

Managing Growth: Building a Sustainable Development in Fort McMurray

Buec 463

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Executive Summary

The Western Canadian Sedimentary Basin houses “Alberta's oil sands (who) lie like a black ribbon across a 120-million-year-old seashore, now buried below lush wetlands and virgin boreal forest” (Lustgarten, 2005). The oil sands are an important source Canadian crude oil, placing Canada second in world crude oil reserves.

The oil sands rely on Fort McMurray, and their potential for growth relies solely on the ability of Fort McMurray to grow at an equivalent rate. As oil sands output has grown, the city of Fort McMurray has grown exponentially, seeing increases in population like no other urban center in North America.

Population increases have created a strain on the city's infrastructure, pushing it to its limits, and then some. In the midst of a population crisis, Fort McMurray must develop strategies in conjunction with industry and government pertaining to long-term development.

Constructing a suitable infrastructure is the first step in building a sustainable development through which industry can support and maintain a sizeable workforce, enabling them to carry on production in the oil sands for the long-term.

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Managing Growth: Building a Sustainable Development in Fort McMurray

Introduction

The Western Canadian Sedimentary Basin houses “Alberta's oil sands (who) lie like a black ribbon across a 120-million-year-old seashore, now buried below lush wetlands and virgin boreal forest” (Lustgarten, 2005). Fort McMurray has become the gateway to these reserves that produce the precious tar-like substance called bitumen. These oil sands transformed Fort McMurray from a quiet Hamlet to a thriving urban station instrumental in the booming Alberta economy. Pressure has been put on Fort McMurray to support the growing oil sands industry and until recently the city has performed that task admirably. The exponential growth in the region has put strain on the city as it has struggled to sustain the needs of the growing population. Fort McMurray must develop strategies to build a sustainable development or an impending crash could devastate the industry and create monumental problems within Alberta, across the country, and possibly across the globe.

Estimated at 175 billion barrels, Alberta's oil sand crude oil reserves place Canada second in the world behind only Saudi Arabia (CAPP, 2005). International investment in the oil sands comes from many countries. For instance China's investment in the oil sands has been about \$255 million, placing an interest in a pipeline to the west coast from Edmonton. A French international banking giant, Societe Generale, has purchased a minority stake in FirstEnergy Capital Corp, one of Canada's top energy investment boutiques (Cattaneo, 2005). FirstEnergy allows the French giant to access the

tight-knit community in Calgary, and allows them to become a stakeholder in FirstEnergy's oil sands projects. Also the oil sands have been worked into United States energy policy; as of 2004 99% of Canada's oil exports were to the United States (Lustgarten, 2005), and as of late president George Bush has indicated interest in Canadian oil, calling it domestic oil that must be utilized in its Energy Policy Act (2005). All of these issues put international importance on the sustainable development of these resources. In terms of Canadian production, the oil sands supply half of the oil produced in western Canada, and are expected to increase their share of production to seventy-five percent by 2012 (CAPP, 2005). New production plans equal an estimated \$45 billion from 2005-2015 from companies such as Suncor, Syncrude, Shell, and Imperial oil, among many (CAPP, 2005). Only 36% of revenues from the oil sands go directly to the Alberta government, with the rest being shared by the (41%) federal government and (23%) other provincial governments (CAPP, 2005).

The economic impact created by these oil sands directly benefits Fort McMurray through increased business, a growing population, and renown created through their role in the development of the oil sands. The benefits also extend far beyond Fort McMurray through Alberta and Canada to the rest of the world, in the form of labour imported to the oil sands, equipment manufactured abroad, oil supplied to international markets, and benchmarking innovative technologies such as in-situ bitumen extraction. Therefore building a sustainable development to support oil production is an issue that involves a vast array of stakeholders.

[Fort McMurray: A History](#)

Fort McMurray began as a small trading post in the 1780's and eventually became home to the North West Company, one of Canada's first trading companies (who eventually merged with The Hudson's Bay Company). It was in the 1790's, amongst these settled trading companies, that the Athabasca oil sands were first observed (Fort McMurray Historical Society, 2005). At that time, however, the immense potential of the valuable resources contained inside the oil sands was not realized. It was not until over one hundred years later that the first attempts to mine the precious bitumen from the oil sands were made, and an industry was created; one that would define the existence of Fort McMurray and how it is known today.

Clear from the outset of the first drilling attempts in the Athabasca area, Fort McMurray was there to service the oil sands industry; they became an oil town, with population thriving congruent to the booming oil sands projects. In 1901 the population of Fort McMurray (or McMurray at that time) was twenty-eight. After the first private drilling attempts by Alfred von Hammerstein the population grew to 312. The population of Fort McMurray continued to grow with the formation of the Alcan Oil Company and Absand Oils Ltd., to reach over 1100 by 1961. In 1967, arguably the defining moment in Fort McMurray history occurred with the opening of the Great Canadian Oil Sands Plant (later to become Suncor Inc.), which had the capability of producing 31 000 barrels per day. By 1971 the population grew to over 6700 and skyrocketed thereafter due to the immense labour needed for the operations of the Suncor plant and auxiliary constructions. After the opening of the Syncrude Ltd. Plant in 1978, with a capacity of 125 000 barrels per day, the population of Fort McMurray grew to over 30 000 by 1981(adapted from: Fort McMurray Historical Society, 2005). As of 2004 the population

of the Regional Municipality of Wood Buffalo (the amalgamation of Fort McMurray and the surrounding rural areas) is over 67 000 (Alberta Municipal Affairs, 2004) with oil sands production totaling over 1 million barrels per day (CAPP, 2004). By 2015 the population of Fort McMurray is projected to be over 100 000 with oil production equaling upwards of 2.7 million barrels per day. Fort McMurray has been a direct beneficiary of the growth in the oil sands, and the two presently carry out a symbiotic relationship. The oil sands rely on Fort McMurray, and their potential for growth relies solely on the ability of Fort McMurray to grow at an equivalent rate. (See appendix 1.1 for population graph)

Issues

Immense oil sands growth has brought about wealth and prosperity for the residents of Fort McMurray but at a much greater cost than one would think. Many issues have arisen from the increased development and population growth in the region. Growing concerns over pollution and the emission of greenhouse gases are a hot topic of debate with the Kyoto accord ratification. The Athabasca oil sands are a major contributor to CO₂ emissions in Canada, emitting about 26 million metric tons per year, a figure that is expected to grow substantially in the future (Lustgarten, 2005). Also the industry relies heavily on the use of natural gas, but as the cost of natural gas rises production becomes more and more unfeasible. In addition, water is used extensively in the retrieval of the bitumen but most is not reusable, creating a burden on the companies as to what to do with it when they are done (Lustgarten, 2005). The oil sands also lie on aboriginal land, creating animosity with the native populations, and creating difficulties

in acquiring new land for expansion. (See appendix 1.2 for figure outlining all issues affecting Fort McMurray)

While all of these issues are important in the development of a sustainable community in Fort McMurray, according to an economic impact study done by the Canadian Association of Petroleum Producers (CAPP, 2005), the 2 most important challenges to be met for the full potential of the oil sands to be realized deal with Fort McMurray's infrastructure development and the availability of skilled workers.

Infrastructure

Right now Fort McMurray lacks the underlying foundation needed to support a population that has grown approximately 56% in the last ten years, and is projected to grow another 50% in the next ten. Since 1996 there have been no additions to their infrastructure—an infrastructure that has struggled to provide the necessary framework needed to maintain quality of life (Blake, 2005). “Adequate infrastructure is key to quality of life in the Fort McMurray region, and [the] failure to improve infrastructure could delay oil sands projects and increase costs” (Suncor Inc., 2005).

According to Melissa Blake (2005), mayor of the Regional Municipality of Wood Buffalo, the high commuter population within Fort McMurray creates unruly bumper-to-bumper traffic during peak hours. “It is a situation that most other communities would not even consider having” (Blake, 2005). Vehicle reliance is dominant, but the current roadway system is far too underdeveloped to handle current loads. She identifies increasing capacity for transportation as being one important facet of the current infrastructure that needs improvement.

Specifically, “key issues relate to Highway 63 as it functions as an arterial road within Fort McMurray requiring intersection improvements, bridge enhancements, and capacity expansion” (Athabasca Regional Issues Working Group, 2005). Highway 63 is the lone highway that leads into Fort McMurray from the South. It also functions as the only connection to oil sands projects located North of Fort McMurray (See appendix 1.3 for attached map). The Highway poses safety concerns for those traveling into and out of Fort McMurray. Currently the lone Highway serves as a commuter road, truck route and a dangerous goods route mixing heavy industrial traffic with smaller commuter traffic across a narrow 4 lanes. An accident spilling dangerous goods across the Highway could have deadly consequences and may create a societal uproar much to the effect of the Wabamun Lake disaster. Also since there are no other transportation alternatives, if the Highway is compromised (reminiscent of the Mariana Lakes Fires), and no traffic is allowed through, Fort McMurray is, in essence, isolated (Blake, 2005). Planned development to accommodate a population that is projected to be upwards of 100 000 by 2015, according to the Regional Issues Working Group [RIWG] (2005), will cost upwards of \$200 million. Renovations to the highway to counteract safety concerns, including rest stops and additional passing lanes, could total another \$50 million.

Industrial issues are centered around the Highway 63 development as well. “Existing and planned oil sands activity that require connection to Highway 63 amount to a potential one million barrels a day new additional oil sands bitumen production” (RIWG, 2005). One of these projects is the planned \$5.9 billion upgrader by Suncor Inc., their third, will contribute about a half a million more barrels of oil per day. The industrial area is currently serviced by Canterra road—a road that is expected to be out of

commission as early as 2008. Development in the area (called the East Side Transportation Corridor) will cost \$150 million in immediate construction (RIWG, 2005) and require approximately \$2.6 billion (funded primarily through private debt) long-term capital needs (Athabasca Oil Sands Transportation Corp., 2004). As the current road is diminishing quickly, in order for oil sands expansion to happen, initiative must be taken to improve the highway in this area.

Money to subsidize the projects may be an issue for the municipality. The Alberta Government will fund a sizeable portion of planned development south, on Highway 63. According to the July 6 (2005) news release by the Government, \$530 million has been budgeted for the Highway 63 improvements that need to be done. The schedule for the improvements shows all Highway 63 improvements to be finished by 2011 (See appendix 1.4 for complete schedule). While the time delay is long, it is work that needs to be done, and eventually, traffic will flow better for commuters traveling back and forth from Edmonton to Fort McMurray. What has yet to be seen is funding for any of the major development plans in the East Corridor. In an article by Paula Simons (2005), Mayor Blake says that the municipality has no more capacity for debt, as they have already made plans to add capacity to their sewage system. As they already have the maximum amount of debt allowed by the Provincial Government for any municipality, the funding for major expansions eastward to the transportation system must come from other sources. "If the municipality doesn't get that help, she says, it simply can't handle any more oil development" (Simons, 2005). With the proposed third upgrader by Suncor, oil development does not seem to heed these warnings.

Area residents have made other transportation frustrations evident. In a dialogue with Fort McMurray residents, led by Alberta Ecotrust (2004), planning and development, centered around previous transportation issues, had not been based on “smart growth or sustainable development principles”. According to dialogue participants, transportation plans for the future need to address public transportation (motivation to use public transportation, bus routes, and shuttle buses for all areas), efficient car-pooling systems, and enforced parking control. The biggest issue pertaining to transportation, according to Fort McMurray resident Karen Welk (2005) is traffic tie-ups in connection with the double bridges crossing over the Athabasca River. “If there is a stalled car, accident, [or] traffic light problem... What should be a five minute drive across can turn into a wait of an hour or more” (Welk, 2005).

Steps to improve public transportation have been made by many of the oil sands companies themselves. Suncor provides accommodations for its contractors that are close to the plant, avoiding adding more congestion to the roads. Also, shuttle services are provided to employees living in Fort McMurray, to get to work; a practice that is mirrored by most other companies that operate outside of Fort McMurray. Suncor provides parking for bicycles, car pool parking, and fleet cars available for employee use (www.suncor.ca, Nov. 20, 2005). All these services are corporate sustainable development practices put in place and designed to combat rising traffic volumes in the Fort McMurray area. Fort McMurray also has a public transportation system, although many people do not utilize it. According to resident Karen Welk, buses are not used partly because of the layout of the city. The city is very spread out and buses can be late by hours because of traffic. The RIWG (2005), in its plea for funding to the Provincial

Government, also identifies the double bridges over the Athabasca River as needing attention, as they are currently the only connection between Fort McMurray and the oil sands projects. They estimate that the best approach would be to add new bridges to increase traffic flow across the river, adding another connection to the oil sands projects. This approach would decrease traffic congestion considerably, but may entice more people to commute to work by themselves.

Along with major infrastructure developments needed in the transportation sector, Mayor Blake (2005) identifies housing as the most significant challenge Fort McMurray is facing. Fort McMurray has reached a critical point where renters outnumber rental units and homebuyers outnumber properties (Tetley, 2005). High oil patch wages and tight supply of homes have allowed rental rates to skyrocket. “It is nothing to be paying \$1,000.00 or more a month for a very small, one bedroom apartment” (Welk, 2005). The average home costs around \$350 000 and people have even resorted to renting out garages and garden sheds with no water or electricity, for over \$200 a month (Tetley, 2005). The planned expansion of the oil sands companies, like Suncor’s third upgrader (previously discussed)—creating almost 4000 construction jobs and about 300 permanent positions (Severs, 2005), will create an even greater demand for housing. But with a vacancy rate of almost zero (Lustgarten, 2005), and a forecast of approximately 6000 new homes needed in the next three years (“Fort McMurray Needs Help, 2005), Fort McMurray can only handle so much. (See appendix 1.5 for housing demand graph)

Housing problems are not necessarily seen by all residents of Fort McMurray. High living costs are easier to handle for those working in the higher paying jobs directly for the oil sands companies. But for every one job in the oil sands there are three spin-off

jobs created to service them (Blake, 2005)—either in fast food, childcare services, hospital staff, and even bus drivers, among many. These lower paying jobs do not provide workers with enough income to afford the high cost of living. To qualify for low income housing, of which there is little available in the first place, a person can even make as much as \$75 000 (“Fort McMurray Needs Help”, 2005).

The short supply of low-income housing has become a major issue for Fort McMurray residents. One non-profit organization is creating some answers to the low-income housing shortage. The Wood Buffalo Housing and Development Corporation “puts together projects for those who cannot afford housing provided in the private sector marketplace” (RIWG, 2005). They created 120 low-income housing units, with land provided free of charge by the Provincial Government. Rent subsidies were provided by Canada Mortgage and Housing Corporation equal to the difference between market price and what the tenants actually paid—30% of monthly income (CMHC, 1996-2005). The program has fostered support from the Provincial Government and is increasing in its attempts to provide housing for low-income families. According to Gilles Huizinga, head of the Canada Mortgage and Housing Corporation, though, there are still approximately “3000 families [that] are either “under-housed” or paying “unreasonable” portions of their income for housing” (Rubenstein, 2003).

While low-income housing development has been slow, it is starting to pick up. At the same time though, the area of Fort McMurray is seeing less and less land available for development. With short supply of land, a competition emerges between low income housing developers and market developers over its use. Economists would argue that there is no incentive for land developers to build more affordable housing with prices

already so high (“Fort McMurray Needs Help”, 2005). But social activists insist that land is needed for lower income families.

In reaction to the short supply of land, the Provincial Government, in a July 6 (2005) news release, announced a plan to release nearly 1000 acres of crown land available for, among other things, housing development. An area of interest to Mayor Blake and the Regional Municipality of Wood Buffalo is a section named Timberlea. If housing projects are to be developed there, according to Blake (2005), the municipality must address concerns of the provincial government pertaining to over-development of the area. In conjunction with the provincial government a staged release of land is planned. This will entail development of smaller parcels of land at a time in order to stabilize the development process. By matching supply with demand, land and housing will come as required (Blake, 2005) to the residents of Fort McMurray (Government of Alberta, 2005). What this plan does not entail is to what extent low-income housing will be developed. The Government of Alberta is selling off the parcels of land by public requests for proposals and will likely be sold to the highest bidders. This could potentially mean that development for low income families, who arguably are in the highest of demand, may be left out, hindering progress made so far, and adding to instability in the area.

While the 1000 acres of land would provide well-needed relief to the housing constraints, use of the land is not without competition. Land space is needed for the development of roads, continuing care facilities, a new hospital, leisure centers, park space, and a new RCMP facility (RIWG, 2005) to name a few. Most importantly though, much of the land released by the Alberta Government is to address water and waste water

treatment needs. Approximately 60 000 residents are using a sewage system that is designed to hold capacity for 50 000. According to Mayor Blake, a new sewage system must be implemented in order for housing development to take place (Simons, 2005). The present sewage system is already operating over capacity and any expansion could create critical problems. Without sewage system improvements there is no place for the thousands of new workers to live (Simons, 2005), halting oil sands expansion and production.

To keep pace, Fort McMurray is planning to build a \$95 million wastewater treatment plant. While the land has been released by the government, under the province's new infrastructure grants, Fort McMurray stands to receive only \$60 million over 5 years to fund the project (Thomson, 2005). Since infrastructure construction money is a municipal affairs matter (Thomson, 2005), the one time grant is money that will be well received, but is not enough. If sewage issues are holding back housing construction, money should be diverted there first.

Workforce

To put the growth into perspective, for the city of Calgary to grow as fast as Fort McMurray, 500 000 rural residents would have to move there in a period of 5 years (Thomson, 2005). This would clearly put a strain on any city's infrastructure. To add to problems stemming from such monumental population growth, the city of Fort McMurray is in the midst of a crisis in the workforce.

The Alberta Economic Development Authority (2004) has indicated that there is a perceived labour shortage in Alberta. Because of increased activity there is a "high demand for labour in the Fort McMurray area [that] has led to dilution of the workforce

and the use of lower-skilled workers, and has hurt productivity” (Alberta Economic Development Authority, 2004). With the use of lower-skilled workers there is a tendency for turnover to be much higher. In Fort McMurray that is the case, as the turnover rate in the oil sands is much higher than the rest of Alberta.

Shell Canada is recruiting up to 700 employees a year to cover their turnover rate (Lustgarten, 2005). Also, Suncor Inc. is running a “recruiting machine”, looking for 500 employees a year (Lustgarten, 2005) just to cover their employees that are retiring or quitting (or in some cases just not showing up anymore). These figures do not take into account the planned expansion labour needs. All together, for each of the established oil companies in the Fort McMurray area to complete their planned expansions, over 30 000 employees would be needed (Lustgarten, 2005). If you take into account the fact that for every one oil sands job created, three jobs are created in the community (Mayor Blake, 2005), that would mean another 120 000 jobs in the future. (See appendix 1.6 for labour demand graph)

To combat the skilled labour shortage and the upcoming need for workers, companies have been looking globally. Shell Canada is looking as far as South America, Venezuela, Indonesia and South Africa for employees (Lustgarten, 2005). They are targeting foreign workers with petroleum and chemical engineering skills, specifically those with prior experience, to avoid using lower-skilled workers. Venezuelan and Colombian workers have recently become available because of political instability in their respective countries. This strategy is in part effective because of the new Temporary Foreign Workers Program set forth by the Provincial and Federal Governments. It allows companies to recruit outside of Canada for employees as long as they can demonstrate

there are no adverse affects on employment and career opportunities for Canadians, and that it will significantly benefit all Canadians. Oil companies have no problem showing the benefits to Canada through temporary foreign workers. Oil sands revenue alone will contribute at least \$5 billion per year for the next ten years to the Federal and Provincial governments through royalties and taxes alone (Blake, 2005). What the oil companies have had a tough time with though is the ability to prove that they are experiencing a shortage of skilled labour.

Alberta does not have an oil sands specific labour supply and demand model that accurately measures current and future labour demand relative to the emerging supply of labour (Alberta Economic Development Authority, 2004). One current study that is trying to achieve this is the Construction Workforce Supply and Demand Forecast 2004-2008 (AEDA, 2004) (see appendix 1.8 for table summarizing sample results). This report, although strong, is not oil sands specific and so far there is no definitive data to put together very strong cases that support labour shortages in Alberta. Although supply/demand models have not been needed to convince the government of the need for foreign workers so far, future arguments may need strong data to contend with labour unions within the province—who argue there is no labour shortage.

An article published by the Alberta Federation of Labour speaks out against oil sands companies' use of foreign workers. They argue that by the Albert Government's own definition, labour shortages are not critical until unemployment drops below 3.5%, and Alberta's unemployment rates in the construction industry hover around 6%. They have taken this stance saying that foreign workers are there to get around paying employees better salaries and benefits. They recommend that employment needs to be

found within aboriginal communities and other provinces in Canada (AFL website, Nov. 11, 2003).

Some companies agree and have narrowed their search within Canada. Ledcor, who has undergone projects in the Fort McMurray area, regularly operates recruitment drives in Atlantic Canada. “The rumors that a third of the population or more is from the Maritimes are very true. Many had come as a temporary means of employment but are still here and have encouraged other family members to join them” (Welk, 2005). Suncor actively recruits at selected universities across Canada, looking for the most qualified candidates. Suncor also contributes annual funds to Fort McMurray’s own Keyano that is designed for research and work experience that directly relates to oil sands issues (Suncor Inc., 2005). The Alberta Economic Development Authority (2004) reports that Alberta Energy has initiated a movement to introduce energy literacy into the Alberta education curriculum, specifically in grades seven to twelve. This program, called Inside Education will introduce the topic of Alberta’s oil and gas industry at a younger age, trying to instill interest in high school students.

These strategies are all designed to solve the workforce issues that are seen by the oil sands companies. But the city of Fort McMurray is seeing a labour crisis as well. Even with over 60 000 residents, area businesses are not able to recruit and maintain a skilled workforce. (See appendix 1.9 for photo depicting labour shortage)

“If you go to any business in town you will be told the same story. “We just can’t keep staff!” McDonald’s has a sign that says, “We are always hiring”. At one time most of the jobs (postal delivery – pumping gas, etc.) in town, were taken by women and the men were out at the plants. Now a lot of the jobs in town are done by students and both men and women are working out at the plants. Most families have both parents working and daycare continues to be an issue for most people although many outlets are available. At one time you couldn’t get a job at the post office or school

boards. Now even the post office has a sign out front soliciting employees”

-Resident Karen Welk (2005) (full account included in appendix)

Labour problems can be expected in high turnover industries like fast food, but Fort McMurray is seeing a shortage of workers in childcare services, health care, and education as well. Fort McMurray’s childcare industry is experiencing the worst labour shortages in the city. Currently there are 12 000 kids in the area under twelve years old, and only 380 spaces for daycare and after school care (Poitras, 2005). According to Sandy Dickenson, chairwoman of the early childhood development program at Keyano College, low wages are the primary reason for the lack of staff in the industry (Poitras, 2005). One of the Provincial government’s plans is to raise the wage of all childcare workers in the province in their new five-point plan. Wages are planned to increase by \$2-\$3 by the end of the year (Poitras, 2005). Other programs are helping to increase labour supply to these professions. A major topic at the most recent University of Alberta Faculty of Education, Education Career Conference, was the need for childcare specialists in the Fort McMurray region. In this conference the major barrier to those looking at coming to Fort McMurray was the high living expenses for housing (University of Alberta, 2004). Also, there are transfer courses through the Universities of Calgary and Alberta, as well as Lethbridge University that allow nurses and other health care specialists to work on their courses at home, with their families (Welk, 2005). This program allows individuals to remain in Fort McMurray, thus upon finishing, adding more people to the skilled workforce that is lacking right now.

Oil sands companies and local Fort McMurray businesses believe that workforce issues can be traced back to problems in infrastructure. Neil Camarta, oil sands chief of

Shell Canada Ltd., says workers will not come if they cannot have decent homes, schools, hospitals, and facilities. Camarta believes the biggest barrier to growth for Shell's \$4 billion expansion plan is going to be people; more specifically keeping people—and keeping people happy (Jaremko, 2005). This burden lies heavily on the back of Fort McMurray, as industry relies on the municipality for housing their workers. Basically, the common problem, for both the oil sands industry and Fort McMurray, lies in the ability of the latter to provide an infrastructure enabling residents to maintain an adequate quality of life.

Conclusion

In conclusion, based on the evidence provided, there are key infrastructure barriers that need to be hurdled to support the growing population. Fort McMurray needs to increase the number of suitable houses available to all residents. This includes adding enough low-income housing to support the needs of low wage earners and their families. For this to happen, a suitable water and wastewater treatment plant has to be developed before adding any new major housing expansions. Fort McMurray needs to improve arterial roadways for industrial traffic to flow. Once this is done, transportation systems can be developed to ensure safety and reduce traffic problems. Constructing a suitable infrastructure is the first step in building a sustainable development through which industry can support and maintain a sizeable workforce, enabling them to carry on production in the oil sands for the long-term.

Fort McMurray must make the necessary changes to their infrastructure to build a sustainable development and support a growing workforce; this much is clear. However, the road to mending these present problems is not so clear. Land availability, resource

availability, and time pressures all weigh heavily on the decisions, and impact many stakeholders. For this reason, based on the evidence presented, some recommendations can be made.

Recommendations

First, a balance must be struck between the land available for development and the time pressure placed on Fort McMurray by the oil companies. Expansion plans have been made by each company that will bring in thousands of workers. In order for the city to handle the increases in population that they will see in the near future, they need to focus on building a water and waste water treatment plant. Even though houses, recreation facilities, road improvements, educational facilities, and a new RCMP office are important, without an appropriate sewage system, development will not be sustained. The plant will use up much of the government-released land and take away from future development, which has already been planned for housing. But since the plants lead-time for construction could be as much as four years (Lustgarten, 2005), plans need to be made now. Major improvements need to be made to Highway 63 as well. Seeing as all industrial traffic is going to be routed to Fort McMurray for the planned expansions through Highway 63, efforts need to be made to make the highway safe for all traffic. The Provincial Government's schedule for expansion of Highway 63 (see appendix 1.4 for schedule) will be quick and efficient in this task south of Fort McMurray, but more effort needs to be put into the East Corridor to fix the ailing Canterra Road. This will be important because winter weather could put Canterra Road out of commission with the heavy trucks ripping it apart, stalling production of the oil sands.

Second, there are major funding needs with all the infrastructure plans set forth by the Regional Issues Working Group (2005). Since the municipality is already in as much debt as is allowed, funding needs to come from other sources. So far, all petitions for funding have been to the Alberta and Federal Governments through various community interest groups, like the RIWG. The government has answered with major projects to Highway 63 and connecting roads, but much more money is needed to fund the exhausting list of infrastructure needs. For this money the municipality needs to look for help from the oil sands companies. Suncor, for instance, “is a leading participant in the Regional Issues Working Group” (Suncor Inc., 2005) who are petitioning the government for money, but has only contributed marginal amounts of money (\$7 million in 2004) to community projects itself. With much of their business relying on the city’s infrastructure it seems natural for them to invest a substantial sum of money to help keep it operational. With more help from the industry, Fort McMurray may see more government involvement. If oil sands companies invest in their future through infrastructure spending, it may act as a signal to the government who may recognize that more money will be needed to sustain the growth in the area. A ratio of 25% industry investment and 75% government investment in the \$1.2 billion identified by the RIWG (2005) could be foreseeable, pending industry initiates the spending.

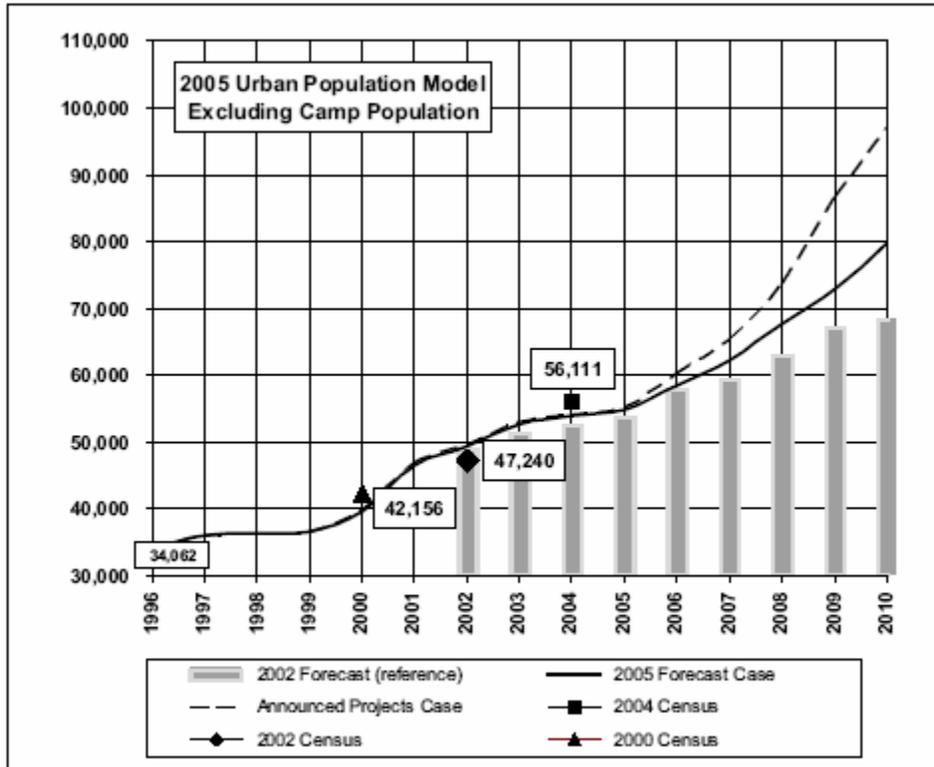
Third, government involvement in the workforce has led to the Temporary Foreign Workers Program. This program offers short-term answers to the labour crisis being seen in Fort McMurray. The program however, fails to offer any long-term benefits. According to the Alberta Federation of Labour (2005) the program does not lead to eventual citizenship for these workers. As they are being sent back to their home

countries when the jobs are finished, labour shortages resume. The Alberta government needs to focus on creating long-term solvency to these issues. One area that should be focused on is Alberta Energy's Inside Education Program. Educating young students about Alberta's growing oil and gas industry will spark interest in joining the workforce. This could be supplemented with a strong apprenticeship program for these students. Such a program can be attractive for a young person who does not plan on continuing on in post secondary. An apprenticeship that starts in a student's grade ten year could lead them to a journeyman ticket upon leaving school, thus entering the workforce with the skills necessary to work in the oil sands. As the working population is presently getting older, it will be of significance for companies to educate young people about the oil sands industry in order to maintain the skilled workforce needed to continue production.

Overall, it is clear that many parties will be impacted by future developments. It is necessary for all these stakeholders to communicate and come to common terms as to what must be done. A committee made up of Provincial and Federal Government officials, representatives from the Regional Municipality of Wood Buffalo, oil sands industry representatives from each major established company, and community development experts must have a roundtable discussion in which every issue is presented and debated. This will ensure long-term sustainability as decisions made will be in the best interest of all parties—with all parties knowing key performance measures, market indicators, and external factors involved in maintaining development.

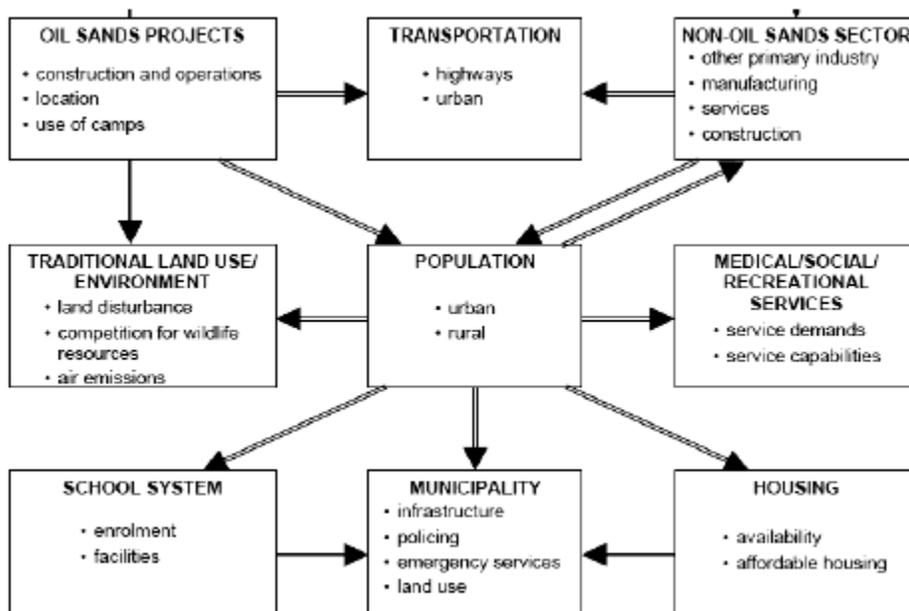
Appendix

1.1



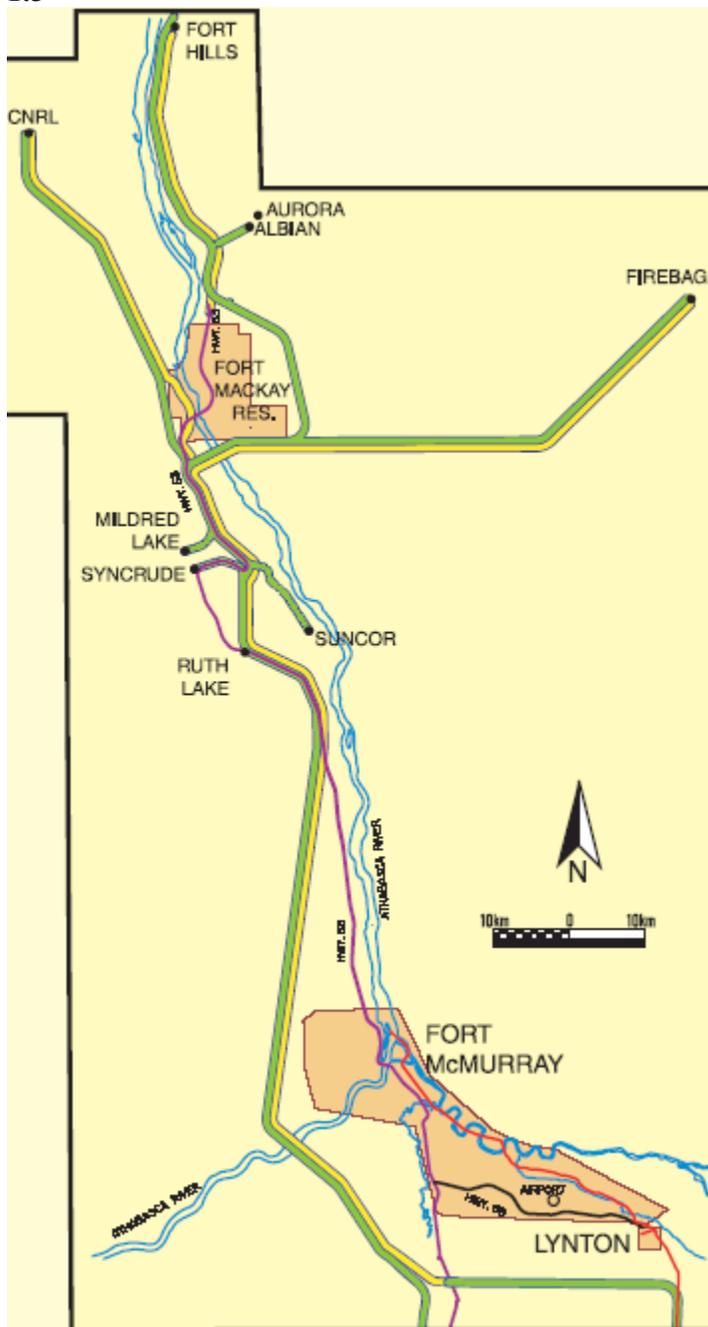
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1.2



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1.4

Fort McMurray road construction schedule

Fort McMurray... On May 3, 2005, the Government of Alberta announced plans to spend \$530 million to improve highways in the Wood Buffalo region over 10 years. With an additional \$200 million from the 2004-05 surplus, that plan has been accelerated significantly, with the expectation that all projects should be complete by 2011.

Expected by 2007

- Paving of the remaining 71 km of Highway 881 between Lac La Biche and Anzac.
- Replacement of the southbound Athabasca River Bridge on Highway 63 in Fort McMurray.
- Addition of 25 km of passing lanes on Highway 63 from its junction with Highway 55 to its junction with Highway 881.
- Construction of rest areas/commercial vehicle staging areas on Highway 63 near the junction with Highway 881, on Highway 63 near Crow Lake Provincial Park, and on Highway 881 near Conklin.
- Rehabilitation and overlay projects on various points of Highway 63.

Expected by 2008

- Twinning of approximately 28 km of Highway 63 from the Suncor Access north to Fort McKay.
- Twinning of 18 km of Highway 63 from the junction of Highway 69 south to the junction with Highway 881.
- Construction of a new interchange on Highway 63 in Fort McMurray at Thickwood Boulevard.

Expected by 2009

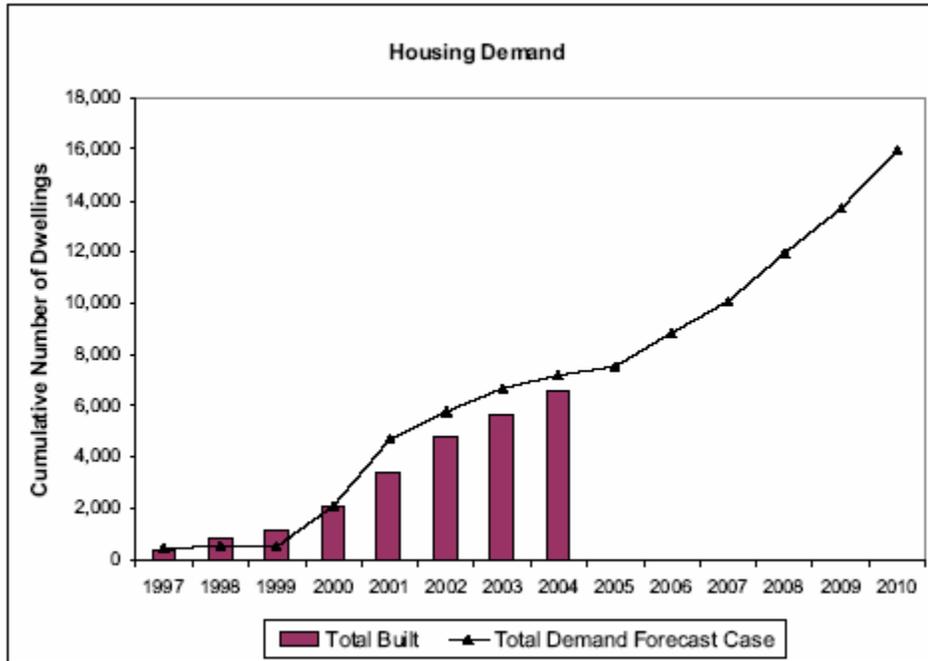
- First phase of six-laning various points on Highway 63 within Fort McMurray.

Expected by 2010 and/or 2011

- Construction of new interchanges on Highway 63 in Fort McMurray at Morrison Street, Beacon Hill Drive, and Confederation Way. All three interchanges will be completed by or before 2011.

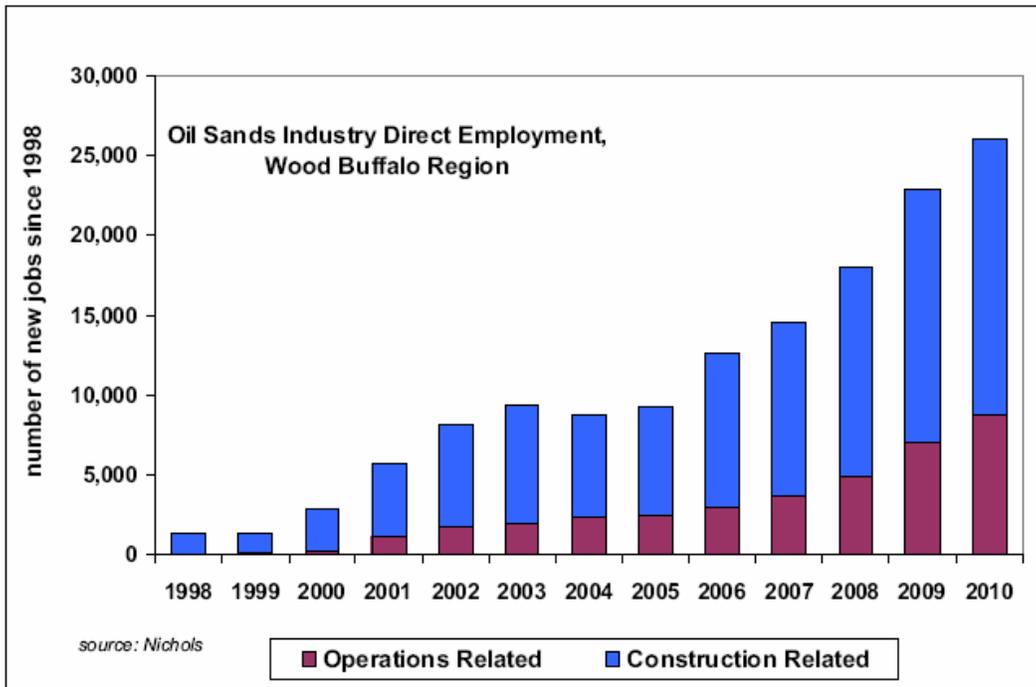
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1.7

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Trades Requirements for Major Industrial Projects (Thousands of Workers)

	2004	2005	2006	2007	2008
Boilermakers	0.4	0.6	0.5	0.3	0.1
Bricklayers	0.1	0.1	0.1	0.1	0.0
Carpenters	1.1	1.5	1.3	1.0	0.8
Cement Mason	0.2	0.2	0.2	0.1	0.1
Drilling Occupation	0.4	0.3	0.3	0.2	0.2
Electricians	1.1	2.6	3.2	2.3	1.6
Insulators	0.8	1.0	1.0	0.8	0.8
Iron Workers	1.4	1.7	1.7	1.3	1.1
Labourers	1.5	1.7	1.6	1.4	1.1
Millwrights	0.5	0.4	0.4	0.3	0.1
Operating Engineers	1.6	1.9	1.9	1.6	1.2
Other Occupations	1.7	1.9	1.9	1.7	1.1
Plumbers - Pipefitters	2.4	3.2	3.3	3.1	2.4
Sheet Metal Workers	1.0	1.2	1.1	0.9	0.6
Supervisor and Support	1.5	1.6	1.6	1.4	1.0
Welders	0.7	1.0	0.8	0.6	0.3
TOTAL TRADES	16.6	20.8	21.1	17.1	12.5

Construction Workforce Supply Demand Forecast

Athabasca Regional Issues Working Group. (2005, March). Wood Buffalo business case 2005: A business case for government investment in the Wood Buffalo Region's infrastructure. Retrieved November 15, 2005

1.8



Karen Welk, 2005

Living In Fort McMurray: A Resident's Perspective

Viewpoint From An Individual Living, As Part Of A Family, In Fort McMurray From 1976 To The Present – 2005

Since moving to Fort McMurray in 1976 we have seen a constant and rapid period of growth and changes.

Syncrude Canada was being built at that time, opening in 1977, so there was large, temporary and unstable rise and fall to the population, as construction workers came and went on a regular basis. At that time, trailer courts with housing that was affordable and could be developed quickly, was the norm. Apartment accommodation was hard to come by and complexes were just not being developed. Syncrude itself got involved in housing for it's employees and set up a program of housing development, maintenance and mortgaging to try and offset the high cost for it's employees. Some of these were single family homes and some four-plexes or large condo-type housing. The entire Abasand Residential district was initially built to accommodate Syncrude employees. These houses all eventually came available on the open market and caused a major change to the housing market for a period of time.

The feedback that you would get from new people arriving in Fort McMurray, was that they were just here for "a couple of years". After living here for almost 30 years, we find that most of those people are still here, and now have children living here who are employed generally at one of the two oil sand plants or elsewhere in the city. They talk of retiring and leaving, but that remains to be seen.

The fact that the oil sand plants have become involved in the housing industry has probably had some effect on the general cost of housing in the city. It has certainly enabled people to buy homes that probably would not have otherwise. In order to "attract" people to the area though, it has become necessary to assist them in some way. In 1976 we had people camped in campgrounds, people's backyards, and even "out in the bush" and that scenario is happening again the past few years, with the demand for housing being greater than what was available. The other problem is that for some people, the cost, is far more than they can afford or are willing to. It is nothing to be paying \$1,000.00 or more a month for a very small, one bedroom apartment. There are always people looking for rooms to rent in people's homes and it is an additional source of income for many people, here.

We started out in an apartment in the downtown area of the city. We were there for three years and then purchased a mobile home in a "trailer park" area of the city and sold it three years later, selling it for more than we had paid for it, with little changes being done. We then purchased a new home in 1980 in one of the newer developing residential areas and have lived there until the present. The value of our home has more than doubled in that time.

There was a housing slump at one point over the past 30 years. Another large oil sand development that was underway, OSLO, did not happen and everything was in limbo. Large areas of land that had been cleared and were ready for development lay vacant and unchanged. The housing industry is now booming and huge apartment complexes, single family homes, trailer areas, etc. appear continually and there appears no end in sight. Zero-lot housing is now the norm, despite being surrounded by land. This means limited or no sidewalks, limited or no on street parking, no back lanes, limited yard and storage space, homes without garages and no room for expansion. There is the start of a retiring population that are leaving or talking of leaving which will put a lot of homes on the market so changes will probably occur again in the next 10 years or so.

Businesses opened and closed on a regular basis. Mostly small businesses. It was not easy to attract larger franchises to the area. When McDonald's came to the city around 1978/79 that was a very big deal. Up until then it had only been A & W and Boston Pizza. At one time if you saw something you wanted to buy, you purchased it immediately or else it would be gone and no more would be available. It was not unusual to be unable to purchase a Father's Day card or replacement Christmas tree bulbs because none were available. Something as simple as white socks were sometimes very hard to find. A lot of purchases were made through the Sears catalogue. Their line-ups for pickup at Christmas time, were phenomenal. Now there is a Canadian Tire, Walmart, Sportchek, Rona, Superstore, Earls, etc. People used to make regular shopping trips to Edmonton, no matter how often they were appealed to, to "shop locally". Now that selection is so much better, they are more inclined to make their purchases here, but personal "out of Fort McMurray" shopping excursions are still planned by individuals or their employers.

Fort McMurray has always been known as a city of commuters. A huge camp area is filled to capacity most times with workers whose families live elsewhere. Weekends and days off are spent travelling home. This still continues for various reasons even though many families have moved here to eliminate this separation. The rumours that a third of the population or more is from the Maritimes is very true. Many had come as a temporary means of employment but are still here and have encouraged other family members to join them. Some have left but come back.

There was always a mass exodus leaving Fort McMurray on a Friday afternoon, heading south down Highway 63 and returning on Sunday afternoon. Many people drove, some carpooling in small groups. A lot of people were fortunate enough to fly or take the bus if it was arranged by their employer. There was only one bus company Greyhound for some time and then eventually Red Arrow was added. It was nothing to see a plant worker getting off the bus with luggage, and a TV, heading out or returning to camp.

Everyone has some sort of story to tell about the five hours of travelling south to "civilization" and north to come back, on Highway 63. Near misses with moose, other vehicles, icy roads, snowstorms, forest fires, car problems and long stretches of nothing but trees. Being stranded for hours, or overnight while busses or other vehicles were repaired or replaced. Additions such as passing lanes and wider shoulders has decreased

some of the danger involved but improvements could always be made. Any driving trip to Edmonton usually involves an extra day tacked on each end just for the travelling.

At one time you could always tell that it was Friday afternoon because “traffic” would be a problem downtown. You would have difficulty finding a parking spot or may have to wait to turn left at an intersection. Now everyday and at any time of day it is “Friday afternoon”. It can take you most of a lunch hour to get down the main street, do a quick errand and get back to work. It is common to see intersections blocked by more vehicles than can be handled by the light changes. A large majority of the vehicles on the city streets are large work related vehicles, (trucks and vans), etc.

It is normal to stand in line to do just about anything. Forty five minutes in line at the bank, grocery store, department store is nothing, at certain times of day. The “drive through line-ups” at Tim Horton’s are now also legendary, causing driving lanes on the streets to become bogged down. Going to the hospital to a scheduled appointment, patient visiting, or emergency or outpatient usually means, obtaining your metered parking ticket, driving around the lot several times to discover there is nothing left and then heading for the closest residential street to find a spot and walking back.

The biggest issue that seems to concern people at present are traffic tie-ups in connection with the double bridges crossing over the Athabasca River. These connect the downtown area to the oil sand plants and one of the largest residential areas. At present this is the only way across the river. If there is a stalled car, accident, traffic light problem, etc. and particularly if it is at a peak period when workers are changing shifts, the backlog of vehicles is horrendous. What should be a five minute drive across can turn into a wait of an hour or more. This causes major inconvenience for regular traffic and emergency vehicles. All large oversize vehicles at present must travel this same route. There is talk of a “ring type” road and another bridge that would enable large trucks and vehicles headed for the oil sand plants to bypass the downtown area and regular traffic. There has also been talk of extending a railroad to the plants for transportation. This was something that was supposed to happen back in the 1920’s but never did. The railroad was eventually taken out through the city and stops just south of it, near the airport.

A bussing system has always been in place to transport workers to and from work at the oil sand plants. There are still many personal vehicles making this journey as well but in general people use the Diversified busses that are available. Many private contractors work at the plants also in some capacity and make some sort of carpooling or taxi service available to their employees, to cut down on the need for parking and to make it safer for their employees travelling back and forth to work. It is still often bumper to bumper traffic at peak times for the journey from the northern mining areas south to the city limits and vice versa.

Local schools find it increasingly difficult to gauge what each new school year will involve. The public school board, for one, has continued to see large and unpredictable increases to student numbers each fall, right up until the first day of school and throughout the year. The need for teachers and housing for them was a major concern in

particular at the start of the 2005/06 school year. The high schools in the city have had excellent results with respect to student achievement and the local college offers many courses that lead students into chosen careers, outside the city or at the oil sand plants, as many choose to remain here. There is also a nursing program and university transfer courses that help get them started and enable them to do so at home, with family, for the start of their education.

If you go to any business in town you will be told the same story. “We just can’t keep staff!” McDonald’s has a sign that says, “We are always hiring”. At one time most of the jobs (postal delivery – pumping gas, etc.) in town, were taken by women and the men were out at the plants. Now a lot of the jobs in town are done by students and both men and women are working out at the plants. Most families have both parents working and daycare continues to be an issue for most people although many outlets are available. At one time you couldn’t get a job at the post office or school boards. Now even the post office has a sign out front soliciting employees.

Even though we are a prosperous community we are also troubled by crime and homeless individuals as all cities are. This continues to increase as the population increases. We are generally a “shift working” city as well which creates an unusual environment for working, socializing, and family relationships. Most have adapted, many have not.

People continually complain about the “high cost” of everything but if you’ve lived here long enough you no longer remember what it was like elsewhere, and just accept that this is the way things are. Most teenagers drive some sort of vehicle and not necessarily one they have paid for themselves. We have a public transportation system, which is utilized, but partially because of the way our city is spread out, people mostly travel in their own vehicles. This is despite the shortage of parking and the cost of gasoline.

In general, everything you need is available in some capacity in Fort McMurray. Excellent cultural experiences are all around. Local theatre, sports, music, art, and other community events happen on a continual basis. If you ask most people they will say that they have had opportunities here that they would not have had elsewhere. For those living here without extended family, there have been friendships formed, that will last a lifetime. This is “home” for those who have made the effort to make it so. It still has the feel of a “boomtown” though, which can be exciting and exhausting at the same time.

Karen Welk
Fort McMurray, Alberta
November 21, 2005

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