In some cases, industry arrangements are provided to bus workers from nearby airport facilities to workforce accommodation sites. Private sector initiatives to provide shuttle services, however, are impacted by the time needed to coordinate such shuttles with different industry shift rotation schedules. Efforts are needed to coordinate industry discussions to stagger shift rotation changes.

Local government strategies to restructure transportation infrastructure, programs, and policies in response to mobile workforces largely focus on ways to 'manage' transportation pressures. In Fort St. John, the City explored opportunities to develop parking stations that could function as focal points to shuttle mobile workers from work sites to their hotels. This model was not well supported by mobile workforces who prefer to have their vehicle close by in case they are called out to the work site. Many mobile workers also keep expensive equipment and gear in their vehicles.

There are also challenges securing timely discussions during the early phases of project development about how shuttle staging areas could enhance entrepreneurial opportunities by connecting mobile workers from nearby camps with businesses and amenities in the community. In Kitimat and Fort St. John, there are arrangements to bring mobile workers into town and increase the mobile workers' use of municipal recreational facilities, such as swimming pools, arenas, golf courses, and fitness facilities. However, there have been delays to ensure shuttle services are in place to connect mobile workforces staying in nearby camps with local businesses outside of their shift schedule.

Staging areas are facilitated through agreements between private property owners of empty lots and industry proponents. Poor and inconsistent shuttle schedules, however, are constricting opportunities for workers to connect with local businesses, services, and amenities. There are also concerns that many mobile workers choose to remain in camp, leading to limited benefits for local businesses.

More entrepreneurial interests were pursued to address airport infrastructure pressures. Under previous regulations, chartered flights were not paying airport improvement fees; thereby prompting the restructuring of policies and costing arrangements to acquire more financial resources to support airport maintenance and improvements.

4.7 Community services

Entrepreneurial Mechanisms: Community Services

Negotiate funding for daycare and community services through the Community Measures Agreement.

Provide support for land donation from camp proponent to support dementia care facility by ensuring appropriate zoning in place and adjusting landscape requirements.

Negotiate industry in-kind support to prepare space for events.

Neoliberal public policy initiatives provide inadequate financial resources for community service providers to respond to the pressures surrounding an influx of mobile workforces. In our study sites, mobile workforces increase the demand for many services, such as health care, dental, recreation services, and other community supports. With open camps, in particular, stakeholders are concerned about the transmission of sexually transmitted diseases and increased demands for local services to test and treat STDs. Local tax payers cover expenses for both residents and the extended shadow population.

As provincial and federal levels of government continue to reduce expenditures for services in rural regions, local governments are pursuing other methods to assist the service sector. For example, in Kitimat, the stability of community social services has been supported by the local government's initiative that established a \$200,000 emergency fund for social services in 2013. By working with local government staff, community groups secured support for a housing resource worker, a Food Share program, and the opening of an extreme weather shelter. This temporary fund was strategically developed to provide bridge funding for community groups that were struggling to obtain additional resources from senior levels of government. The fund has now been depleted.

Through the Community Measures Agreement negotiated by the local government, BC Hydro invested in daycare services at Margaret Ma Murray Elementary School in Fort St. John. In return, BC Hydro employees are guaranteed daycare spots for 10 years. Despite these investments, shortages in daycare workers are impacting both daycare and after school programs. These challenges are complicated by BC Hydro's requirement that the daycare needs to be operated by a nonprofit. Fort St. John's Child Development Centre, however, operates at full capacity, leaving the contract to be awarded to the YMCA, a non-profit organization from Prince George. With existing shortages of daycare workers, local stakeholders have important questions about whether distant daycare workers will be recruited for rotations or whether daycare workers will be relocated to resolve staff shortages in the community.

In Kitimat, an open camp proponent is interested to donate a piece of land to support the development of a dementia facility. This is not a project negotiated by the local government; instead, the company was approached by a resident who presented the request for the project. The local government supported the initiative by ensuring appropriate zoning was in place and modifying the development permit to eliminate landscaping requirements for that proportion of land. Northern Health and BC Housing are working with work camp proponent to address construction and operational funding, as well as the development of a business plan for the facility.

Community organizations are also benefitting from work camp proponents who are providing meeting space and supporting community events. The provision of meeting space is typically offered through open camps. In Kitimat, for example, Civeo provides a meeting room for community use. In the Peace River Regional District, companies have supported the Fall Fair by mowing lawns to support the event.

5.0 Moving Forward

As local governments prepare for, and respond to, the influx of large mobile workforces, our research explores how they are working to ensure appropriate local policies, regulations, and processes are in place to support an entrepreneurial approach that can maximize opportunities associated with mobile labour. This topic is critically important as senior levels of government continue to roll out neoliberal public policy directives and are not pursuing timely and adequate supports to assist communities that are experiencing an influx of large shadow populations. In this context, senior governments continue to fulfill their role to facilitate industrial development, but often fall short of fulfilling their role to strategically invest in community development to support large scale industrial projects and related mobile workforces. Drawing upon the assumption that benefits will automatically trickle down to nearby communities, the impacts of mobile workers and resource-based activities are disregarded or overlooked.

Our findings reveal some pro-active, innovative, and entrepreneurial strategies to increase business and community development opportunities due to the presence of mobile workforces. Negotiated agreements, work camp templates, foregiveable loan programs, and tax exemptions are just some of the tools and strategies used to leverage investments and to obtain more information about mobile workforces. Local governments, however, remain largely focused on the costs and impacts associated with mobile workforces. This has reinforced approaches to manage mobile workforce issues within local government operations and a dependency on inadequate senior government policies to chart new pathways. In this context, local governments may not fully realize opportunities associated with mobile workforces that would then command more entrepreneurial strategies. Local government can no longer afford to only examine the costs associated with mobile workforces, but also the opportunities that may require a different approach to nurturing investments that can effectively maximize opportunities across construction and operational phases of large-scale industrial developments. This will require a shift towards a more entrepreneurial culture.

Inadequate information structures, limited jurisdiction, and unclear and restrictive senior government policies and structures that guide mobile workforces and related accommodations further disconnect local governments from regulatory frameworks and limit their ability to develop relationships and more diverse strategies as they respond to the influx of mobile workforces. There are several changes that can be undertaken to better support local government entrepreneurialism and innovation as a response to the opportunities and pressures associated with mobile workforces.

Better information support systems are needed to enable local governments to understand the scale and scope of mobile workforces. A centralized registry for work camps is needed at the provincial level in order to allow municipalities and regional districts to acquire good quality information that can inform broader planning, investments, and policy decisions. This information is also critical to help local government better understand the benefits and costs associated with mobile workforces through impacts on finances, business, policing and emergency services, infrastructure, amenities, and overall community health. With better

information, local governments can think more strategically about how to use these developments to leverage investments and support more entrepreneurial approaches for community and economic development.

Local governments also need to be integrated into the approval and permitting processes due to the implications that mobile workforces have for municipal infrastructure and services. In this respect, local governments need input to determine how and where work camp facilities are located. Currently, provincial agencies encourage work camps to notify the regional district about their plans for development and operations, but there is no mechanism in place to ensure work camp operators follow through and connect with local governments to share pertinent information. Communities need to be engaged in the renewal of senior government policies and regulations that shape the development and monitoring of mobile workforces and related work camps. This consultation should be grounded within rural landscapes where senior government decision-makers can see the impacts on the ground.

Regulatory tools need to be updated to reflect the different types of mobile workforce accommodations that can unfold and change quickly in these rural environments. At the provincial and federal level, this should reflect a closer examination of how both closed and open camp facilities are being used to support industry operations. Local and senior government policies also need to define temporary in order to guide the implementation of regulations pertaining to work camps and mobile workforces.

Thus far, the lack of information and disconnection from regulatory or approval processes has limited the ability of local government to explore any entrepreneurial opportunities associated with mobile workforces. If information and regulatory structures improve, future research may explore how the internal capacity of local governments is being retooled to support more entrepreneurial endeavors as communities work to reduce their dependency on insufficient senior government resources and pursue more resilient and diversified pathways.

6.0 References

Andersen, A. J. W., & Svensson, T. (2012). Struggles for recognition: A content analysis of messages posted on the Internet. *Journal of Multidisciplinary Healthcare*, 5, 153-162.

Argent, N. (2013). Reinterpreting core and periphery in Australia's mineral and energy resources boom: An Innisian perspective on the Pilbara. *Australian Geographer*, *44*(3), 323-340.

Aroca, P., & Atienza, M. (2011). Economic implications of long distance commuting in the Chilean mining industry. *Resources Policy*, *36*(3), 196-203.

Ateljevic, J. (2009). Tourism entrepreneurship and regional development: Example from New Zealand. *International Journal of Entrepreneurial Behaviour & Research*, 15(3), 282-308.

Audretsch, D. B., Kuratko, D. F., & Link, A. N. (2015). Making sense of the elusive paradigm of entrepreneurship. *Small Business Economics*, 45(4), 703-712.

Barclay, M.A., Harris, J., Everingham, J., Kirsch, P., Arend, S., Shi, S., Kim, J. (2013). *Factors linked to the well-being of fly-in fly-out (fifo) workers*. Research report. Brisbane, Australia: CSRM and MISHC, Sustainable Minerals Institute, University of Queensland.

Beamish Consulting Ltd. and Heartwood Solutions Consulting. (2013). *Policy, communications, capacity: A time to lead. Scoping the impacts and benefits of work camps in the Peace region.*Prepared for the Peace River Regional District. Beamish Consulting Ltd. and Heartwood Solutions Consulting.

Beer, A. (2014). Leadership and the governance of rural communities. *Journal of Rural Studies*, *34*, 254-262.

Boswell, W. J., & Crompton, J. L. (2007). A city's strategy to fund a golf course by developing homes on proximate property. *Journal of Park & Recreation Administration*, 25(1), 115-127.

Bryant, C. R. (1989). Entrepreneurs in the rural environment. *Journal of Rural Studies*, *5*(4), 337-348.

Carson, D. (2011). Political economy, demography and development in Australia's northern territory. *The Canadian Geographer*, *55*(2), 226-242.

Chadwick, A., & May, C. (2003). Interaction between states and citizens in the age of the internet: "e-government" in the United States, Britain, and the European Union. *Governance*, 16(2), 271-300.

City of Fort St. John. (2012). Site C Clean Energy Project – Position Paper. Fort St. John: City of Fort St. John. Available on-line at:

https://www.fortstjohn.ca/assets/Documents/Reports~Publications/SiteC-Position-Paper.pdf.

Coiacetto, E., & Baker, D. (2005). *Real estate development by local government in Queensland*. Brisbane: Griffith University.

Connelly, S., & Nel, E. (2017). New Zealand: Community responses to restructuring. In G. Halseth (Ed.), *Transformation of resource towns and peripheries: Political economy perspectives* (pp. 317-335). London and New York: Routledge.

Constitution Act. (1982). Schedule B to the Canada Act 1982 (UK), 1982, c 11.

Creed, A., & Kordvani, A. (2013). *Canada: The WTO Report on Local Content Requirements for Canadian Renewables Programme – MENA Implication*. Available at: http://www.mondaq.com/canada/x/222390/Renewables/The+WTO+Report+On+Local+Content+Requirements+For+Canadian+Renewables+Programme+MENA+Implication.

Cumbie, B. A., & Kar, B. (2016). A study of local government website inclusiveness: The gap between e-government concept and practice. *Information Technology for Development*, 22(1), 15-35.

Dannestam, T. (2008). Rethinking local politics: Towards a cultural political economy of entrepreneurial cities. *Space and Polity*, *12*(3), 353-372.

Davies Transportation Consulting Inc., Wave Point Consulting Inc., Lane Property Advisors Inc. (2011). *Major industrial property taxation impacts*. Prepared for the Union of BC Municipalities and the BC Ministry of Community, Sport, and Cultural Development. Available on-line at: http://www.cscd.gov.bc.ca/lgd/infra/library/Major Industrial Property Taxation Impacts Report.pdf.

Day, G. (1998). Working with the grain? Towards sustainable rural and community development. *Journal of Rural Studies*, *14*(1), 89-105.

Delgamuukw v. British Columbia. (1997). 3 S.C.R. 1010.

District of Kitimat. (N.d.). *Secondary suites*. Available on-line at: http://www.kitimat.ca/EN/main/municipal/departments/community-planning-development/secondary-suites.html.

District of Kitimat. (2014). Bylaw No. 1841: A bylaw to amend the Kitimat Municipal Code with respect to land uses permitted in the M1 manufacturing zone. Available on-line at: http://www.kitimat.ca/assets/Municipal~Hall/Public~Notices/1841-14%20M1%20Manufacturing%20Zone.pdf.

District of Kitimat. (2013). *Kitimat to reduce property tax for renovated commercial buildings*. Available on-line at: http://www.kitimat.ca/EN/meta/news/archives/2013/kitimat-to-reduce-property-tax-for-renovated-commercial-buildings.html.

Dollery, B., Grant, B., & Akimov, A. (2010). A typology of shared service provision in Australian local government. *Australian Geographer*, *41*(2), 217-231.

Douglas, D. J. (2005). The restructuring of local government in rural regions: A rural development perspective. *Journal of Rural Studies*, *21*(2), 231-246.

Dowall, D. (1990). The public real estate development process. *Journal of the American Planning Association*, 65(4), 504-512.

Drew, J., Dollery, B., Blackwell, B. (2017). A square deal? Mining costs, mining royalties and local government in New South Wales, Australia. *Resources Policy*, 55, 113-122.

Fosse, J. K. (2014). Between continuity and change in local restructuring: Facilitating path creation in local development in Vennesla, Norway. *Norsk Geografisk Tidsskrift-Norwegian Journal of Geography*, 68(2), 102-110.

Gale, R., & Gale, F. (2006). Accounting for social impacts and costs in the forest industry, British Columbia. *Environmental Impact Assessment Review*, 26(2), 139-155.

Gibson, G., & O'Faircheallaigh, C. (2015). *IBA community toolkit: Negotiation and implementation on impact and benefit agreements*. The Gordon Foundation.

Grant, B., & Dollery, B. (2010). Place-shaping by local government in developing countries: Lessons for the developed world. *International Journal of Public Administration*, 33(5), 251-261.

Haida Nation v. British Columbia (Minister of Forests). (2004). 3 S.C.R. 511, 2004 SCC 73.

Halseth, G. (2017). Introduction: Political economy perspectives on the transformation of resource towns and peripheries. In G. Halseth (Ed.), *Transformation of resource towns and peripheries: Political economy perspectives* (pp. 1-10). London and New York: Routledge.

Halseth, G., & Ryser, L. (2018). *Towards a political economy of resource-dependent regions*. New York: Routledge.

Halseth, G., & Ryser, L. (2016). Rapid change in small towns: When social capital collides with political/bureaucratic inertia. *Community Development*, 47(1), 106-121.

Harvey, D. (2005). *A brief history of neoliberalism*. Oxford and New York: Oxford University Press.

Harvey, D. (1989). From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism. *Geografiska Annaler: Series B, Human Geography*, 71(1), 3-17.

Haslam McKenzie, F. M., & Rowley, S. (2013). Housing market failure in a booming economy. *Housing Studies*, 28(3), 373-388.

Headwaters Economics. (2012). Oil and natural gas fiscal best practices: Lessons for state and local governments. Bozeman, MT: Headwaters Economics.

Headwaters Economics. (2011). *Fossil fuel extraction and western economies*. Bozeman, MT: Headwaters Economics.

Heisler, K. G., & Markey, S. (2014). Navigating jurisdiction: Local and regional strategies to access economic benefits from mineral development. *The Canadian Geographer*, *58*(4), 457-468.

Heisler, K. G., & Markey, S. (2013). Scales of benefit: Political leverage in the negotiation of corporate social responsibility in mineral exploration and mining in rural British Columbia, Canada. *Society & Natural Resources*, 26(4), 386-401.

Herbert-Cheshire, L. (2000). Contemporary strategies for rural community development in Australia: A governmentality perspective. *Journal of Rural Studies*, *16*(2), 203-215.

Herbert-Cheshire, L., & Higgins, V. (2004). From risky to responsible: Expert knowledge and the governing of community-led rural development. *Journal of Rural Studies*, *20*(3), 289-302.

House of Representatives. (2013). *Cancer of the bush or salvation for our cities? Fly-in, fly-out and drive-in, drive-out workforce practices in regional Australia*. Canberra, Australia: Standing Committee on Regional Australia, Parliament of the Commonwealth of Australia.

Innis, H. (1933). *Problems of staple production in Canada*. Toronto: Ryerson Press.

Kobia, M., & Sikalieh, D. (2010). Towards a search for the meaning of entrepreneurship. *Journal of European Industrial Training*, 34(2), 110-127.

Kuratko, D. F., Morris, M. H., & Schindehutte, M. (2015). Understanding the dynamics of entrepreneurship through framework approaches. *Small Business Economics*, 45(1), 1-13.

Laurie, M. (2013). An overview: Sharing benefits from natural resources with local stakeholders in British Columbia. Retrieved from:

https://www.cbt.org/uploads/pdf/sharingBenefitsFromnaturalresourcesWithlocalstakeholdersinBC.pdf.

Leyden, D., & Link, A. (2015). Public sector entrepreneurship: US technology and innovation policy. New York: Oxford University Press.

Lucas, R. (1971). *Minetown, milltown, railtown: Life in Canadian communities of single industry*. Toronto: University of Toronto Press.

Major Industrial Properties Steering Committee. (2012). *Final report*. Victoria, BC: Major Industrial Properties Steering Committee, Province of British Columbia. Available on-line at: http://www.cscd.gov.bc.ca/lgd/infra/library/Major Industrial Tax Steering Committee Report.pdf.

Malecki, E. J. (1994). Entrepreneurship in regional and local development. *International Regional Science Review*, *16*(1-2), 119-153.

Markey, S., Halseth, G., & Manson, D. (2012). *Investing in place: Economic renewal in northern British Columbia*. UBC Press, Vancouver.

Markey, S., & Heisler, K. (2010). Getting a fair share: Regional development in a rapid boombust rural setting. *Canadian Journal of Regional Science*, 33(3), 49-62.

Ministry of Municipal Affairs and Housing. (2018). *Local government statistics: Revenue*. Victoria, BC: Ministry of Municipal Affairs and Housing, Province of British Columbia. Available on-line at: http://www.cscd.gov.bc.ca/lgd/infra/municipal stats/municipal stats2016.htm.

Mitchell, C. (1998). Entrepreneurialism, commodification and creative destruction: A model of post-modern community development. *Journal of Rural Studies*, *14*(3), 273-286.

Mitchell, C., & De Waal, S. (2009). Revisiting the model of creative destruction: St. Jacobs, Ontario, a decade later. *Journal of Rural Studies*, *25*(1), 156-167.

Morris, R. (2012). Scoping study: Impact of fly-in fly-out / drive-in drive-out work practices on local government. Sydney: Australian Centre of Excellence for Local Government, University of Technology.

Nasi, G., & Frosini, F. (2010). Vision and practice of e-government: An empirical study. *Financial Accountability & Management*, 26(1), 85-101.

Nelsen, J., Scoble, M., & Ostry, A. (2010). Sustainable socio-economic development in mining communities: North-central British Columbia perspectives. *International Journal of Mining, Reclamation, and Environment, 24*(2), 163-179.

Neuendorf, K. A. (2016). The content analysis guidebook. Los Angeles: Sage.

Newell, R., & Raimi, D. (2015a). *Oil and gas revenue allocation to local governments in eight states* (No. w21615). Cambridge, MA: National Bureau of Economic Research.

Newell, R., & Raimi, D. (2015b). *Shale public finance: Local government revenues and costs associated with oil and gas development* (No. w21542). Cambridge, MA: National Bureau of Economic Research.

Nordås, H.K., Vatne, E., & Heum, P. (2003). *The upstream petroleum industry and local industrial development: A comparative study.* SNF report no. 08/03. Bergen: Institute for Research in Economics and Business Administration.

Northern Health. (2012). *Understanding the state of industrial camps in northern BC: A background paper*. Draft. Prince George, BC: Northern Health Authority.

Northwest BC Resource Benefits Alliance. (2019). Northwest BC Resource Benefits Alliance. Available on-line at: https://www.nwresourcebenefits.ca. Accessed June 17, 2019.

Oakerson, R. (1999). Governing local public economies. Oakland: ICS Press.

O'Faircheallaigh, C. (2013). Community development agreements in the mining industry: An emerging phenomenon. *Community Development*, 44(2), 222-238.

Province of Alberta. (2006). *Investing in our Future: Responding to the rapid growth of oil sands development*. Final Report. Edmonton: Province of Alberta.

Randall Conrad and Associates Ltd. (2006). *Municipal green space allocation: Practice and protocol in Alberta communities*. Prepared for the Alberta Recreation and Parks Association. Edmonton, Alberta.

Robinson, S. (1995). Public / private partnerships in development: The new role of local authorities as urban entrepreneurs. *Australian Planner*, 32(3), 156-160.

Ryser, L., Halseth, G., & Markey, S. (forthcoming). Moving from government to governance to address housing pressures during rapid industrial development: The case of Kitimat, BC, Canada. Submitted to: Housing Studies.

Ryser, L., Halseth, G., Markey, S., Gunton, C., & Argent, N. (2019). Path dependency or investing in place: Understanding the changing conditions for rural resource regions. *The Extractive Industries and Society*, *6*(1), 29-40.

Ryser, L., Halseth, G., & Markey, S. (2018a). Restructuring of rural governance in a rapidly growing resource town: The case of Kitimat, BC, Canada. *EchoGéo*, (43), 1-15. DOI: 10.4000/echogeo.15218.

Ryser, L., Halseth, G., Markey, S., & Morris, M. (2018b). On the move: Labour mobility and community capacity. The opportunities and challenges for labour mobility in rural and remote Canada. Prince George, BC: University of Northern British Columbia.

Ryser, L. M., Halseth, G., Markey, S., & Morris, M. (2017a). New mobile realities in mature staples-dependent resource regions: Local governments and work camps. *Environment and Planning C: Politics and Space*, *35*(3), 500-517.

Ryser, L., Markey, S., Halseth, G., & Welch, K. (2017b). Moving from mobility to immobility in the political economy of resource-dependent regions. *Applied Mobilities*, 1-22.

Ryser, L., Halseth, G., Markey, S., & Morris, M. (2016). The structural underpinnings impacting rapid growth in resource regions. *The Extractive Industries and Society*, *3*(3), 616-626.

Scott, J. K. (2006). "E" the people: Do US municipal government web sites support public involvement? *Public Administration Review*, 66(3), 341-353.

Shearmur, R., & Poirier, V. (2017). Conceptualizing nonmarket municipal entrepreneurship: Everyday municipal innovation and the roles of metropolitan context, internal resources, and learning. *Urban Affairs Review*, *53*(4), 718-751.

Shone, M. (2011). Local government entrepreneurship in tourism development: The case of the Hurunui District, New Zealand. In D. Dredge and J. Jenkins (Eds.), Stories of Practice: Tourism Policy and Planning (pp. 153-171). Farnham: Ashgate Publishing.

Shrimpton, M., & Storey, K. (1992). Fly-in mining and the future of the Canadian north. In M. Bray and A. Thomson (Eds.), *At the end of the shift: Mines and single-industry towns in northern Ontario*, (pp. 187-208). Toronto, ON: Dundurn Press Limited.

Skaburskis, A. (1988). Criteria for compensating for the impacts of large projects: The impact of British Columbia's Revelstoke dam on local government services. *Journal of Policy Analysis and Management*, 7(4), 668-686.

Skelcher, C. (2017). An enterprising municipality? Municipalisation, corporatization, and the political economy of Birmingham City Council in the nineteenth and twenty-first centuries. *Local Government Studies*, *43*(6), 927-945.

Sommers, L. & Cullen, B. (1981). Living accommodations for North Sea oil exploitation. *Geographical Review*, 71(1), 91-97.

Statistics Canada. (2016). Community profiles. Ottawa: Statistics Canada.

Tonts, M. (2010). Labour market dynamics in resource dependent regions: An examination of the Western Australian Goldfields. *Geographical Research*, 48(2), 148-165.

Tordo, S., Warner, M., Manzano, O., & Anouti, Y. (2013). *Local content policies in the oil and gas sector*. Washington, DC: International Bank for Reconstruction and Development / World Bank.

Tsilhqot'in Nation v. British Columbia. (2014). SCC 44, 2014, 2 S.C.R. 256.

Tuulentie, S., Halseth, G., Kietäväinen, A., Ryser, L., & Similä, J. (2019). Local community participation in mining in Finnish Lapland and Northern British Columbia, Canada: Practical applications of CSR and SLO. *Resources Policy*, *61*, 99-107.

URS Australia. (2012). *Bowen Gas Project EIS: Social impact management plan, report*. Prepared for Arrow Energy. Brisbane, QLD, Australia: URS Australia.

Van Gramberg, B., & Teicher, J. (2000). Managerialism in local government - Victoria, Australia. *International Journal of Public Sector Management*, *13*(5), 476-492.

Wanjek, C. (2013). *Workforce housing and feeding solutions for health, safety, productivity and morale*. White Paper 03.13. Target Logistics.

West, B. (2013). *Impact of government-mandated partnerships on service providers: The BC experience*. Unpublished Masters Thesis. Victoria: School of Public Administration, University of Victoria.

Woolford, A., & Curran, A. (2011). Neo-liberal restructuring, limited autonomy, and relational distance in Manitoba's non-profit field. *Critical Social Policy*, *31*(4), 583-606.

Zelenbabic, D. (2015). Fostering innovation through innovation friendly procurement practices: A case study of Danish local government procurement. *Innovation: The European Journal of Social Science Research*, 28(3), 261-281.

7.0 Appendices

Appendix A: PRRD Work Camp Template

Services	Function	Requirement	Confirmation / Documentation (attach supporting documents)
Water	Use of local government water source	Pre-approval from local government	
	Use of river or other natural water resource	Permitting or agreement in place	
Sewer	Use of local government sewer receiving facility Use of on-site treatment	Pre-approval from local government Pre-approved from Ministry of Health / Ministry of Environment	
Transportation Roads	Ministry of Transportation Traffic Impact Study or Traffic Impact Study completed by a Ministry approved company	Completion of Traffic Impact Study	
	Noise and Dust Address the concern about Noise and Dust	Provide a copy of the Operational Impact Plan that addresses how noise and dust concerns will be addressed.	
Transportation Travel	Will the camp be fly in, fly out; Will employees be bussed to work area; will a shuttle from a municipal centre operate	Explanation on whether it is an open or closed camp and the company's plan for worker transportation	
Housing	Will all employees be housed at the work camp	Explanation on whether other accommodation will be used (i.e. hotels, RV camps)	
Recreation	What is being planned for employee recreation activities	Confirmation of discussion with municipalities around recreation if not using onsite recreation	

Policing	What is planned for on-	Confirmation details for site	
	site security (policing)	security	
	What is the camp's plan	Confirmation of open or	
	around crime prevention	dry camp and policies on	
		alcohol, drugs, hunting,	
		trespassing, off-site	
		behavior, etc.	
Social	What is being planned	Information of level of on-	
	for on-site health	site health service	
	services		
Reclamation	Demobilization	Documentation on site	
		remediation plans	
Emergency	Safety	Information on emergency	
Management		management procedures	
		including notification	
		process to local and	
		provincial government	
		agencies	
Communications	Internet / cell phone	Information on mitigation	
		plans to local	
		communication	
		infrastructure as a result of	
		additional demand	
BC Assessment	Notification	Communication of work	
		camp to BC Assessment	

Source: Peace River Regional District 2019.

Appendix B: Community Measures Agreement Summary

Measures

BC Hydro to provide \$1 million / year during construction to the City of Fort St. John. This will increase 3.5% each year.

BC Hydro will provide \$125,000 to the City of Fort St. John to support the City's collaboration and technical engagement.

BC Hydro will provide \$100,000 per year for 8 years towards a community fund to support non-profit agencies in the Peace River Region.

BC Hydro will provide \$250,000 to non-profit agencies that provide emergency / transition housing.

BC Hydro will provide \$75,000 in 2016 to support local charities identified by the City of Fort St. John. These included:

- \$20,000 to support Community Bridge, a non-profit counselling and service agency.
- \$20,000 to support the Fort St. John Women's Resource Centre.
- \$5,000 to support Abbeyfield Houses for seniors.
- \$5,000 to support the Fort St. John Arts Council.
- \$5,000 to support the North Peace Justice Society.
- \$5,000 to support the Fort St. John Library.
- \$5,000 to support the Fort St. John Literacy Society.
- \$5,000 to support the Fort St. John North Peace Museum.
- \$5,000 to support the BC SPCA North Peace Branch.

BC Hydro will provide resources to support one additional RCMP officer.

BC Hydro will co-manage a Site C Community Agreement Monitoring Committee with the City of Fort St. John to track the implementation of the agreement.

BC Hydro will pre-purchase tickets to connect mobile workers with local recreational facilities – totalling approximately \$423,000 over the construction period.

BC Hydro will support any future city boundary expansion application to include 96 hectares of land within the city.

BC Hydro will maintain a community consultation office.

BC Hydro and the City will regularly monitor the City's drinking water source quality and quantity.

BC Hydro will provide a health clinic, water and sewer systems, and recreational facilities on site to reduce pressures on community infrastructure and services.

BC Hydro will work with BC Housing to develop 50 new rental units; 40 will be used by the construction workforce and their families during construction and 10 units will be built for immediate use in the community.

BC Hydro will provide funding to support new daycare spaces in Fort St. John, with a priority to support families in the labour force.

BC Hydro will provide \$200,000 for a community recreation site fund to support local groups to develop new shoreline recreation areas.

BC Hydro will provide \$200,000 to fund the development of a BC Peace River / Site C

Reservoir Navigation and Recreation Opportunities Plan.

BC Hydro will provide shuttle services to transport mobile workers from the camp to town where they may access local services and recreational amenities.

BC Hydro will provide \$184,000 to support a school district career counsellor position to help students transition into trades and related career training.

BC Hydro will provide \$100,000 to the North East Native Advancing Society to support trades training under the North East Aboriginal Trades Training Program.

BC Hydro will provide \$175,000 over 5 years to support a pre-apprenticeship program through Northern Opportunities.

\$1 million will be provided to the Northern Lights College Foundation to support trades and skills training through bursaries.

BC Hydro will work with the Fort St. John Chamber of Commerce, the City of Fort St. John Economic Development Department, and the North Peace Economic Development Commission to implement the Site C business participation strategy and deliver sessions about procurement and contracting opportunities.

Source: https://www.fortstjohn.ca/EN/main/community/budget-taxes/community-measures-agreement.html.

https://www.sitecproject.com/sites/default/files/info-sheet-fsj-agreement-march-2018 0.pdf. https://www.sitecproject.com/bc-hydro-and-fort-st-john-sign-community-agreement-for-site-c

Appendix C: Consent Form





On the Move: Labour Mobility and Community Capacity in Northern BC

Research Lead:

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<u>Purpose</u> – A key change in Canada's northern resource towns has been the growth of long distance labour commuting (LDLC). Labour mobility presents numerous opportunities and challenges for workers and communities in rural and small town settings. Building upon the experiences in Fort St. John, Kitimat, and the Peace River Regional District, this project will explore how local governments are working to capture benefits from mobile workforces through entrepreneurial approaches to community development and attraction and retention strategies. This research will also explore broader structural and policy related changes needed to better support innovative and entrepreneurial approaches adopted by local governments in these settings.

<u>How Respondents Were Chosen</u> - The interview participants were contacted through publically available contact lists of local government leaders and staff. Interview participants were selected for their potential to provide information that can help to better understand infrastructure and service pressures, as well as innovative and entrepreneurial approaches being pursued by local governments to secure adequate fiscal resources and maximize the benefits from work camps and mobile workforces.

<u>Anonymity And Confidentiality</u> - The names of participants will not be used in any reporting, nor will any information which may be used to identify individuals. All information shared in this interview will be held within strict confidence by the researchers. All records will be kept in a locked research room at UNBC and will be accessible only to the research team. Our research team consists of Dr. Greg Halseth (UNBC), Laura Ryser (UNBC), and Sean Markey (Simon Fraser University). The information will be kept until the final project report is complete. After which time, shredding and file erasure will destroy all information related to the interview.

<u>Potential Risks and Benefits</u> - This project has been assessed by the UNBC Research Ethics Board. The project team does not consider there to be any risks to participation. We hope that by participating you will have a chance to provide input into issues relevant to work camps and mobile workforces, and its impacts on local government operations.

<u>Voluntary Participation</u> - Participation in the interview is entirely voluntary and, as such, interviewees may choose not to participate. Interviewees may choose not to answer any questions that make them uncomfortable, and they have the right to end their participation in the interview at any time and have all the information they provided withdrawn from the study and destroyed. The interview will be audio recorded and a summary of key themes will be created. A key thematic summary of the interview will be sent to the interviewee, and they will have two weeks to provide any edits or corrections back to the research team. The interview should take about 45 minutes to complete.

<u>Research Results</u> - In case of any questions that may arise from this research, please feel free to contact Dr. Greg Halseth (250-960-5826; halseth@unbc.ca) in the Geography Program at UNBC. The final project report will be distributed to all participants.

<u>Complaints</u> - Any complaints about this project should be directed to the Office of Research, UNBC (250) 960-6735, or email: reb@unbc.ca

I have read the above description of the study and I understand the conditions of my participation. My signature indicates that I agree to participate in this study.

(Name -please print)	(Signature)	(Date)

Appendix D: Interview Guide

On the Move: Labour Mobility and Community Capacity in Northern BC

Interview Guide for Local Government

Participant name:		
Contact information:		
Interviewer:		
Date:	Place:	
Interview Time: Start	Finish	
NOTES:		

A. Background Questions

As a result of large-scale industrial projects, what were the key pressures facing local government?

Prompt: infrastructure, services (i.e. housing, emergency services, etc.), human resources, fiscal resources, etc.

What were some of the key benefits you were hoping to see for the community as a result of work camps / mobile workforces?

Did you negotiate any agreements with industry / work camp proponents to address any issues **to get ready** for work camps / mobile workforces?

Prompt: emergency services, water, sewage, roads, bridges, housing, RCMP, inspection staff, training, studies, etc.

Did you need to **re-negotiate / revise** any agreements with industry / work camp proponents to address any pressures associated with having work camps / mobile workforces? *Prompt: emergency services, water, sewage, roads, bridges, housing, RCMP, inspection staff, training, studies, etc.*

Did you negotiate any agreements with industry / work camp proponents to address any issues after the work camp / mobile workforces have left?

Prompt: emergency services, water, sewage, roads, bridges, housing, RCMP, inspection staff, training, studies, etc.

Were local government regulations / bylaw mechanisms updated / used to obtain additional fiscal resources to address any infrastructure / service pressures from large-scale industrial projects? If yes, how?

Prompt: density bonusing, work camp beds, contributions to local government fund, renovations to commercial / industrial buildings, secondary suites, funds for additional staff, etc.

Was an investment strategy developed to strategically use any additional fiscal resources obtained?

What happens to any additional fiscal resources / revenues obtained? *Prompt: general revenue, investments, housing fund, community fund, etc.*

Were you able to negotiate any additional fiscal resources from senior governments to address infrastructure / service pressures? If yes, please explain.

Prompt: Site C agreement, FSA / PRA, BC Housing, funds for needs assessments, grants, etc.

What initiatives did local government undertake to facilitate private sector engagement with camps?

Prompts: water, food, safety, security, construction, transportation, cleaning, etc.

Have any provincial or federal regulations, policies, or structures impacted the local government's ability to pursue any new innovative or entrepreneurial approaches to maximize benefits from work camps and industrial development? If yes, please explain.

What changes do you think are needed to better position local governments to maximize benefits associated with work camps, mobile workforces, and large-scale industrial projects?