HOLLINGER BASELINE STUDIES

SOCIO-ECONOMIC REPORT

Submitted to:

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Socio-Economic Baseline Study

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1.0 INTRODUCTION

Goldcorp Canada Ltd. (Goldcorp) is conducting pre-feasibility level studies to determine the potential for re-developing the former Hollinger and McIntyre underground gold mines as an open pit mine. The former Hollinger Mine is located immediately adjacent to downtown Timmins and the urban area of Schumacher, on the south side of Highway 101 (**Figure 1**). The McIntyre Mine is located directly north and east of the Hollinger Mine site. Ore from the open pit mine would be processed at the existing Dome mill, located approximately 5 km east of the Hollinger Mine site. Considerable residual gold resources have been identified at the Hollinger site, and development of the site would have the added advantage of removing a number of known mine hazards (open stopes, mini pits, and near surface underground workings) that are associated with past activities at the site.

This document deals with the socio-economic setting, and is one of a series of pre-feasibility baseline reports prepared to describe the current environmental conditions, in part to assist with obtaining future environmental approvals to re-open the Hollinger Mine, should this course be pursued; as well as to assist with project planning and to provide further information for Closure planning.

This introduction is included in each document, such that the reports can be read independent of one another. Baseline reports are being prepared to describe the following environmental aspects:

- Air Quality;
- Noise;
- Vibration;
- Hydrology;
- Hydrogeology;
- Geotechnical Conditions (and Little Pearl Tailings Facility);
- Terrestrial Environment;
- Aquatic Environment;
- Cultural Heritage Environment;
- Socio-Economic Setting;
- Visual Environment; and,
- Traffic Conditions.

The reports are being prepared by AMEC Earth & Environmental, a Division of AMEC Americas Limited (AMEC), with the exception of the baseline reports related to noise and vibration (Valcoustics Canada Ltd.), the cultural heritage environment (Woodland Heritage Services Limited), the socio-economic setting and visual environment (planningAlliance), and traffic (B.H. Martin Consultants Ltd.). The latter four entities are working under the direction of AMEC to ensure an appropriate level of study integration.

1.1 SITE HISTORY

The Hollinger gold deposit was discovered in 1909 by Benny Hollinger and Alex Gillies, as one of the three original major Timmins properties, along with that of the Dome and McIntyre Mines. The main Hollinger Mine operated from 1910 to 1968, during which time 65,778,234 tons of gold ore were milled, yielding 19,327,691 ounces of gold (equivalent to 15.4 billion dollars at today's gold price of $800 US), at an overall grade of 0.29 ounces per ton – one of the richest mines in the western hemisphere. Further mining took place in the 1970s and 1980s, with numerous small open pit mines through the near surface crown pillars; along with additional underground mining during the mid 1980s, accessed from the adjacent McIntyre workings. Approximately 182,000 additional ounces were mined in this fashion. The Hollinger, McIntyre and Coniaurum underground mine workings are all interconnected, along with those of a number of other smaller mines in the area. Considerable gold resources are estimated to remain at the Hollinger site, which can be accessed by open pit mining; hence the current prefeasibility studies to evaluate remaining Hollinger resources, and project planning requirements.

Historical underground workings at the Hollinger site were developed to a depth of 1,662 m (5,450 ft), and included almost 600 km (373 miles) of shafts and tunnels (Ferguson 1968 and Wright 1979). Surface facilities included seven vertical shafts and their associated headframes and hoists; a processing plant (mill); maintenance, warehouse and other support buildings; an office complex; staff housing; an above grade tailings deposition area; and other related features. Remaining Hollinger facilities include: the Main Shaft headframe, the No. 26 Shaft headframe, the Central Shaft concrete foundations, the main office building, portions of the former mill building, and the tailings deposition area. Water pumped from the Hollinger underground workings was discharged to Pearl Lake (Golder Associates 1997).

Because of their connection to the McIntyre Mine, the Hollinger underground workings were kept dry until 1988, when the McIntyre Mine was shut down. Upper mine levels continue to be dewatered to the present day, to an approximate level of 25 m (80 ft) below surface, to help manage near surface groundwater levels in the area. Dewatering occurs by way of underground pumping from the nearby McIntyre No. 11 headframe, with water discharge to the Little Pearl Tailings Facility. The primary Hollinger Mine site remains fenced for public safety because of hazards associated with open stopes, mini-pits and potentially unstable crown pillars.

The McIntyre Mine operated from 1911 to 1988, and during that time 37,529,961 tons of ore were mined, yielding 10,745,361 ounces of gold (valued at 8.6 billion dollars at today's gold price of $800 per ounce). The McIntyre Mine underground workings are connected to those of the Hollinger and Coniaurum Mines as described above. The main McIntyre structures have been removed as part of mine closure operations, but a number of facilities still remain. These include the No. 11 headframe constructed in 1927, the stamp mill ruins, the executive lodge, and the tailings deposition area. The No. 11 headframe has been designated as a property of historical significance in accordance with provisions of the *Ontario Heritage Act*. Mine water from the Hollinger, McIntyre and Coniaurum Mines is managed through the McIntyre No. 11 shaft, as described above.

1.2 PROJECT OVERVIEW

Goldcorp is considering re-development of the former Hollinger and McIntyre underground gold mines as an open pit mine. Details of the pit shell geometry are still in the development stage, and options are available to develop the pit to various dimensions, depending upon a combination of economic, engineering and environmental considerations. These options include the potential to extend the open pit into the adjacent, former McIntyre Mine workings to the immediate north of the Hollinger Mine, possibly requiring relocation of a portion of Highway 101 and associated commercial facilities. Development of the open pit would require comparatively limited new infrastructure, as ore from the Hollinger site would be processed at the existing, nearby Dome mill, with tailings from ore processing to be discharged to the existing Dome Mine tailings facility (**Figure 1**).

There would, however, be a requirement for the disposal of a considerable volume of waste rock (currently estimated at up to 200,000,000 m^3), together with the long-term stockpiling of low grade ore (currently estimated at up to 20,000,000 m^3), and the short-term stockpiling of gold ore for shipment to the mill (live ore storage – estimated at up to 50,000 m^3).

Mine dewatering will be by sump pumping out of one of the existing shafts, with the water to be discharged to either the Dome operation for processing, or discharge to the Dome tailings; or alternatively to the environment after passing through a mine water settling pond for the removal of suspended solids. Selection of one option over the other will depend on economics, water quality, and environmental factors.

A limited amount of infrastructure would need to be developed at the Hollinger site itself, likely including as a minimum:

- Maintenance building and office building complex;
- Yard area(s);
- Vehicle fleet fueling station;
- Pit dewatering system;
- Live ore storage pad; and,
- Mine dry and parking lot.

Explosives would be manufactured and stored in licensed facilities at the nearby Dome Mine, and transported to the Hollinger site on an as required basis for immediate use.

At closure, the Hollinger pit will be allowed to flood, and the pit discharge will likely be routed by gravity flow south to one or the other of the Skynner Creek or Perch Lake systems, both of which drain to the Mountjoy River. This gravity flow will require the construction of a naturalized drainage way, the routing of which remains to be determined. Routing natural drainage through Gillies Lake is less likely because of the potential for urban flooding. Topographic constraints do not allow passive discharge to the Porcupine River system. All other remaining mine infrastructure would be removed at closure, and the site would be rehabilitated in accordance with established mine closure protocols.

Project development and closure will involve input from the general public, the City of Timmins, First Nations, and the provincial and federal governments.

1.3 GENERAL SETTING

The Timmins area is characterized by a mix of urban and industrial development superimposed on a background of coniferous and mixed deciduous coniferous boreal forest. The City of Timmins consists of a major downtown urban area, as well as a number of other smaller urban centres scattered throughout the area, with Schumacher, South Porcupine, and Connaught Hill being the more prominent of these smaller centres. Various other smaller hamlets also occur throughout the area, such as Gold Centre, the Aunor, Buffalo-Ankerite and Delnite areas, and several other small clusters of residences. Many or most of these communities have grown up around former mine sites. All of these areas, together with a much larger surrounding region, were amalgamated in 1973 to form the City of Timmins.

South Porcupine and other communities to the east are linked to Timmins by Highway 101, with a commercial strip occurring along this highway between downtown Timmins and Schumacher. Highway 655 extends north from Highway 101, with linkages to the Timmins airport via Airport Road, and linkages further north to Xstrata Copper's Kidd Mine site and Highway 11. Several major transmission, gas, water, and sewer lines pass through the area, as well as local services.

Timmins was founded as a mining centre, with the three prominent original mines being the Hollinger Mine, the McIntyre Mine, and the Dome Mine. Of these, only the Dome Mine is still in operation within the study area. Numerous other smaller mines also operated in the local area (see Section 1.4); many of which were or became linked to the three major mines at one time or another. None of these smaller mines are currently active. Above and below grade tailings, associated with these active and former mine sites, are widespread throughout the study area (**Figure 1**). Prominent waste rock stockpiles are associated with the Dome Mine. There is little evidence of waste rock stockpiles associated with the other mining operations, because all the mines, except for the Dome open pit operation, were underground mines. Waste rock produced by these underground mines was typically used as material for construction and backfill operations.

Topography in the Timmins area is dominated by its location at the transition of Precambrian Shield terrain to the south and southwest, and by flat-lying glaciolactrine silt and clay plains to the north and east. An extensive glaciolacustrine sand plain area lies to the south of Timmins, including dune formations, and extends into the lower, southwest portion of the study area (**Figure 2**). A prominent esker system extends immediately adjacent and parallel to the east side of Highway 655, north from Highway 101. The local topography reaches a maximum of about 365 m above mean sea level (amsl) in the area just southeast of the Hollinger site and north of Gold Mine Road. Further east towards South Porcupine, and within the glaciolacustrine silt and clay plains, the local topography decreases to as little as 280 m elevation.

The geology of the Timmins area is structurally complex, and includes several major fault zones, and anticline / syncline systems, many of which control surface topographic expressions. The Pearl Lake / Little Pearl Pond, and the Gillies Lake area are controlled by these features, and as a result are the site of deeper sediment accumulations. Bedrock exposures are widespread and frequent

throughout the major portion of the study area, but with much reduced expression in the areas dominated by glaciolacustrine silt, clay and sand plains.

Several small lakes and numerous ponds are scattered throughout the area, with larger numbers of ponds having formed along low gradient creek valleys as a result of beaver activity. Most of the area's drainage is captured by the Porcupine and South Porcupine Rivers, which flow east, converging just upstream of Porcupine Lake, northeast of the Dome Mine site. The Porcupine River is a low gradient system that has its headwaters in the area just north and east of the Hollinger site. The Porcupine River drains into Night Hawk Lake and the Frederick House River system. Areas south and west of the Hollinger site drain to either the Skynner Creek or Perch Lake systems, both of which drain to the Mountjoy River, which flows into the Mattagami River. Areas north and west of the Hollinger site drain to Gillies Lake and the Town Creek system, which drains to the Mattagami River; or slightly further north there are a number of smaller drainages that drain directly west to the Mattagami River.

Virtually all drainages in the area have been affected by existing or past mining activities, which have affected water quality, and to a lesser extent drainage patterns themselves.

The majority of the landscape that has not been developed for urbanization or mining remains in forest cover, with the exception of principal agricultural areas to the north and south of Timmins, near to the Mattagami River, and a number of smaller parcels of land in and around the Porcupine Lake area. Forest communities in the area are virtually all second growth as a result of past logging activities, and fires. Throughout the generally lower-lying, eastern portion of the study area, forest communities are dominated by varying mixtures of black spruce and poplar (trembling aspen and balsam poplar), with white spruce, jack pine, balsam fir, larch and white birch as common associates. Central portions of the study area, where rock outcroppings are common, show similar forest community types, but with a somewhat stronger representation of jack pine. Sandy areas north of Gillies Lake bordering Highway 655, and south and west of the Kayorum (Hollinger) tailings stack, show a dominance of jack pine, or jack pine with poplar. The abundance of poplar in the area is indicative of the level of past disturbance, as poplar species are typically successional and not characteristic of mature forest communities. Virtually all major forest blocks are transected by roads, transmission lines, trails, or other such linear features.

1.4 SPATIAL AND TEMPORAL BOUNDARIES

To encompass all potential development areas and immediate drainages there from, Local Study Area (LSA) boundaries for natural environment investigations were focused on watershed and riverine boundaries, with the exception of the northwest study area boundary, which was defined by Laforest Road and a narrow strip of land bordering the east side of Highway 655 (**Figure 1**). The narrow strip of land bordering the east side of Highway 655 was included because this area includes a small trailer park and a single residence north of the trailer park, which have the potential to be affected by possible Hollinger related developments. Biophysical environmental studies are limited to this larger area, but depending on the specific discipline, may focus only on the relevant portions of the LSA.

The socioeconomic study area (SESA) is based on the City of Timmins limits, which encompass both urban and rural areas (**Figure 3**).

1.5 STUDY APPROACH

Consideration was given to developing a single environmental baseline report, or a series of baseline reports. In the final analysis, it was determined that development of a series of separate baseline reports was most advantageous for the following reasons:

- Greater ease of preparation by diverse members of the study team;
- More timely submissions to internal reviewers;
- Greater flexibility for updates and additions, as and when new information becomes available;
- Easier file management, printing and electronic distribution; and,
- Facilitation of a more focused review by government agencies and members of the public.

The generation of separate reports notwithstanding, an attempt has been made, to the extent practical, to develop a standardized report format, to better facilitate information dissemination and ease of information access. Also, the entire study team functioned as an integrated unit to ensure that all team members carried out their studies in a coordinated manner, so as to avoid inconsistencies and misinterpretations of the data.

Baseline data were gathered using the standard approaches of literature review, observation, sample collection, data analysis and discussions with people having specific knowledge of the area or similar environments. Traditional Ecological Knowledge, which is typically more applicable in more remote settings, was not considered except within the context of cultural heritage resources. Traditional activities by Aboriginal peoples, as commonly understood by the term, are not carried out within the LSA, except possibly on a recreational basis similar to activities carried out by other Timmins area residents.

Despite the independence of the baseline reports, where appropriate an ecosystem perspective has been used to integrate the data into functional relationships. It is recognized that the entire physical, chemical, and biological system (i.e., the ecosystem) is interconnected. For example, surface water systems are connected to groundwater systems, which are in turn affected by climate, geology, soils and general aspects of the terrain. The expression of surface water systems in terms of water flows, water quality, and riverbed/creek bed materials, affects the presence and abundance of aquatic life and wildlife.

Figure 1: Site Location and Study Area

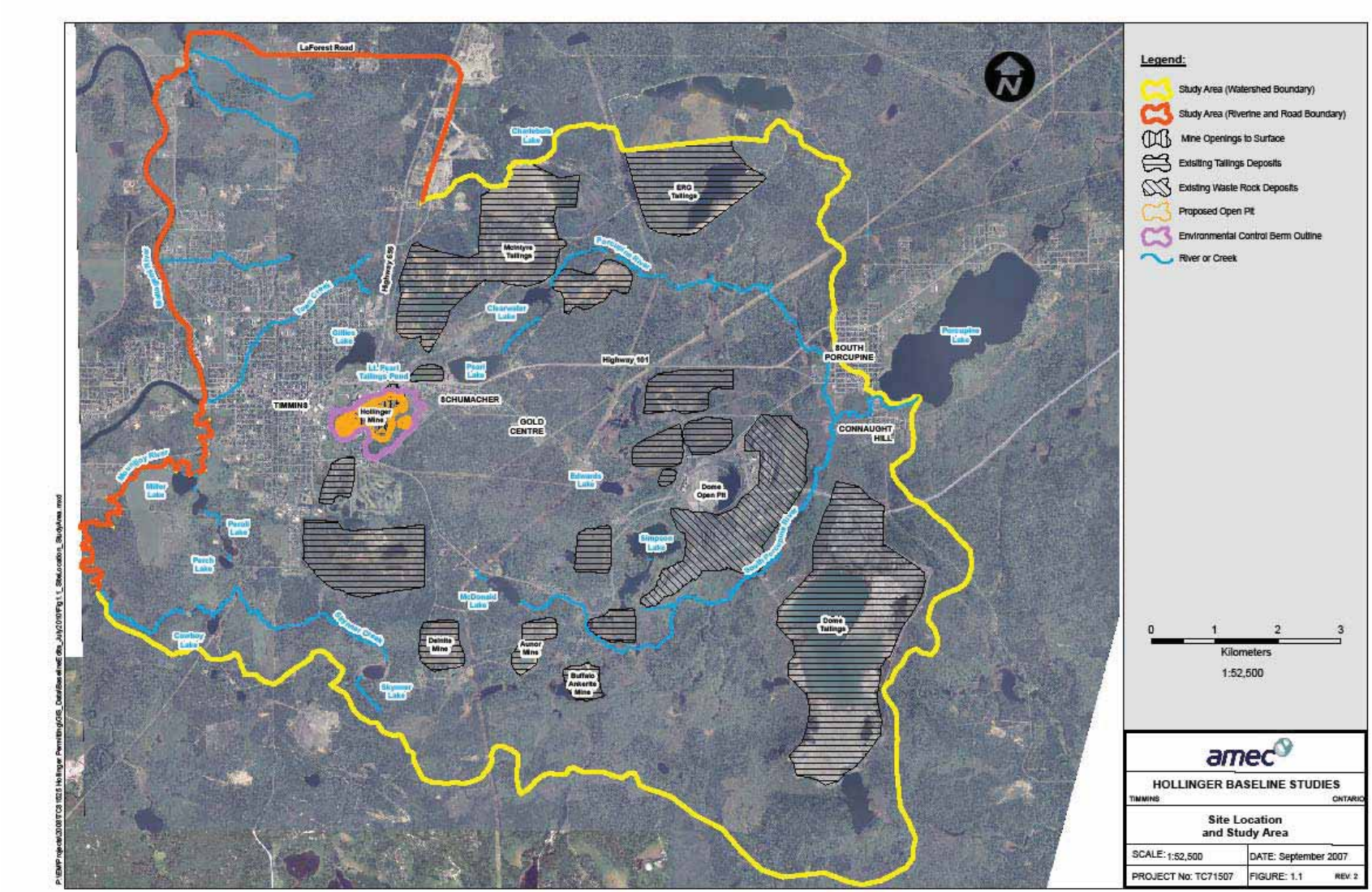


Figure 2: Surficial Geology

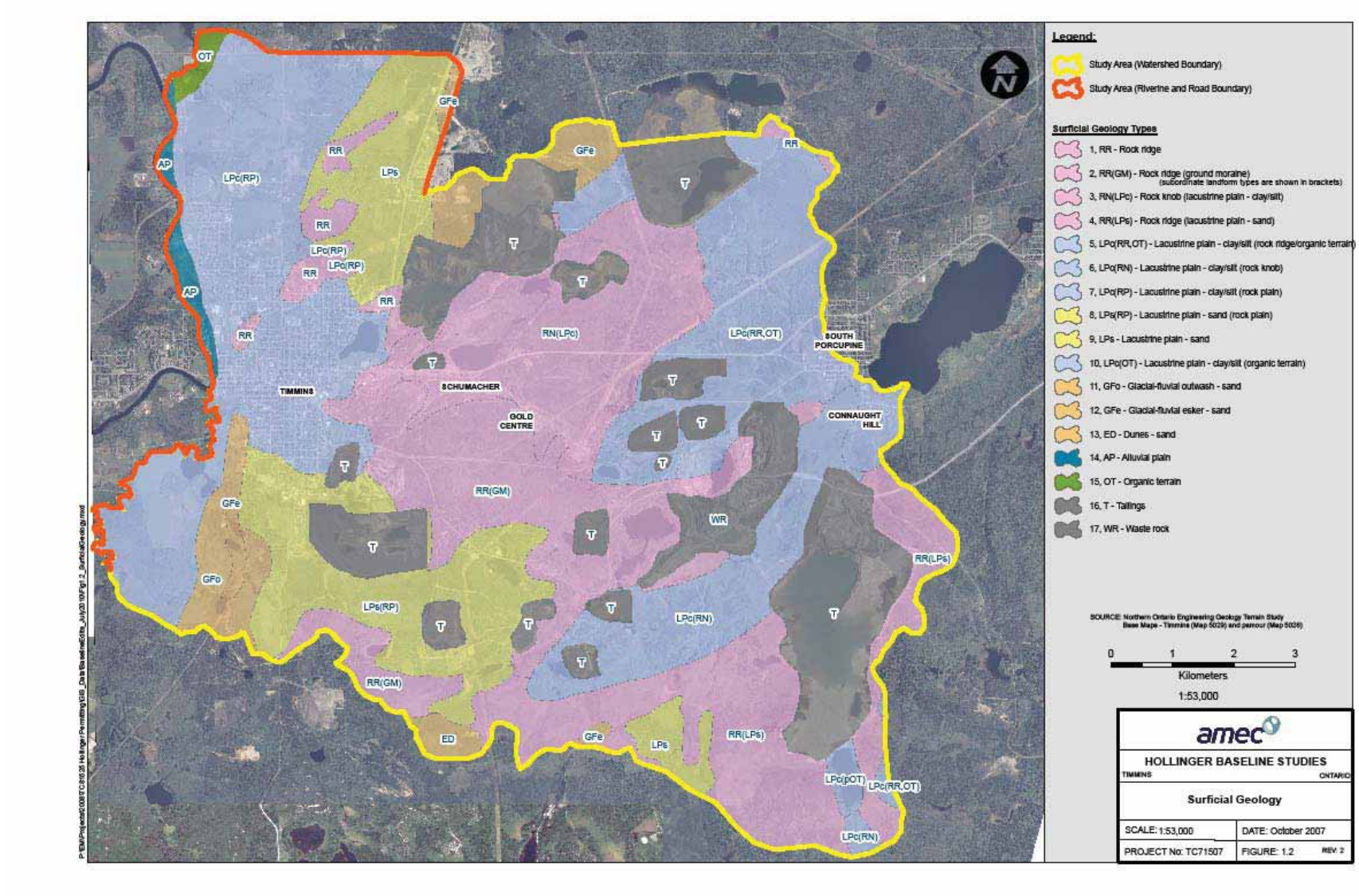
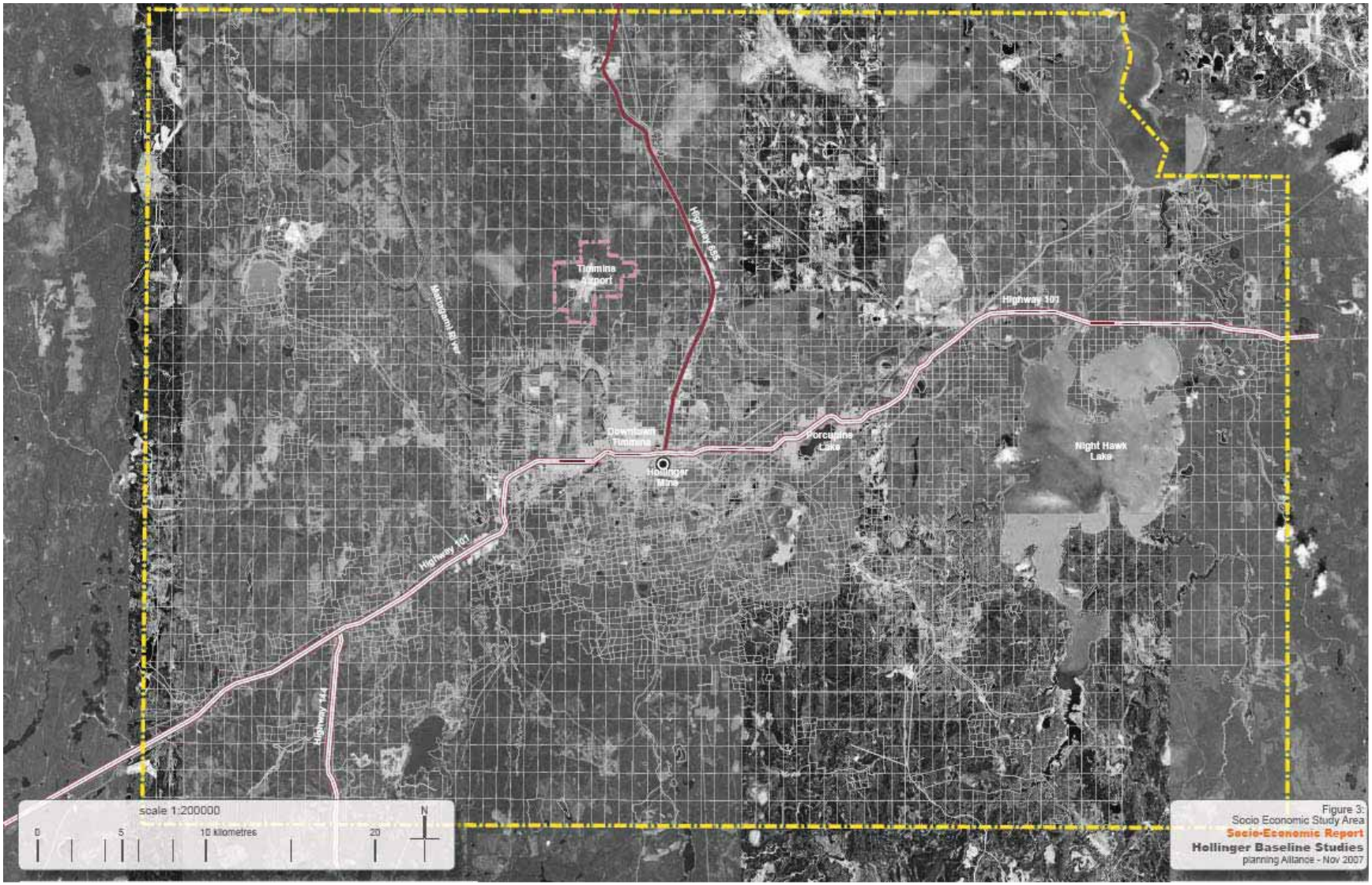


Figure 3: Socio-economic Study Area



2.0 METHODS

2.1 DATA SOURCES

The objectives of the socio-economic baseline investigations were to characterize the households and communities within the Study Area with respect to the following:

- Political organization and governance
- Demographic, social and cultural characteristics
- Economic activities and conditions
- Availability of housing, infrastructure and social services
- Individual, family and community wellness
- Planning policy and land use
- Traditional values and cultural heritage

The socio-economic study provides a detailed understanding of the existing conditions and trends in the Study Area. To achieve this, data were collected from a range of sources, including a literature review of existing information, meetings and/or communications with a range of local stakeholders, including staff at the City of Timmins' Planning Department, the Timmins Economic Development Corporation, the four school boards, and the Chamber of Commerce; and key inventories were developed with respect to zoning and land use conditions, cultural heritage features and relevant community based and non-governmental organizations and services.

Given the above, a preliminary profile of social conditions has been developed, one that can be built on by future studies and that will assist detailed planning, implementation and monitoring in collaboration with local stakeholders.

Data sources are listed in the references provided in Section 5.

2.2 DATA ANALYSIS

Census data obtained for various socio-economic indicators have been analyzed for historic and future trends. In addition, specific data were collected for the areas within the immediate vicinity of the former Hollinger Mine in order to create a more detailed profile of surrounding communities, including zoning, land use, cultural heritage features and sensitive uses. These last two themes have been mapped using GIS (Geographic Information System).

Limited additional data analysis was necessary for the baseline study, although future studies may require more detailed analysis in the form of household and asset surveys for potential relocation areas.

2.3 DATA LIMITATIONS

The community profile for Timmins is based on census data obtained from 1991, 1996 and 2001. Additional data were available from the 2006 census for limited socio-economic indicators, including population, family and household characteristics. Economic indicators, including employment rates and household income for 2006 are scheduled for release in March 2008.

Staff at the City's Planning Department and Timmins Economic Development Corporation were interviewed regarding more recent socio-economic trends however only limited information from these sources was available. To the best of our knowledge, the latest information available is presented in the report.

Future reports should incorporate the remainder of data available from Statistics Canada for the 2006 census; however, it is important to note that the entire City of Timmins is considered a census area (data is aggregated at the city-level), therefore, if a more detailed breakdown is required by neighbourhood within Timmins, household surveys will be need to be completed.

3.0 DATA ANALYSIS

3.1 AN OVERVIEW OF THE HISTORY OF TIMMINS

Prior to the 20th century, the area representing the present-day City of Timmins was a largely uninhabited, heavily forested region, visited only by the occasional native or European explorer or fur trader. Mining exploration in areas further south of Timmins gradually spread to the area, resulting in the discovery of gold in 1909. As the story goes, prospector Harry Preston slipped on a mossy slope uncovering a large vein of gold several hundred feet in length and 150 feet wide. This area later became known as the Dome Mine, the first of the three largest gold discoveries in Timmins. Shortly after, Benny Hollinger and his partner Alex Gillies discovered the Hollinger Gold Mine, followed by Alexander Olifant's (also known as Sandy McIntyre) discovery of the McIntyre Mine.

Prospectors and miners who came to the area generally settled around these three mines, resulting in the establishment of South Porcupine, Schumacher and Timmins. South Porcupine sprang out of the arrival of the earliest prospectors to the area, whereas the hamlet of Schumacher was purchased in 1915 by gold rush investor Frederick Schumacher and developed to house workers for the McIntyre Mine. In 1910, shortly after discovering gold, Hollinger and Gillies sold their claims to Noah Timmins. Timmins purchased a number of adjacent claims and established the Hollinger Mine. The land west of the Hollinger Mine – representing the core of present-day Timmins - was subsequently developed as miner housing (see **Figure 4**).

Over time, these and other prospector and miner settlements were recognized as townships, characterized by low-density developments spread over large geographic areas. In 1973 the provincial government amalgamated the towns of Timmins, Schumacher, Mountjoy, Whitney, South Porcupine and Porcupine, and the City of Timmins was founded. With a population of approximately 43,000, Timmins is now one of the largest cities in northern Ontario, servicing a region of 117,000 people.[1]

Over the last century, mining has been the consistent theme in the development of Timmins, a fact that is highlighted by the landscape in and around the City: the iconic headframes are the most visual landmarks on the horizon, in addition to above grade tailings deposits and rock piles that have gradually transformed into grassy hills, some of which have come to be indistinguishable from the surrounding landscape. Mining activities have affected so much of the area in and around Timmins that most 'natural' features do not actually represent the original landform, but have gradually come to be known as recognizable and even cherished features of the cityscape.

Figures 4 – 7 show the historical evolution of the Porcupine and Hollinger mining camps between 1911 and 1966.[2] Settlement patterns are explained in greater detail in Section 3.7.

[1] Statistics Canada, 2006 and City of Timmins, 2007
[2] Historical maps obtained from Ministry of Northern Development, Mines and Forestry (formerly known as Ministry of Northern Development and Mines), 2007

Figure 4: Porcupine Area, 1911

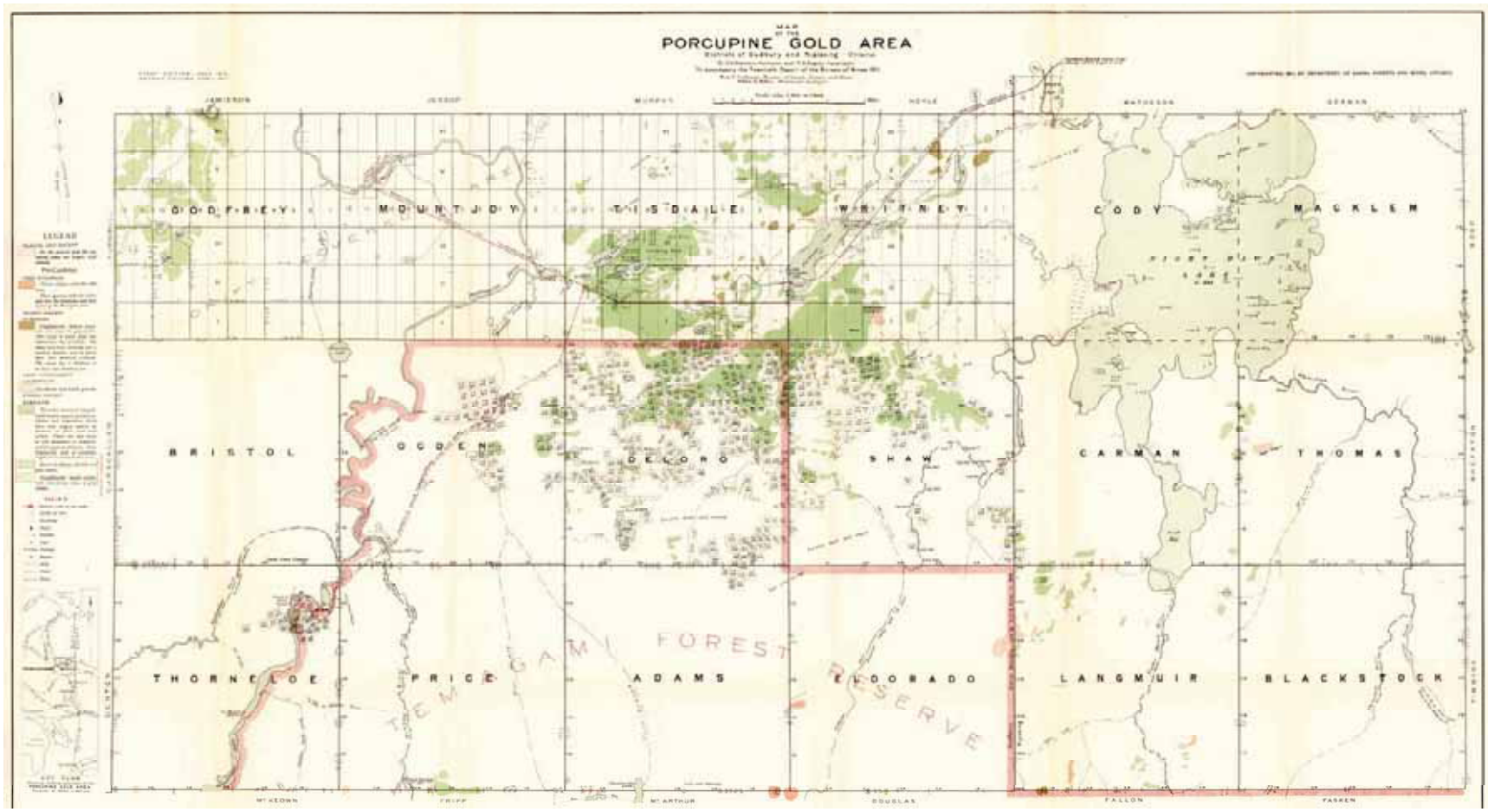


Figure 5: Porcupine Area, 1915

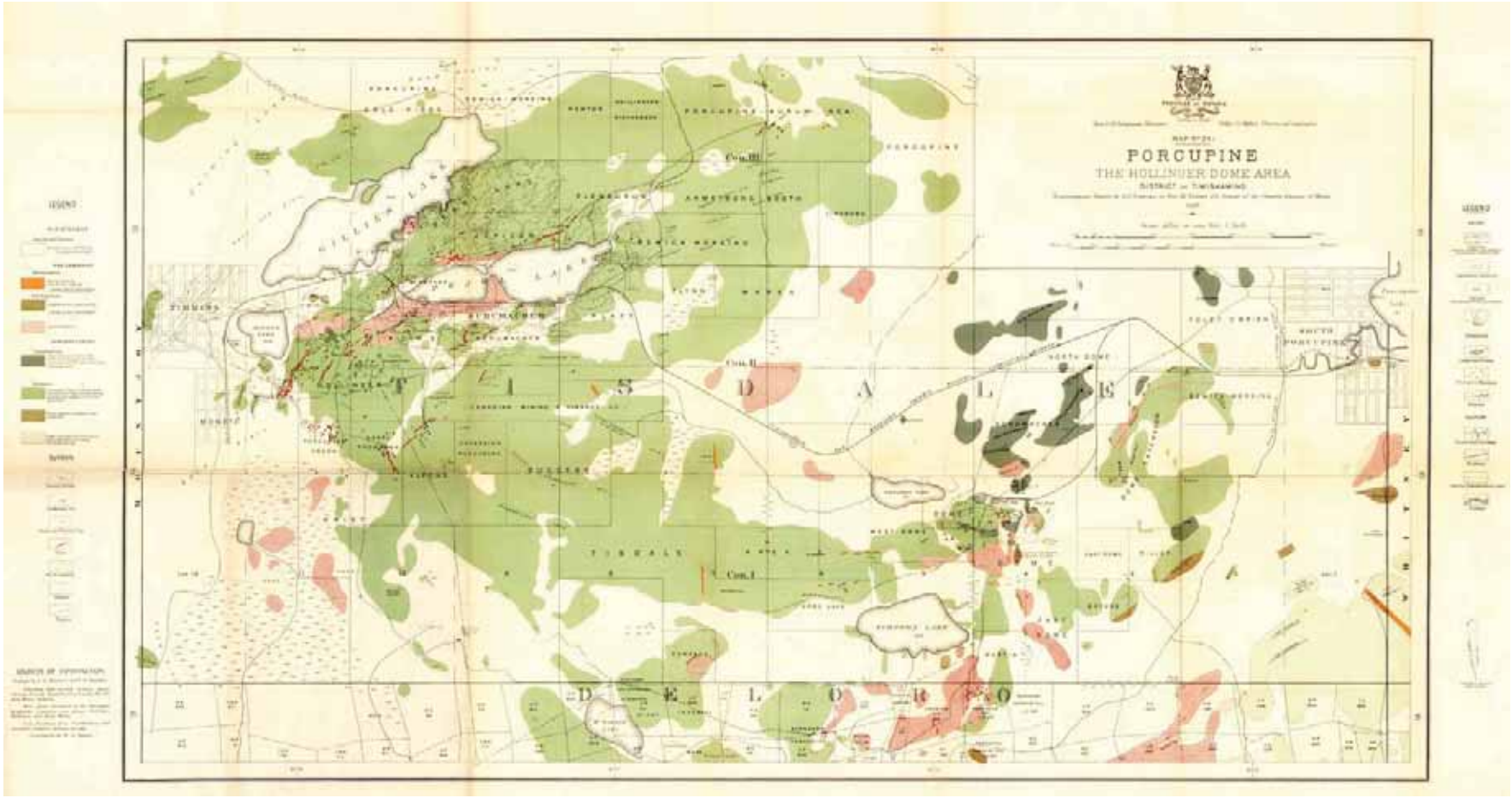


Figure 6: Porcupine Area, 1939

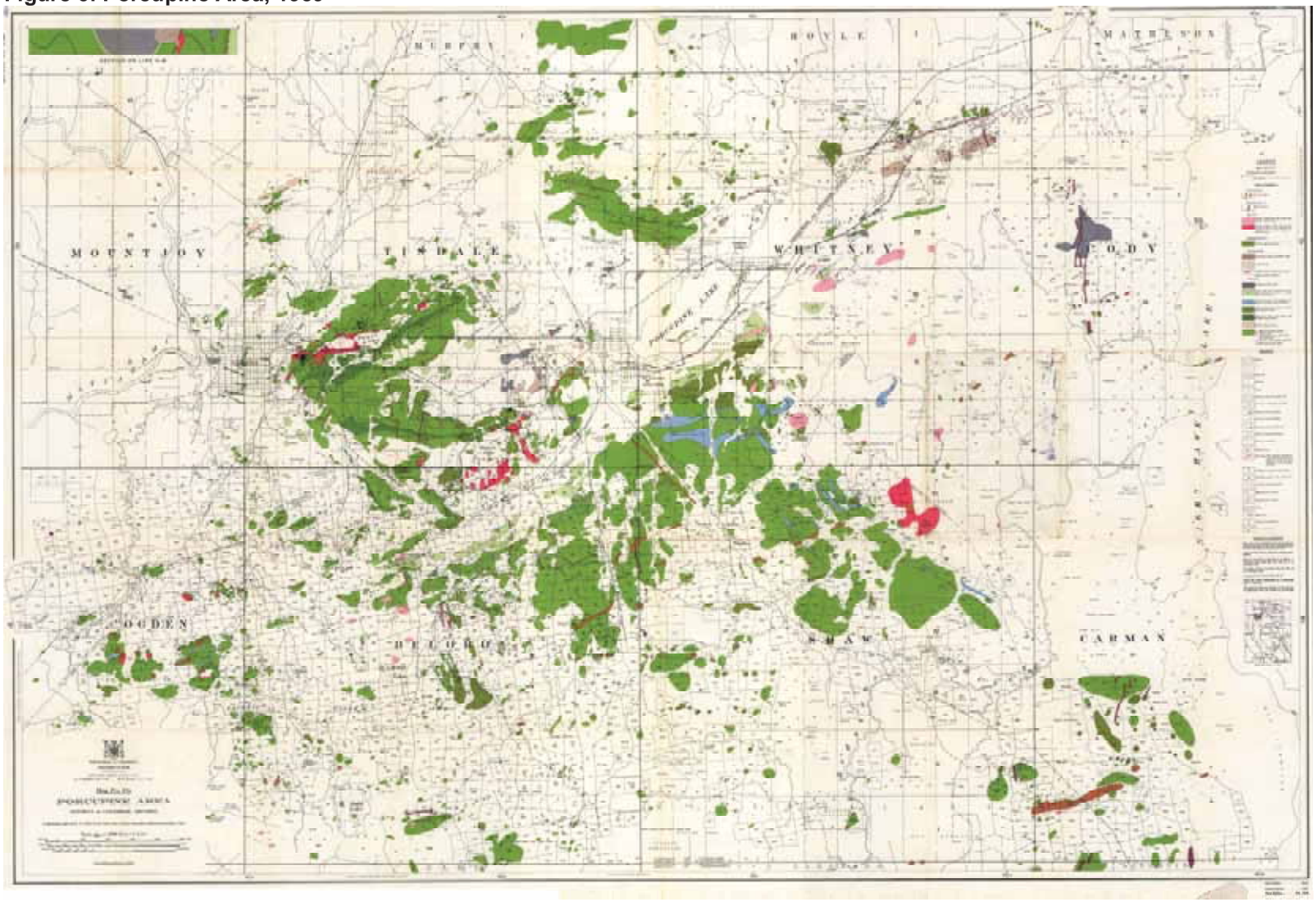
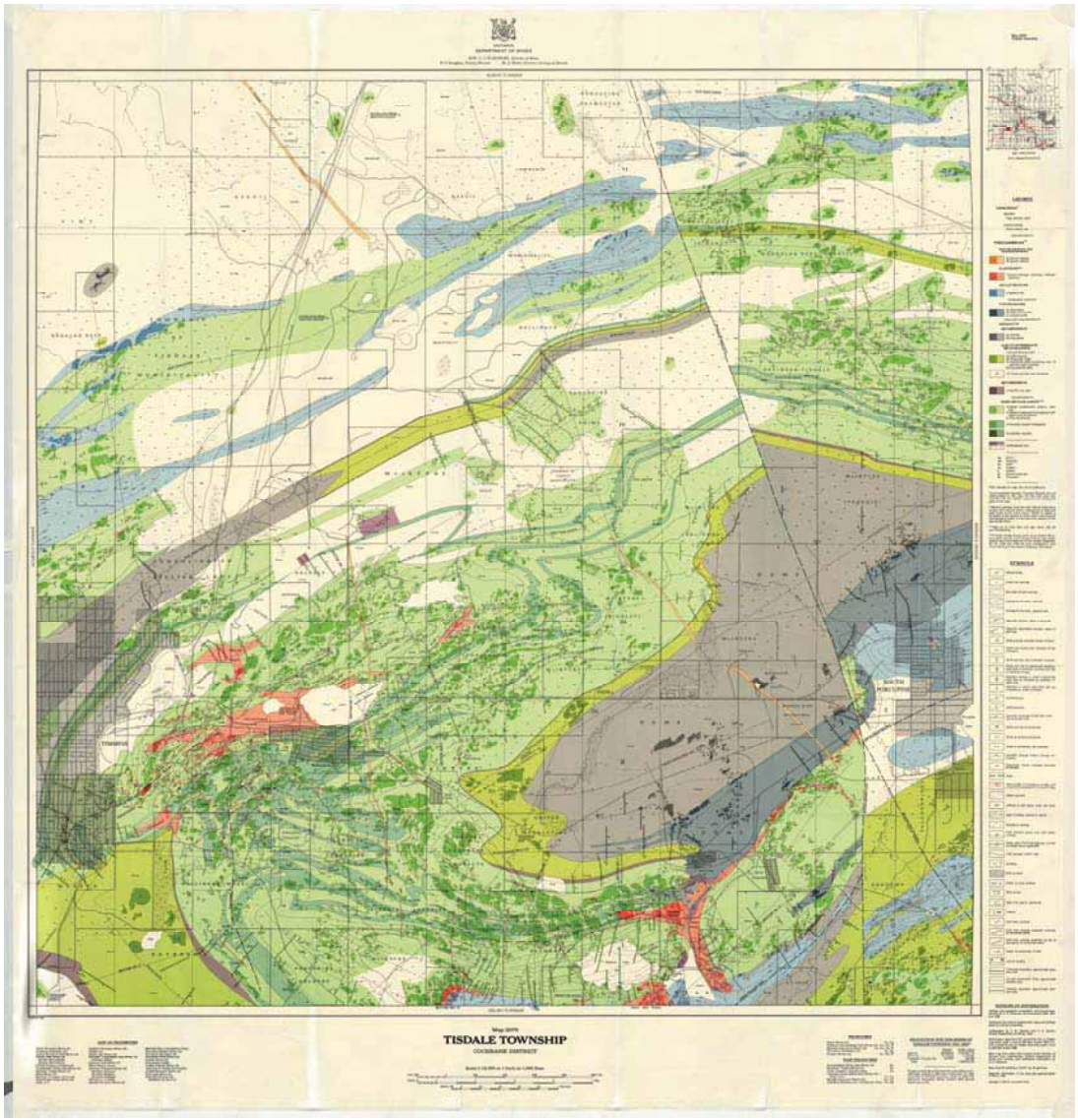


Figure 7: Tisdale Township, 1966



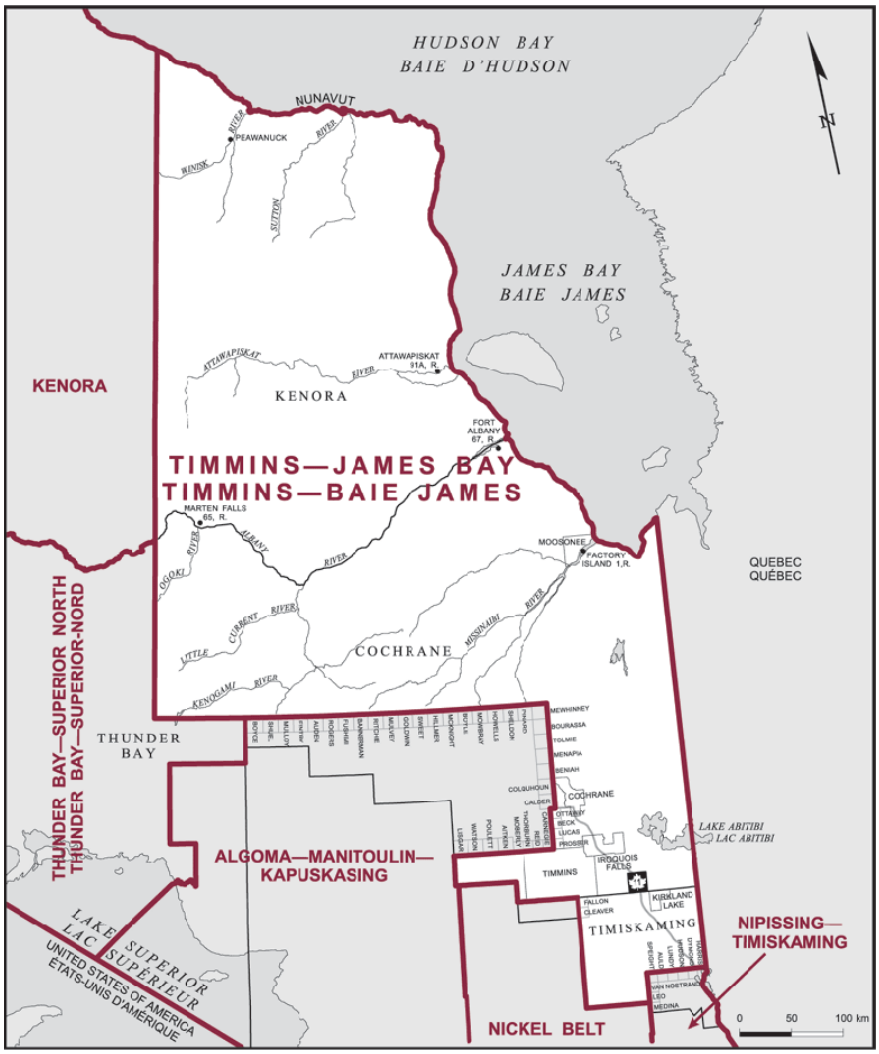
3.2 POLITICAL ORGANIZATION AND GOVERNANCE

3.2.1 Federal, Provincial and Municipal Government

Since 1996, the federal and provincial electoral districts for Timmins have shared the same boundaries, representing a population of 80,791 people and an area of 249,624 sq km. [3] The area includes the municipalities of Timmins, Kirkland Lake, Cochrane, Iroquois Falls, Black River-Matheson and Moosonee.

On the federal level, Member of Parliament Charlie Angus, a member of the New Democratic Party, has represented the Timmins-James Bay riding since 2004. Gilles Bisson, also a member of the New Democratic Party, has represented the riding on a provincial level since 1990. Bisson was re-elected in October 2007.

Figure 8: Timmins-James Bay Federal and Provincial Electoral District



Source: Elections Canada, 2007.

[3] Based on 2006 census data, Elections Canada, 2007

At the municipal level, eight councillors, eight school board trustees and a mayor represent the City of Timmins.[4] The last election was held November 13, 2006, prior to which elections were held every three years. As a result of Bill 81, which was passed by the provincial government in April 2006, the term of office for municipal councillors has increased to four years, which matches the provincial and federal levels of government. The next election is scheduled for November 2010.

Tom Laughren, the current mayor of the City of Timmins, was sworn in December 8th, 2006. Laughren succeeded Vic Power, longest-serving mayor in the City's history, who held office for 20 years between 1980 and 2006.

The City's Statement of Directions and Priorities provides an overview of recent trends, as well as challenges and opportunities currently facing the City. In summary, new jobs have been gained in the mining sector as a result of increased exploration activities, as well as in the health sector due to the construction of the City of Timmins and Region Hospital. Commercial development in the west end of Timmins has resulted in spin-off business opportunities and helped to cement Timmins as the regional commercial centre. On the other hand, population has declined over the past decade and the City has seen an overall net decrease in employment, including a significant loss of well-paying jobs in the mining and public sector. Youth out-migration is a particular challenge.[5] Employment patterns in mining and forestry are changing, with the forestry industry being under particular pressure because of the high value of the Canadian dollar.

Northern Ontario is divided into ten districts for the purpose of providing government services, including regional planning and managing common services. Timmins is identified as being part of Cochrane District, the second largest district in Northern Ontario following Algoma District.

Based on 2006 census data, the City of Timmins (43,686) is the largest municipality located in Cochrane District, followed by Kapuskasing (8,509), Hearst (5,825), Cochrane (5,690) and Iroquois Falls (5,217).[6]

Two thirds of the population in Northern Ontario lives in urban areas, with over 90% located in the five major cities of Thunder Bay, Sault Ste. Marie, Timmins, Sudbury and North Bay. A recent position paper prepared by the mayors of Northern Ontario's largest cities identified key challenges facing northern communities, including aging infrastructure, out-migration and increasing electricity prices. The Mayors are advocating the development of an infrastructure renewal program and creating a plan to enhance growth and stem out-migration, introduce more competitive electricity pricing, upload health and social services, and provide an increased share of natural resource revenues for municipalities.[7] These issues are addressed in greater detail in Section 3.3: Economy, and Section 3.4: Population.

[4] One elected councillor each represents four of the five wards in Timmins. Four councillors, for a total of eight councillors, represent the fifth ward, which has a much higher population in and around the downtown area of Timmins. Four school boards serve the City of Timmins: Northeastern Catholic District School Board (three representatives from Timmins), District School Board Ontario Northeast (three representatives from Timmins), Conseil scolaire de district catholique des Grandes Rivières, (one representative from Timmins), and Conseil Scolaire de District du nord-est de l'Ontario (one representative from Timmins).
[5] City of Timmins, 2004.
[6] Statistics Canada, 2006.
[7] Northern Ontario Large Urban Mayors, 2007.

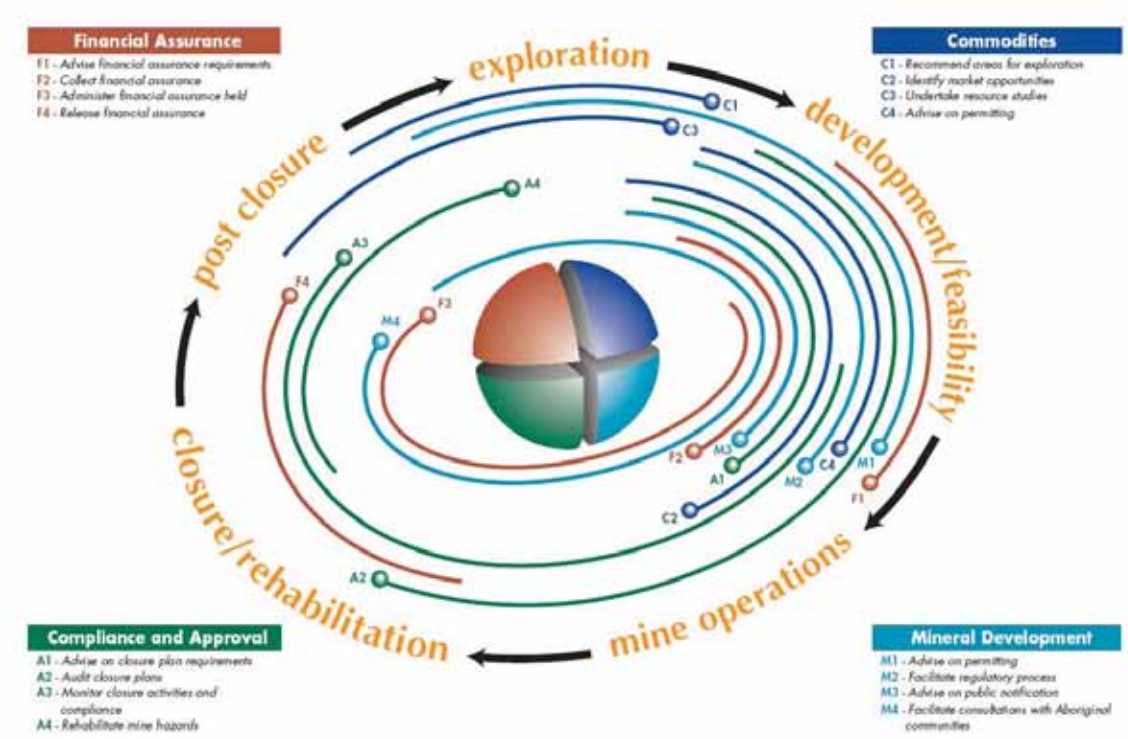
3.2.2 Regulatory Framework

The following section provides an outline of the key provincial ministries and legislation that play a role in the monitoring and regulation of mining activities.

Mining Activities

The Mines and Minerals Division of the Ministry of Northern Development and Mines is responsible for administering the Mining Act, compiling information about the state of mining and mineral industries in Ontario, including the location and quantity of mineral deposits, and consulting with industry throughout all phases of the mining sequence. These responsibilities can be further described as providing guidance with respect to commodities, mineral development, compliance and approval, and financial assurance related to closure planning.[8]

Figure 9: The Role of Mines and Northern Development during the Mine Life Cycle



Part VII of the Mining Act outlines the responsibilities of the industry with respect to the rehabilitation of mining lands, including the submission of a certified Closure Plan with financial assurance detailing the method, schedule and cost for all proposed rehabilitation activities. The Closure Plan is posted on the Ministry of the Environment's Environmental Registry, and audited to ensure all requirements have been met.

Environment

In Ontario, Environmental Assessments are carried out in order to assess potential affects of certain activities on the natural and human environment. Depending on the specific scope of the Project, a

[8] Ministry of Northern Development, Mines and Forestry (formerly known as Ministry of Northern Development and Mines), 2007.

range of environmental assessments may be required prior to Project commencement. In Ontario, the *Environmental Assessment Act*, administered by the Ministry of the Environment, outlines the Environmental Assessment process, including the roles and responsibilities of regulatory bodies and project proponents.

With respect to mining, Provincial Class Environmental Assessments are generally triggered if approvals are required from the Ministry of Natural Resources regarding one of the following:

- Land or resource dispositions (acquisition of Crown land for buildings or facilities, roads and water crossings)
- Construction or re-alignment of a provincial highway
- Dikes
- Stream bank stabilization
- Excavation, dredge and fill activities

In addition, Environmental Assessments are required for electricity projects depending on the size, source of power generation and transmission line characteristics required for the mine.

In certain circumstances, Federal Environmental Assessments are triggered, e.g. if federal funding, land or facilities will be used, or if a federal agency is required to provide an approval or authorization for a specific activity. In general, the mining project itself is not subject to an environmental assessment unless the project is designated, or triggered in the case of the federal process. For the provincial process, any resident of Ontario who is prepared to justify the request can submit an Environmental Assessment designation request to the Minister of the Environment. [9] Municipal Class Environmental Assessments are required if the project requires relocation or modification of municipal infrastructure.

In addition to Environmental Assessments, a range of environmental permits may be required for mining activities, depending on the specific scope of the project. The Ministry of Environment acting in conjunction with other municipalities such as the Ministry of Natural Resources, administers regulation and approval of the permits, often including a posting and review period on the Environmental Registry. For example, approval is required for operation of any equipment or machinery that may discharge a contaminant, including noise and vibration, to the environment. The approval process ensures protection of adjacent land uses, in particular sensitive land uses like hospitals, churches, senior citizens' facilities and residential areas).[10]

The Ministry of the Environment is also responsible for producing guidelines with respect to compatibility between industrial facilities and sensitive land uses, in order to minimize adverse affects that may alter the quality of life or safety of individuals. Section 3.7 Planning Policy and Land Use covers the municipal interpretation of the Ministry of the Environment requirements, as set out in the Official Plan and Zoning By-law.

Planning

Mining activities are subject to the Official Plan and Zoning Bylaw of the corresponding municipality or planning area. The Ministry of Municipal Affairs and Housing is responsible for administering the

[9] Ministry of Environment, 2007

[10] The Socio-Economic Baseline study will focus on planning permit requirements associated with potential Hollinger mining activities, whereas environmental assessment and permitting requirements will be identified by the additional baseline studies covered by AMEC's Environmental Baseline Studies, 2007.

Planning Act and the Provincial Policy Statement (PPS), which set out the roles and responsibilities of municipal planning departments, including the 5-year review of the Official Plan. The Planning Act in particular sets out rules for land use planning by identifying who has the power to make decisions affecting land use and how, for example, using such tools as Official Plans, zoning and other by-laws.

Issued under authority of Section 3 of the Planning Act, the Provincial Policy Statement provides direction on matters of provincial interest related to land use planning and development. Section 3 of the Planning Act requires that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. Furthermore, the Implementation and Interpretation Section 4.5 of the Provincial Policy Statement states: "The official plan is the most important vehicle for implementation of this Provincial Policy Statement." Council is required to make decisions on planning matters that are consistent with the PPS. The following is a brief summary of sections of the PPS that are of particular importance to mining activities:

Table 1: Provincial Policy Statement – Selections Sections

1.7 Long-Term Economic Prosperity
1.7.1 Long-term economic prosperity should be supported by: a. optimizing the long-term availability and use of land, resources, *infrastructure* and *public service facilities*; b. maintaining and, where possible, enhancing the vitality and viability of downtowns and mainstreets; c. promoting the redevelopment of *brownfield sites*; d. providing for an efficient, cost-effective, reliable *multi-modal transportation system* that is integrated with adjacent systems and those of other jurisdictions, and is appropriate to address projected needs; e. planning so that major facilities (such as airports, transportation/transit/rail infrastructure and corridors, intermodal facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries and resource extraction activities) and *sensitive land uses* are appropriately designed, buffered and/or separated from each other to prevent *adverse effects* from odour, noise and other contaminants, and minimize risk to public health and safety; f. providing opportunities for sustainable tourism development; g. promoting the sustainability of the agri-food sector by protecting agricultural resources and minimizing land use conflicts; and h. providing opportunities for increased energy generation, supply and conservation, including *alternative energy systems* and *renewable energy systems*.

2.4 Minerals and Petroleum

2.4.1 *Minerals* and *petroleum resources* shall be protected for long-term use.

2.4.2 Protection of Long-Term Resource Supply

2.4.2.1 *Mineral mining operations* and *petroleum resource operations* shall be protected from *development* and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact.

2.4.2.2 In areas adjacent to or in known *mineral deposits* or known *petroleum resources*, and in *significant areas of mineral potential* and *significant areas of petroleum potential*, *development* and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:

- resource use would not be feasible; or
- the proposed land use or development serves a greater long-term public interest; and issues of public health, public safety and environmental impact are addressed.

2.4.3 Rehabilitation

2.4.3.1 Rehabilitation to accommodate subsequent land uses shall be required after extraction and other related activities have ceased. Progressive rehabilitation should be undertaken wherever feasible.

2.4.4 Extraction in Prime Agricultural Areas

2.4.4.1 Extraction of *minerals* and *petroleum resources* is permitted in *prime agricultural areas*, provided that the site is rehabilitated.

2.6 Cultural Heritage and Archaeology

2.6.1 *Significant built heritage resources* and *significant cultural heritage landscapes* shall be *conserved*.

2.6.2 *Development* and *site alteration* shall only be permitted on lands containing *archaeological resources* or *areas of archaeological potential* if the *significant archaeological resources* have been conserved by removal and documentation, or by preservation on site. Where *significant archaeological resources* must be preserved on site, only *development* and *site alteration* which maintain the heritage integrity of the site may be permitted.

2.6.3 *Development* and *site alteration* may be permitted on *adjacent lands* to *protected heritage property* where the proposed *development* and site alteration has been evaluated and it has

been demonstrated that the *heritage attributes* of the *protected heritage property* will be *conserved*. Mitigative measures and/or alternative development approaches may be required in order to conserve the *heritage attributes* of the *protected heritage property* affected by the adjacent *development* or *site alteration*.
3.2 Human-Made Hazards
3.2.1 Development on, abutting or adjacent to lands affected by *mine hazards*; *oil, gas and salt hazards;* or former *mineral mining operations, mineral aggregate operations* or *petroleum resource operations* may be permitted only if rehabilitation measures to address and mitigate known or suspected hazards are under-way or have been completed. 3.2.2 Contaminated sites shall be remediated as necessary prior to any activity on the site associated with the proposed use such that there will be no *adverse effects*.

Source: Ministry of Municipal Affairs and Housing, 2005.

In summary, the municipality must balance economic growth and urban expansion with maintaining the overall quality of life and the environment, and ensuring an efficient use of infrastructure. Mining is inextricably linked with the history of Timmins, and appears positioned to act as a strong economic force well into the future. Municipal planning decisions will thus need to consider how to best protect proven mineral resources from urban expansion. These issues are addressed in greater detail in Section 3.7 Planning Policy and Land Use.

Infrastructure

The Ministry of Public Infrastructure Renewal is responsible primarily for managing public infrastructure and real estate. The Ministry of Public Infrastructure Renewal and the Ministry of Northern Development and Mines are currently working with stakeholders to develop a Growth Plan for Northern Ontario. The Plan will focus on reversing out-migration trends and developing a plan that provides for the future infrastructure needs of northern communities through wise coordination and investment at the provincial and municipal levels.[11] A draft Growth Plan is anticipated by the end of 2007, with consultation commencing in 2008.

First Nations

The Ministry of Aboriginal Affairs is responsible for managing land claims and land-related issues and activities in Ontario. Indian and Northern Affairs Canada is primarily responsible for meeting the federal government's responsibilities to Aboriginal peoples, including governance issues. To date, no land claims have been filed for the area near the Hollinger Mine, however, interviews and TEK

[11] The forerunner of this plan, the recently completed Growth Plan for the Greater Golden Horseshoe, identified a plan for sustainable growth, including target population densities for specific areas, in an effort to limit the extent of sprawl resulting in unsustainable growth, particularly with respect to infrastructure requirements and environmental effects.

(Traditional Environmental Knowledge) documentation work, undertaken in cooperation with and by the Mattagami First Nation, is recommended to confirm the status of First Nation land use values in the broader study area.[12]

A number of organizations provide services to the Aboriginal community located in and around Timmins including:

- Timmins Native Friendship Centre: Established in 1974, funded by Heritage Canada's Aboriginal Friendship Centre Program with the objective of providing a healthy atmosphere to the community. Services include counseling and referral, cultural, education and recreational activities. The Centre services over 3,600 clients each year.

- The Ojibway and Cree Cultural Centre: Established 1979 under direction of the Grand Council Treaty #9, known as Nishnawbe Aski Nation. The Centre is funded by the Indian and Northern Affairs Canada (INAC) Cultural Education Centres program and seeks to maintain and strengthen cultural identity for Aboriginal people; develop positive images for Aboriginal people; and enhance social awareness of Aboriginal culture and appreciation of Nishnawbe Aski Nation heritage. The Centre services 49 native communities, including a native population of approximately 29,000. Programs encourage the use of Cree, Oji-cree and Ojibway; provide translation and interpretation services, language resource materials, educational programs and workshops; and promote the development of school programs, curriculum and professional growth. In addition to Aboriginal peoples located in Timmins, the Ojibway and Cree Cultural Centre provides services to the following First Nations communities: Attawapiskat, Constance Lake, Flying Post, Fort Albany, Kashechewan, Mattagami, Mocreebec, Moose Cree, New Post (Taykwa Tagamou) and Wahgoshing.

- Wabun Tribal Council and Wabun Health Services: Established in 1990, is responsible for coordinating and delivering federal and provincial services at the local level to the following seven First Nations communities: Beaverhouse, Brunswick House, Chapleau Ojibwe, Matachewan, Mattagami, Wahgoshig and Flying Post.

3.2.3 Synopsis

Northern Ontario is divided into ten districts, the largest of which is Algoma District, followed by Cochrane District. Timmins (43,686) is the largest municipality in Cochrane District, followed by Kapuskasing (8,509), Hearst (5,825), Cochrane (5,690) and Iroquois Falls (5,217).[13] Two thirds of the population in northern Ontario lives in urban areas, 90% of which are located in the cities of Thunder Bay, Sault Ste. Marie, Timmins, Sudbury and North Bay. Key challenges currently facing northern communities include aging infrastructure, out-migration and increasing electricity prices.

Provincial ministries that play a role in the monitoring and regulation of mining activities include Ministry of Northern Development and Mines, Ministry of Environment, Ministry of Natural Resources, Ministry of Municipal Affairs and Housing (due to the urban nature of the project), and Ministry of Aboriginal Affairs. Key acts and regulations affecting this project include the Mining Act, the Environmental Assessment Act, the Planning Act and the Provincial Policy Statement.

[12] Archaeological and Cultural Heritage, Built Heritage & Cultural Heritage Landscapes Assessment, Woodland Heritage Services, December 2007.
[13] Statistics Canada, 2006.

The Provincial Policy Statement outlines the responsibilities of municipalities pertaining to issues of provincial interest. With respect to mining, the municipality must seek to ensure long-term economic prosperity of the City by protecting proven mineral resources from activities that might prevent development of the resource.

The Mining Act provides operational guidelines for the Mining Industry that must be adhered to throughout the mine life cycle. Goldcorp has extensive experience with the Mining Act, but the Hollinger Project represents a unique opportunity due to its urban nature. As a result, it is important to understand the constraints and opportunities resulting from mining in an urban environment. Specific issues, such as potential economic benefits and protecting adjacent land uses and property owners, are covered in greater detail in the following sections. In addition, Goldcorp should seek to develop strong partnerships with stakeholders at all levels, in order to recognize the value of this undertaking on both a local and regional basis.

3.3 ECONOMY

The economy of Timmins is inextricably linked to the mining activities of the last century (there are approximately 2,400 km of underground mine workings in Timmins), beginning with the discovery of gold at the Porcupine Camp in the early 1900's. In the 1960's, base metals such as copper, zinc and nickel began to replace gold as the primary mined deposit. Today, Timmins is a regional centre for shopping, cultural events, commerce and health services in Northeastern Ontario. In addition to resource-based businesses, metal fabrication, service industries, including government services, and tourism have become significant elements of the local economy.

In Ontario, thousands of jobs are generated on annual basis as a result of mining activities. A study recently released by the Institute for Policy Analysis at the University of Toronto reports that the average mine generates 2,000 jobs per year and $140 million to the province's Gross Domestic Product (GDP) during the construction phase, and 2,300 jobs per year and $280 million to the province's GDP during the production phase. The report, "Ontario Mining: A Partner in Prosperity Building – The Economic Impacts of a 'Representative Mine' in Ontario", identifies four levels of economic benefits: direct, indirect, induced and diffuse.[14]

Direct benefits refer to goods and services directly attributed with the activities of the mine, whereas indirect benefits are related to goods and services that support these activities, including accounting, financial, transportation, and food services, as well as replacement parts for machinery. Induced economic impacts relate to the spending of wages and salaries of mine employees, and diffuse impacts refer more generally to the changes incurred on a local level, including increased demand for teachers, doctors, police officers and various other government services. The following sections provide an overview of these various economic benefits.

3.3.1 Labour Market Profile

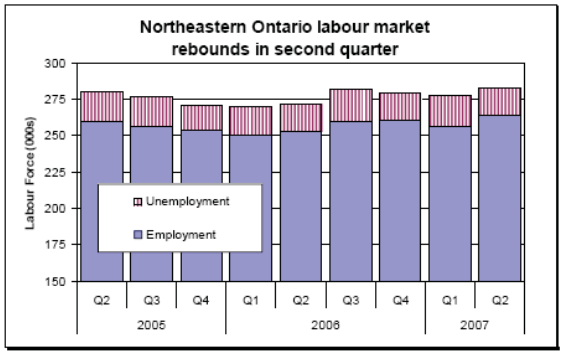
On a regional level, an analysis of the Timmins and area labour market for the second quarter of 2007 shows close to a five year record high in job gains, led by the services-producing sector. Northeastern Ontario's unemployment rate fell to 6.8%, much closer the Ontario average of 6.5% than in previous years. These strong economic indicators can be attributed in part to record high commodity prices fueling growth in the mining sector, while comparatively lower employment levels in 2005 and 2006 can be explained in part by a slow down in the forest industry. These two sectors are particularly relevant in Timmins where the share of jobs in forestry and mining is significantly higher than the average community in Ontario.

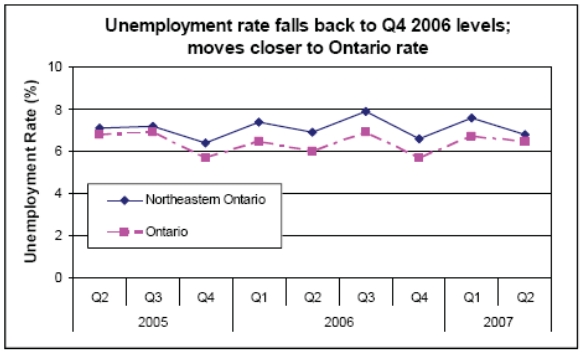
In 2001, Timmins reported a population of 43,686 with a labour force participation rate of 63.9% (% of the population eligible for work). Of this, 56.7% were employed, resulting in an unemployment rate of 11.2%. These statistics are consistent with participation, employment and unemployment rates for the District of Cochrane, but show slightly higher compared to Northern Ontario due to a sustained period of economic stagnation prior to 2001.[15]

[14] Dungan and Murphy, 2007.

[15] Participation Rate: the labour force in the week expressed as a percentage of the population 15 years of age and over. Employment Rate: Refers to the number of persons employed in the week expressed as a percentage of the total population 15 years of age and over. Unemployment Rate: Refers to the unemployed expressed as a percentage of the labour force in the week. Statistics Canada, 1996 and 2001 Timmins, Cochrane and Ontario Census Data.

Figure 10: Labour Force Trends – Northeast Ontario (2005 - 2007)





Service Canada, 2007

Compared to 1996, employment rates increased in Timmins over a five-year period (from 44.12% to 56.7%), as well as for the region (from 42.53% to 55.2%), showing a gradual upturn in the economy. This trend has continued since 2001.

Table 2: Labour Force: Timmins, District of Cochrane and Ontario (2001)

Labour Force Indicators in 2001			
	Timmins	District of Cochrane	Ontario
Participation Rate %	63.9	62.3	67.3
Employment Rate %	56.7	55.2	63.2
Unemployment Rate %	11.2	11.5	6.1

Unemployment rate	1996	2001
Timmins	11.20%	11.20%
District of Cochrane	11.60%	11.50%
Ontario	9.10%	6.10%

Statistics Canada, 2001

In 2001, median income for Timmins ($20,648) was comparable with the regional average ($20,499), but slightly lower than the average for the province ($24, 816). Since 1996 the gap between regional and provincial incomes has narrowed by almost 50%.

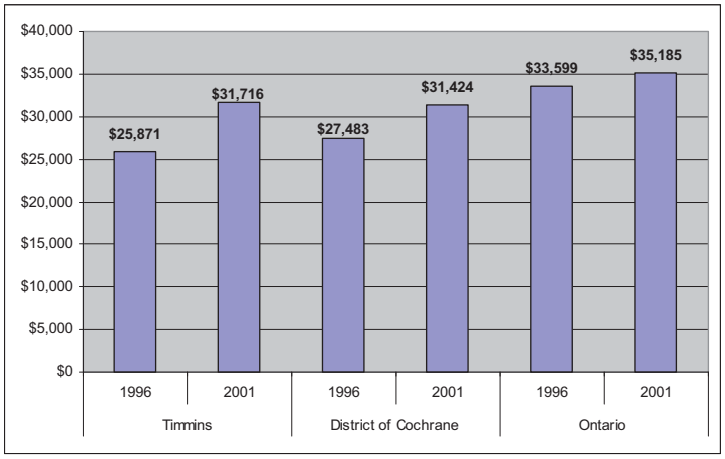
Table 3: Earnings and Income: Timmins, District of Cochrane and Ontario (2001)

Earnings in 2001			
	Timmins	District of Cochrane	Ontario
All persons with earnings	22,045	42,815	6,319,535
Average earnings	$31,716	$31,424	$35,185
Worked full year full time	11,100	21,295	3,527,045
Average earnings	$44,079	$43,990	$47,299

Income in 2001			
	Timmins	District of Cochrane	Ontario
Median total income	$20,648	$20,499	$24,816
Composition of total income %			
Earnings % of income	76.9	76.3	78.7
Government transfers % income	14	14.2	9.8
Other money % income	9.1	9.4	11.5

Statistics Canada, 2001

Figure 11: Average Earnings Timmins, District of Cochrane and Ontario (1996-2001)



Statistics Canada, 2001

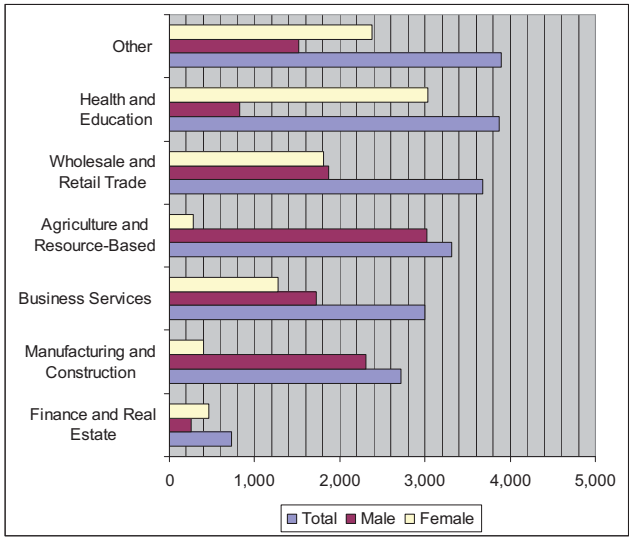
The 2004 Timmins Community Profile notes that the representation of the retail trade, transportation and storage, health and food, and accommodation sectors is above average compared to other northern communities, underlining the role of Timmins as a regional centre.[16] Data from 2007 indicate a significant increase in job postings since 2006 in many of these sectors, in parallel with important activities underway such as the expansion of the Cedar Meadows resort in Timmins, an expansion of Timmins International trucking dealership, as well as significant government funding for the Canada Ontario Affordable Housing Program (which will include targeting off-reserve housing).[17]

In addition to on-going developments in the mining sector - for example, the construction of the De Beers Victor Mine, requiring recruitment of an additional 375 workers from James Bay First Nations, Timmins and surrounding areas - current economic conditions suggest sustained employment levels for the near future.

With respect to gender based participation, Statistics Canada data from 2001 indicate that noticeable differences exist in the top ranking Health and Education Industry, where 78% of the labour force is female. On the other hand, the Agriculture and Resource-Based Industry shows a predominantly male workforce (91%). These trends can be seen across the region and province as well.

[16] City of Timmins, 2004
[17] Service Canada, 2007

Table 4: Labour Force by Gender (Timmins, 2001)



Statistics Canada, 2001

3.3.2 Major Employment Sectors

Statistics Canada data from 2001 show the top three employment sectors in Timmins as retail trade (14.9%), mining (13.6%) and health care and social assistance (11.6%) reflecting the provision of regional health services and the high degree of mining activities.[18] The importance of mining activity in the Timmins area is further underscored by the approximate three-to-one spin-off factor associated with mining employment, which is not reflected in these statistics. The District of Cochrane is more reflective of provincial trends, showing the top three employment sectors as manufacturing and construction (22%), business services (19.1%) and wholesale and trade (15.9%).[19]

The information provided in **Table 5** also shows the employment share per sector in Timmins compared to the provincial average. Mining represents a much higher than average share of jobs in Timmins compared with Ontario as a whole (13.6% compared to 0.3%). Utilities, construction, retail trade, transportation, warehousing, education, heath care and social services, accommodation and food services, and government and other services show a slightly higher share of employment than the provincial average, while agriculture, manufacturing, retail trade, arts, entertainment, recreation and professional services and finance show a lower share of employment.

[18] City of Timmins Community Profile, 2004
[19] Statistics Canada 2001

Table 5: Total Employees by Industry: Timmins and Ontario (2001)

	Timmins Employed	% Share	Ontario Employed	% Share	Timmins / Ontario Ratio
Total employed by place of work	17,745	100.0	5,252,745	100.0	100
Agriculture, other primary	265	1.5	109,910	2.1	71
Mining	2,405	13.6	18,200	0.3	3,912
Utilities	220	1.2	41,970	0.8	155
Construction	730	4.1	162,850	3.1	133
Manufacturing	1,055	5.9	909,710	17.3	34
Wholesale trade	585	3.3	251,005	4.8	69
Retail trade	2,640	14.9	621,625	11.8	126
Transportation, warehousing	765	4.3	212,825	4.1	106
Information, cultural	425	2.4	152,880	2.9	82
Finance, insurance	475	2.7	279,600	5.3	50
Real estate, leasing	200	1.1	99,950	1.9	59
Professional, scientific, technical services	685	3.9	382,120	7.3	53
Management of companies and enterprises	0	0.0	7,515	0.1	0
Administrative, support, waste management	435	2.5	184,330	3.5	70
Education	1,380	7.8	340,835	6.5	120
Health care, social	2,060	11.6	491,655	9.4	124
Arts, entertainment, recreation	200	1.1	103,055	2.0	57
Accommodation, food	1,310	7.4	345,055	6.6	112
Other services	900	5.1	243,390	4.6	109
Government	1,010	5.7	294,265	5.6	102

Statistics Canada, 2001

3.3.3 Key Local Employers

The top employers in the public sector in Timmins include Timmins and District Hospital, the French Catholic District School Board, and the English Public District School Board, followed by the City of Timmins and the provincial government. Four out of five of these employers have a service area that extends beyond the municipal borders, reflecting the City's position as a regional centre for education and health services, among other areas.[20] The City's Statement of Priorities and Directions reflects an interest in continuing to build on this position, while also focusing on areas such as sports and retirement services. Specific initiatives include developing Timmins as the #1 centre for year-round sports in Northern Ontario, developing the sports tourism theme, and becoming a centre of health care excellence.[21]

With respect to the private sector, five out of ten of the top ranking employers are from the mining sector, including Xstrata (1,413 employees), Goldcorp (700 employees), Redpath Group (310 employees), Dumas Contracting (300 employees) and Rio Tinto Minerals-Luzenac (65 employees).

[20] Timmins Economic Development Corporation, 2007
[21] City of Timmins, 2004

Table 6: Top Public Sector Employers: Timmins (2007)

Top Public Sector Employers		
Employer	**Employees**	
	#	%
Timmins and District Hospital	590	16%
Conseil scolaire catholique du district (CSCD) des Grandes Rivières	520	14%
District School Board Ontario North East	460	13%
City of Timmins	520	14%
Provincial Government	420	11%
Northeastern Catholic District School Board	340	9%
Golden Manor	217	6%
Cochrane Temiskaming Resource Centre	180	5%
Federal Government	160	4%
Technology – Porcupine Campus	160	4%
Cochrane District Community Care Access Centre	100	3%
Total	3667	100%
Overall Employment	21,195	
% of overall Employment	17.30%	

Timmins Economic Development Corporation, 2007

Table 7: Top Private Sector Employers: Timmins (2007)

Top Private Sector Employers		
Employer	**Employees**	
	#	%
Xstrata (mining) – (820 smelter, 484 Kidd & 109 Montcalm)	1,413	32%
Teletech (call centre)	950	21%
Goldcorp (mining)	700	16%
The Redpath Group (mining)	310	7%
Dumas Contracting (mining)	300	7%
Leo Alarie and Sons (construction)	140	3%
Fleury's Independent Grocer (retail)	80	2%
Grant Forest Product (forestry)	160	4%
Domtar Inc. (forestry)	117	3%
Home Depot (retail)	150	3%
Rio Tinto Minerals – Luzenac (talc)	65	1%
Millson Forestry Services (nursery)	50	1%
Total	4,435	100%
Overall Employment	21,195	
% of overall Employment	20.92%	

Timmins Economic Development Corporation, 2007

The following is a brief outline of the top three private sector employers in Timmins:

Xstrata: Xstrata's operations include the Kidd Creek Mine, 25 km north of Timmins, the Kidd metallurgical facility (met site), 20 km east of Timmins, and the Montcalm Mine, 70 km northwest of Timmins. The Kidd operations produce copper, zinc, indium, cadmium and silver. The mine reached a depth of 2.7 km in late 2006, making it the deepest base metal mine in the world. The Montcalm Mine is a nickel-copper mine.

Teletech: Teletech is a customer management/call centre located on Spruce Street adjacent to downtown Timmins. Established in Timmins in 2002, Teletech has 950 employees providing services in insurance, transportation, government contracts and wireless communication services.

Goldcorp: Goldcorp's assets include the Dome underground mine and mill, the Holye Pond underground mine, Pamour open pit mine and a large land package in Timmins camp (the Hollinger Mine is located on these lands). Ore production in 2006 came from four sources: the

Dome stockpiles, the Dome underground mine, the Pamour open pit and stockpiles, and the Hoyle Pond underground operation.

It is important to note that the proposed Hollinger Mine would start up as operations at the Pamour Pit are winding down, extending Goldcorp's overall operations in Timmins for another ten or more years beyond 2014. Staff currently employed at the Pamour Pit, representing approximately 185 positions (including the pit, maintenance, technical support and the mill), would transfer over to the Hollinger operation. In addition to sustaining the 185 positions, contractors hired to work at the mine would result in a total of 250 direct jobs and over 570 indirect jobs. During the construction phase, employment generation is anticipated in the range of 250 positions. With potential annual expenditures expected in the range of $50 million, the Hollinger Mine represents a vital opportunity for sustaining the mining industry as a crucial element of Timmins' economy.

Table 8 provides a comparison of the economic impacts of a typical mine in Ontario with the anticipated impacts of the Hollinger Mine.[22]

Table 8: Economic Impacts: Typical Ontario Mine & Anticipated Impacts at the Hollinger Mine

Employment Category	Description	Typical Ontario Mine	Hollinger Mine with Associated Milling
Level 1 - Direct	Mine employees (including contractors employed directly at the mine / mill site)	480	250
Level 2 - Indirect	Transportation, equipment, outside engineering and scientific services, accounting, financial, insurance, etc.	1,103	574
Level 3 - Induced	Spin-offs related to spending in the local economy from direct and indirect employees, as well as by induced level employment itself.	697	363
Level 4 - Diffuse	Employment related mainly to services such as that provided by municipal workers, teachers, police, fire and health care workers, etc.	Difficult to quantify, but nonetheless important, because most effects felt locally	Difficult to quantify, but nonetheless important, because most effects felt locally
Total	Direct, Indirect and Induced (*excludes diffuse employment*)	2,280	1,187
Ratio of Indirect + Induced to Direct		3.75 : 1	3.75 : 1
Percentage Employment Retained Locally		66.7	Above 66.7%[23]

[22] Economic impacts of a typical mine in Ontario are obtained from "Ontario Mining: A Partner in Prosperity Building – The Economic Impacts of a 'Representative Mine' in Ontario" (Dungan P. and Murphy, S., 2007).

[23] With Timmins being a regional mining centre it is expected that the percent of employment retained locally would be higher than for the Ontario average.

3.3.4 Real Estate Market Profile

Timmins has been experiencing a shortage in housing as a result of high residential sales over the last three years. According to the Timmins Real Estate Board, the volume of sales over this period is at a 15-year peak. In May 2006, the City was reporting an increase of seven new residential permits compared to the same time in 2005, surpassing 2005 building permits by more than $24 million.[24]

Annual data for the District of Cochrane provided by the Timmins Real Estate Board and summarized in **Table 8** show sales for each land use category. Between 2003 and 2006, the real estate market experienced an overall growth in sales, with the highest number and value of residential sales recorded in 2004.[25] Residential sales lead in volume (76.9%) and dollar value (83.2%), followed by multi-family, commercial and vacant lands. This trend appears to be continuing, reflected by the fact that seven subdivisions are currently under construction in Timmins, a much higher than average amount.

Table 9: Real Estate Sales Volume: District of Cochrane (2003-2006)

Total Number of Sales								
	Residential	Recreational	Condominium	Farm	Vacant Land	Commercial	Multi-Family	Total
2006	566	12	4	12	45	25	72	736
2005	542	11	4	21	30	17	60	685
2004	643	14	20	12	26	12	50	777
2003	471	22	10	8	22	13	38	584
2002								
Percentage Change Over Previous Year								
06/05	4.4	9.1	0.0	-42.9	50.0	47.1	20.0	7.4
05/04	-15.7	-21.4	-80.0	75.0	15.4	41.7	20.0	-11.8
04/03	36.5	-36.4	100.0	50.0	18.2	-7.7	31.6	33.0
03/02								

Sales By Land Use as a % of the Total Number							
Residential	Recreational	Condominium	Farm	Vacant Land	Commercial	Multi-Family	Total
76.9	1.6	0.5	1.6	6.1	3.4	9.8	100.0
79.1	1.6	0.6	3.1	4.4	2.5	8.8	100.0
82.8	1.8	2.6	1.5	3.3	1.5	6.4	100.0
80.7	3.8	1.7	1.4	3.8	2.2	6.5	100.0

Timmins Real Estate Board, 2007

Due to increased demand (related to the overall upturn in the economy) the average sale price steadily increased between 2003 and 2006 for residential, recreational and farm uses, whereas prices for condominiums, vacant lands, commercial and multi-family uses have fluctuated.

[24] Larmour, 2006
[25] Timmins Real Estate Board, 2007

Table 10: Real Estate Sales Value: District of Cochrane (2003-2006)

Total Sales Dollar Value								
	Residential	Recreational	Condominium	Farm	Vacant Land	Commercial	Multi-Family	Total
2006	$59,791,300	$954,000	$389,000	$1,008,900	$1,210,824	$3,135,940	$5,332,000	$71,821,964
2005	$54,927,285	$811,500	$384,900	$1,618,062	$1,037,505	$2,059,516	$3,598,500	$64,437,268
2004	$62,810,741	$861,000	$1,442,600	$842,500	$897,000	$1,176,250	$3,353,650	$71,383,741
2003	$45,750,270	$1,495,100	$171,000	$480,900	$676,600	$2,060,000	$2,548,410	$54,182,280
2002								
Percentage Change Over Previous Year								
06/05	8.9	17.6	1.1	-37.6	16.7	52.3	48.2	11.5
05/04	-12.6	-5.7	-73.3	92.1	15.7	75.1	7.3	-9.7
04/03	37.3	-42.4	743.6	75.2	32.6	-42.9	31.6	31.7
03/02								

Sales By Land Use as a % of the Total Value							
Residential	Recreational	Condominium	Farm	Vacant Land	Commercial	Multi-Family	Total
83.2	1.3	0.5	1.4	1.7	4.4	7.4	100
85.2	1.3	0.6	2.5	1.6	3.2	5.6	100
88.0	1.2	2.0	1.2	1.3	1.6	4.7	100
84.4	2.8	0.3	0.9	1.2	3.8	4.7	100

Timmins Real Estate Board, 2007

Demand is reported to be highest for three and four bedroom houses ranging from 1,200 sq ft to 2,000 sq ft. In June 2007, the average price of a home was reported as having increased by 29% from 2006, the highest increase across the province. Despite this, at $113, 941, the average cost of a home in Timmins was much more affordable than the provincial average of $275, 268.[26] The data also suggests that an average house sold for $80,000 in 2006 (29% lower than $113,941), much lower than the District average of $105,638, whereas current residential costs appear to be more in line with District prices.

Table 11: Real Estate Average Sale Price: District of Cochrane (2003-2006)

Average Sale Price								
	Residential	Recreational	Condominium	Farm	Vacant Land	Commercial	Multi-Family	Total
2006	$105,638	$79,500	$97,250	$84,075	$26,907	$125,437	$74,055	$97,584
2005	$101,341	$73,772	$96,225	$77,050	$34,583	$121,148	$59,975	$94,069
2004	$97,683	$61,500		$70,208	$34,500	$98,020	$67,073	$91,870
2003	$97,134	$67,959	$117,100	$60,112	$30,754	$158,461	$67,063	$92,777
2002	$93,841	$63,661	$78,000	$47,400	$23,904	$59,776	$67,601	$86,706
Percentage Change Over Previous Year								
06/05	4.2	7.8	1.1	9.1	-22.2	3.5	23.5	3.7
05/04	3.7	20.0		9.7	0.2	23.6	-10.6	2.4
04/03	0.6	-9.5		16.8	12.2	-38.1	0.0	-1.0
03/02	3.5	6.8	50.1	26.8	28.7	165.1	-0.8	7.0

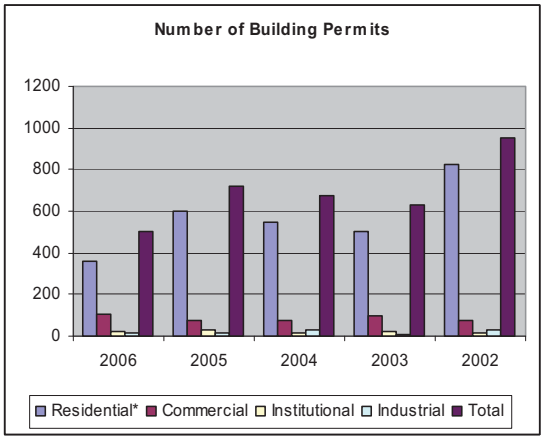
Timmins Real Estate Board, 2007

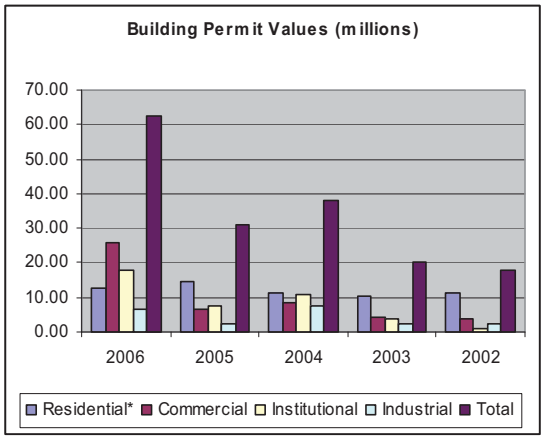
Although the overall number of permits decreased from 953 in 2002 to 499 in 2006, by the end of 2006 the overall value of permits in all sectors doubled that of the previous year, reaching $62 million. In May 2005, the total was $31 million. This increase in permit values is due to higher sale values for commercial, institutional and industrial buildings. The increase in commercial building permits in particular reflects the recent development surge on the west side of town, including the redevelopment of Timmins Square, and further west on Riverside Drive, with construction of a Home Depot, and Canadian Tire. Commercial building permits in 2006 increased by 35% from 2005, with development activity still going strong in 2007.[27]

[26] Wong, T., June 22, 2007
[27] City of Timmins, 2007

Table 12: Building Permits: City of Timmins (2005-2006)

Building Permit Number and Values (Millions)										
	2006		2005		2004		2003		2002	
	#	$	#	$	#	$	#	$	#	$
Residential*	363	12.47	600	14.66	550	11.40	503	10.27	826	11.07
Commercial	104	25.73	77	6.62	77	8.47	96	4.10	77	3.57
Institutional	20	17.87	27	7.43	17	10.72	20	3.53	17	0.80
Industrial	12	6.52	16	2.52	33	7.48	10	2.36	33	2.58
Total	**499**	**62.59**	**720**	**31.23**	**677**	**38.07**	**629**	**20.26**	**953**	**18.02**
*Includes cottages&mobile homes										





City of Timmins, 2007

According to data released by Canada Mortgage and Housing Corporation during the first quarter of 2007, overall vacancy rates in 2006 were slightly higher than vacancies in other major Northern Ontario cities – 3.8% for Timmins compared with 1% for Sault Ste Marie and 2.4% for North Bay – but comparable to the provincial average of 3.9%. Average rents for Timmins were in line with regional data, but lower than the provincial average – $611 for Timmins compared to $604 for Sault Ste Marie and $677 for North Bay and $869 for the provincial average.[28]

Table 13: Vacancy Rates and Rents: Timmins, Sault Ste Marie, North Bay (2005-2006)

Private Apartment Vacancy Rates(%)										
	Bachelor		1 Brm		2 Brm		3+ Brm		Total	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
North Bay	n/a	n/a	1.20	3.00	3.30	1.70	n/a	n/a	2.70	2.40
Sault Ste Marie	n/a	n/a	3.40	0.70	3.10	1.10	3.20	n/a	3.30	1.00
Timmins	8.60	n/a	4.70	3.30	3.50	3.80	0.80	0.00	4.00	3.80

Private Apartment Average Rents($)										
	Bachelor		1 Brm		2 Brm		3+ Brm		Total	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
North Bay	440	456	553	581	695	729	762	808	637	677
Sault Ste Marie	399	433	524	538	624	644	670	706	586	604
Timmins	448	405	543	544	644	660	760	750	606	611

Canada Mortgage and Housing Corporation, 2007

[28] Canadian Mortgage and Housing Corporation, 2007

3.3.5 Economic Trends and Forecasts

The City has been experiencing a boom in retail development in the west end, representing an investment of over $25 million in land, servicing and construction. Recent developments have included the Timmins Square redevelopment, and further west on Riverside Drive, the construction of a Home Depot and Canadian Tire. Residential development is also booming with at least seven different subdivisions currently under construction. Other development activity includes construction of a $6.5 million, 71 unit senior's residence on Tamarack Street, Feldman Timber's $16.2 million commercial development on Highway 101, and a proposal for a strip mall in the west end of Timmins. The City is also undertaking a feasibility study for a 34 ha industrial park in the west end.[29]

High commodity prices have spurred all kinds of mineral exploration activity; gold has increased from $297 per ounce in 2000 to a current value of over $800 US per ounce in 2007 (see **Table 13**). Starting in 2002, the City and region has capitalized on this mineral sector growth with the Discover Abitibi Initiative (DAI), coordinated by Timmins Economic Development Corporation. The objective of DAI is to support and stimulate further mineral exploration activity by providing access to a comprehensive mineral resource database and reducing technical and cost constraints.

Table 14: Commodity Prices (2000, 2007)

Commodity	November 2007 Market Price	March 2007 Market Price	Early 2000 Market Price
Gold	$807/ounce	$653/ ounce	$297/ ounce
Copper	$3.15/ pound	$2.80/ pound	$0.72/ pound
Zinc	$1.24/ pound	$1.50/ pound	$0.45/ pound
Nickel	$15.22/ pound	$20.37/ pound	$2.97/ pound

November 2007: Bloomberg.com
March 2007 and 2000: Timmins Economic Development Corporation, 2007

Recent discoveries, including Tres-Or Resource diamond find near Kirkland Lake, Contact Diamond's discovery of diamonds near Cobalt and current activities being undertaken by West Timmins Mining Corporation have been attributed to the DAI database. New investment is estimated at $25 million in the Timmins region. City officials will attempt to further capitalize on the commodity boom by lobbying the province to reduce diamond-mining royalties to encourage further exploration investments.[30]

Another important project currently underway is the construction of the Victor Mine. Project construction began in December 2005 and is anticipated to have an affect on Timmins' economy for the next two decades. Located in the James Bay Lowlands approximately 90 km west of the coastal community of Attawapiskat, the project represents plans for a diamond mine – the first in Ontario – owned by De Beers. The mine will be open-pit with an expected life of 12 years and a total project life of 17 years. A large number of contractors from Timmins are participating in the construction phase. In addition, Timmins is the departure point for flights to the mine site. Both materials and labour will require transportation from or through Timmins, all of which will result in a considerable impact on the local economy. As noted previously, the De Beers Victor project anticipates hiring an

[29] Timmins Economic Development Corporation, 2007, Service Canada 2007
[30] Timmins Economic Development Corporation, 2007

additional 325 employees in 2007, which will continue to have a positive trickle-down affect on the Timmins economy. [31]

3.3.6 Synopsis

As a result of high commodity prices, mining activities continue to be a contributing factor to Timmins' economic base. Increased employment opportunities have spurred a surge in the economy, resulting in increased residential and retail development. Although the City plans to continue to diversify, the strong relationship with natural resource based activities leaves it vulnerable to global markets and commodity prices. Despite this, the outlook is optimistic for on-going exploration and mining activities.

The Hollinger Mine in particular represents an important opportunity for sustaining mining-related employment well into the future. As one of the top three employers in the City, and representing annual expenditures expected in the range of $50 million, the Hollinger Mine would have far reaching economic implications, preserving approximately 185 existing mining jobs well beyond 2014, together with important spin-off employment effects.

Of additional note are the opportunities which will be presented both during operation and post-rehabilitation of the Hollinger pit, including tourism opportunities presented by the unique situation of an urban mine and, post-rehabilitation, recreational, commercial and residential development on lands previously considered hazardous, in addition to millions of dollars in savings as a result of the elimination of monitoring and rehabilitation costs shared by Goldcorp and the Ministry of Northern Development and Mines. As the Project enters the feasibility phase Goldcorp will need to further examine the direct and indirect costs and benefits related to this undertaking and examine partnership opportunities with various levels of government.

[31] *Ibid*

3.4 POPULATION

3.4.1 Population Characteristics

Two thirds of the population in Northern Ontario lives in urban areas, with over 90% located in the five major cities of Thunder Bay, Sault Ste. Marie, Timmins, Sudbury and North Bay. Northern Ontario is divided into ten districts for the purpose of providing government services, including regional planning and managing common services. Timmins is part of Cochrane District, the second largest district in Northern Ontario following Algoma District. Based on 2006 census data, the City of Timmins (42,997) is the largest municipality located in Cochrane District, followed by Kapuskasing (8,509), Hearst (5,825), Cochrane (5,690) and Iroquois Falls (5,217).[32]

Between 1996 and 2001, the City experienced a decline in population of 8%, from 47,499 to 43,686. Prior to this, the City's population had remained fairly constant for approximately 15 years. Between 2001 and 2006, this trend has slowed; population decreased approximately 1.6%, from 43,686 to 42,987. Similar to Timmins, the District of Cochrane experienced a steady population decline in the range of 9% between 1996 and 2001 and 3% between 2001 and 2006. These trends do not reflect provincial population characteristics, which have shown steady growth over the last two decades.

The major cause for the lack of population growth in Timmins, and Northern Ontario in general, can be attributed to the high dependency on the number of jobs provided by the mining and forestry industries. However, in the past few years, an upturn in the mining industry has contributed to slowing out-migration in mining communities such as Timmins.

Table 15: Population: Timmins, District of Cochrane and Ontario (1991-2006)

Population			
Year	Timmins	Cochrane	Ontario
2006	42,997	82,503	12,160,282
2001	43,686	85,247	11,410,046
1996	47,499	93,240	10,753,573
1991	47,461	N/A	10,084,885
Population Change %			
Year	Timmins	Cochrane	Ontario
2006 - 2001	-1.6	-3.3	6.2
2001 - 1996	-8.0	-9.4	6.1
1996 - 1991	0.1	N/A	6.6
Age Characteristics			
Year	Timmins	Cochrane	Ontario
Median Age	37.1	37.5	37.2
% Population Aged 15+	79.5	79.6	80.4

Statistics Canada, 1991-2006

[32] Statistics Canada, 2006

3.4.2 Population Distribution

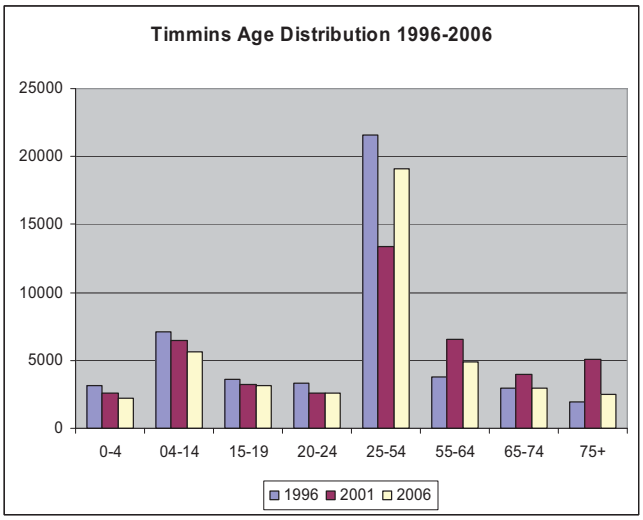
Adults between the age of 25 and 54 represent the dominant demographic group in Timmins, with a median age of 37.1, compared to 37.5 for Cochrane and 37.2 for the province. Between 1996 and 2001, this age group experienced a significant drop in population, from 21,595 to 13,390, followed by an increase in the range of 6,000 people between 2001 and 2006, from 13,390 to 19,070. Over the same period, the 55-64-age cohort experienced significant growth, and a slight decline between 2001 and 2005.[33] The 25-54-age range represents approximately 44% of the population, followed by the 4-14 age range, representing 13% of the population.

Table 16: Age Distribution: Timmins (1996, 2001, and 2006)

Age Group	Timmins Total Population		
	1996	2001	2006
0-4	3,180	2,550	2,225
04-14	7,100	6,420	5,635
15-19	3,590	3,205	3,150
20-24	3,325	2,615	2,615
25-54	21,595	13,390	19,070
55-64	3,805	6,515	4,855
65-74	2,925	3,930	2,960
75+	1,979	5,061	2,487
Total	**47,499**	**43,686**	**42,997**

Statistics Canada, 1996-2006

Figure 12: Age Distribution: Timmins (1996, 2001, and 2006)

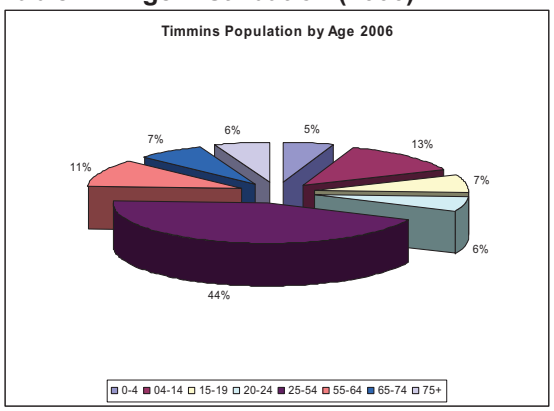


Statistics Canada, 1996-2006

Within the age cohorts, the breakdown of males and females is fairly equal, with women outnumbering men in the age groups over 65, a trend seen across the province and nationally.

[33] Mobility data is not available for the period between 2001-2006 so it was not possible to cross-reference this information for out-migration trends during this period.

Table 17: Age Distribution (2006)



	Timmins Total Population 2006		
	Total	Male	Female
Age Group	#	%	%
0-4	2225	51.24%	48.99%
05-14	5635	51.11%	48.80%
15-19	3150	52.22%	47.94%
20-24	2615	49.71%	50.29%
25-54	19070	49.34%	50.63%
55-64	4855	50.88%	49.02%
65-74	2960	47.30%	52.70%
75+	2487	36.99%	63.33%
Total	**42997**	49.22%	50.78%

Based on Statistic Canada Census 2006

Statistics Canada, 2006

3.4.3 Family Structure

In 2006, approximately 30% of the population of Timmins, (a total of 12,525 families) identified themselves as census families.[34] Of these, 67% identified themselves as married-couple families, 18% as common-law-couple families and 15% as lone-parent families. Compared to provincial averages, Timmins reports a lower number of married-couple families and a higher number of common-law-couple families. Average family size was 2.9, slightly smaller than the province's average of 3.0. In comparison, in 2001, out of a total 12, 585 families, 70% identified themselves as married-couple families, 15% as common-law-couple families and 16% as lone-parent families.

Table 18: Family Characteristics: Timmins, Ontario (2006)

Selected Family Characteristics				
	Timmins		Ontario	
	#	%	#	%
Total Number of Census Families	12,525	100%	3,422,315	100%
Married-couple Families	8,355	67%	2,530,560	74%
Common-law-couple Families	2,230	18%	351,045	10%
Lone-parent Families	1,940	15%	540,715	16%
Average number of persons in all census families	2.9		3.0	

Statistics Canada, 2006

3.4.4 Aboriginal Population

In 2001, approximately 6.7% of the population of Timmins, or 2,880 residents, identified themselves as Aboriginal.[35] In comparison, 9.8 % of the population of the District of Cochrane identified

[34] Statistics Canada defined a census family as a married couple (with or without children of either or both spouses), a couple living common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple may be of opposite or same sex. 'Children' in a census family include grandchildren living with their grandparent(s) but with no parents present. (2006 Census of Population -- Statistics Canada)

[35] Included in the Aboriginal population are those persons who reported identifying with at least one Aboriginal group, that is, "North American Indian," "Métis" or "Inuit (Eskimo)," and/or who reported being a Treaty Indian or a Registered Indian, as defined by the Indian Act of Canada, and/or who reported they were members of an Indian Band or First Nation. (2001 Census of Population -- Statistics Canada)

themselves as Aboriginal, versus only 1.7% for Ontario. Census data is not yet available for 2006.

Table 19: Aboriginal Population (2001)

Aboriginal Population						
	Timmins		Cochrane		Ontario	
	#	%	#	%	#	%
Total	43,190		84,300		11,285,545	
Aboriginal Identity	2,880	6.7	8,275	9.8	188,315	1.7
Non-Aboriginal Identity	40,305	93.3	76,025	90.2	110,972,355	98.3

Statistics Canada, 2001

3.4.5 Visible Minorities

In 2001, only 485 residents, representing 1.1% of the population of Timmins, identified themselves as a visible minority. This is comparable to the District (0.9%), but much lower than the average for Ontario (19.1%), due to the much higher proportion of visible minorities found in larger urban areas.

Table 20: Visible Minorities (2001)

Visible Minorities						
	Timmins		Cochrane		Ontario	
	#	%	#	%	#	%
Total	43,190		84,300		11,285,545	
Visible Minority Population	485	1.1%	730	0.9	2,153,045	19.1

Statistics Canada, 2001

Table 21: Visible Minorities by Group (2001)

Visible Minority Status		
Group	#	%
Total	485	100%
Chinese	175	36.1%
South Asian	115	23.7%
Black	65	13.4%
Filipino	70	14.4%
Latin American	20	4.1%
Southeast Asian	0	0.0%
Arab	0	0.0%
West Asian	10	2.1%
Korean	15	3.1%
Japanese	15	8.6%

Statistics Canada, 2001

3.4.6 Religion

Across Canada, the majority of the population identify themselves as either Catholic or Protestant. In Timmins and the District of Cochrane, a higher percentage of individuals are Catholic compared to the provincial average, reflecting the large French-Canadian population (see **Table 21**).

Table 22: Main Religion: Timmins, District of Cochrane, Ontario (2001)

Top 5 Religions - Census 2001						
	Timmins		Cochrane		Ontario	
	#	%	#	%	#	%
Total	43,190		84,295		11,285,545	
Catholic	29,680	68.7	59,595	70.7	3,911,760	34.7
Protestant	8,755	20.3	16,700	19.8	3,935,745	34.9
No Religious affiliation	3,700	8.6	6,195	7.3	1,841,290	16.3
Christian, n.i.e.	745	1.7	1,305	1.5	301,935	2.7
Christian Orthodox	55	0.1	105	0.1	264,055	2.3

Statistics Canada, 2001

3.4.7 Mobility and Immigration

Between 1996 and 2001, 40% of the population of Timmins changed addresses, compared with 43% for the province. Of this, 2% of residents moved to Timmins from another province or from outside of Canada, whereas the remaining 38% moved within the province. Data have not yet been released for 2006. Although this shows a highly mobile population, the numbers are reflective of national trends, with the exception that larger urban areas tend to show a higher proportion of immigrants arriving from outside the province or country.

Table 23: Mobility: Timmins and Ontario (2001)

Mobility Status - Place of Residence 1 Year Ago	Timmins, City			Ontario		
	Total	Male	Female	Total	Male	Female
Total population 1 year and over (21)	42,700	21,200	21,495	11,156,120	5,462,480	5,693,640
Lived at the same address 1 year ago	36,215	18,005	18,210	9,610,125	4,696,350	4,913,765
Lived within the same province/territory 1 year ago, but changed address	6,180	3,020	3,160	1,321,240	653,755	667,480
Lived in a different province/territory or country 1 year ago	300	180	120	224,760	112,365	112,395

Mobility Status - Place of Residence 5 Years Ago	Timmins, City			Ontario		
	Total	Male	Female	Total	Male	Female
Total population 5 years and over (22)	40,625	20,105	20,520	10,609,755	5,183,200	5,426,555
Lived at the same address 5 years ago	24,275	12,150	12,125	6,067,755	2,951,790	3,115,965
Lived within the same province/territory 5 years ago, but changed address	15,530	7,535	7,995	3,784,170	1,855,225	1,928,945
Lived in a different province/territory or country 5 years ago	815	415	395	757,830	376,190	381,650

(21) Information indicating whether the person lived in the same residence on Census Day (May 15, 2001), as he or she did one year before (May 15, 2000).
(22) Information indicating whether the person lived in the same residence on Census Day (May 15, 2001), as he or she did five years before (May 15, 1996).

Source: Statistics Canada, 2001

In 2001, 95% of the population of Timmins identified themselves as Canadian-born, compared to 72% for the province. Only 5%, or 990 residents, were born outside of Canada, reflecting the limited presence of minority groups shown in **Table 23**. Most immigrants (91%) arrived in Timmins prior to 1991, compared to 66% for the province.

Table 24: Immigration Characteristics: Timmins, Ontario (2001)

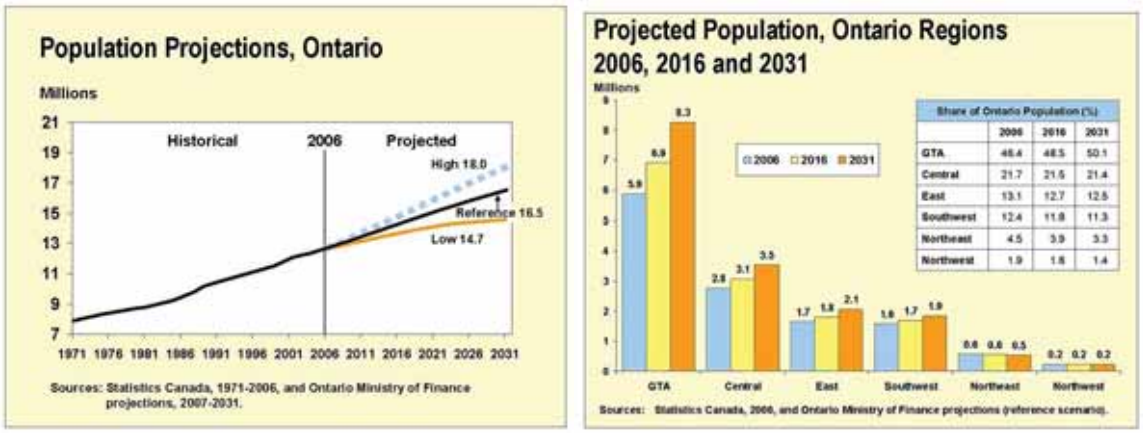
Immigration Characteristics								
	Timmins				Ontario			
	Total	%	Male	Female	Total	%	Male	Female
Total - All persons	43,185		21,500	21,690	11,285,545		5,529,145	5,756,400
Canadian-born population	41,105	95%	20,500	20,605	8,164,860	72%	4,029,890	4,134,965
Foreign-born population	2,065	5%	990	1,075	3,030,075	27%	1,453,510	1,576,565
Immigrated before 1991	1,870	4%	890	975	2,007,705	18%	964,585	1,043,120
Immigrated between 1991 and 2001	195	0%	100	100	1,022,370	9%	488,930	533,440
Non-permanent residents	20	0%	10	15	90,615	1%	45,745	44,870

Statistics Canada, 2001

3.4.8 Growth and Population Change

According to a recent study undertaken by the Ministry of Finance, Ontario's population is forecasted to grow under all projection scenarios (low, medium and high-growth), despite a gradual decline of the population growth rate from 1.1 per cent per year to 0.8 per cent per year. By 2031, the medium-growth, or most likely, scenario shows that the population will reach 16.5 million, up 30% or 3.8 million from the 2006 baseline of 12.7 million. By comparison, the population will reach 14.7 million in the low-growth scenario and 18 million in the high-growth scenario. In northern Ontario, the population is expected to decline by 4.5 per cent, with the District of Cochrane experiencing the fastest population decline.[36]

Figure 13: Ontario Population Projections (2006 – 2031)



Ministry of Finance, 2007

Table 10: Historical and Projected Population: District of Cochrane and Ontario (1996-2031)

Historical and Projected Population								
	Historical			Projected				
	1996	2001	2006	2011	2016	2021	2026	2031
Timmins	47,499	43,686	42,997	40,778	39,318	40,478	39,357	38,286
Cochrane	95,800	89,600	85,300	80,900	78,000	75,700	73,600	71,600
Ontario	11,083,100	11,897,600	12,687,000	13,426,200	14,248,000	15,050,700	15,809,900	16,489,100

Projections for Cochrane and Ontario: Ontario Population Projections Update, Ontario Ministry of Finance Spring 2007

Timmins population data 1996, 2001, 2006: Statistics Canada. Projections assumes Timmins continues to represent approx. 50% of population of Cochrane.

Ministry of Finance, 2007, Statistics Canada 1996-2006

[36] Ministry of Finance, 2007

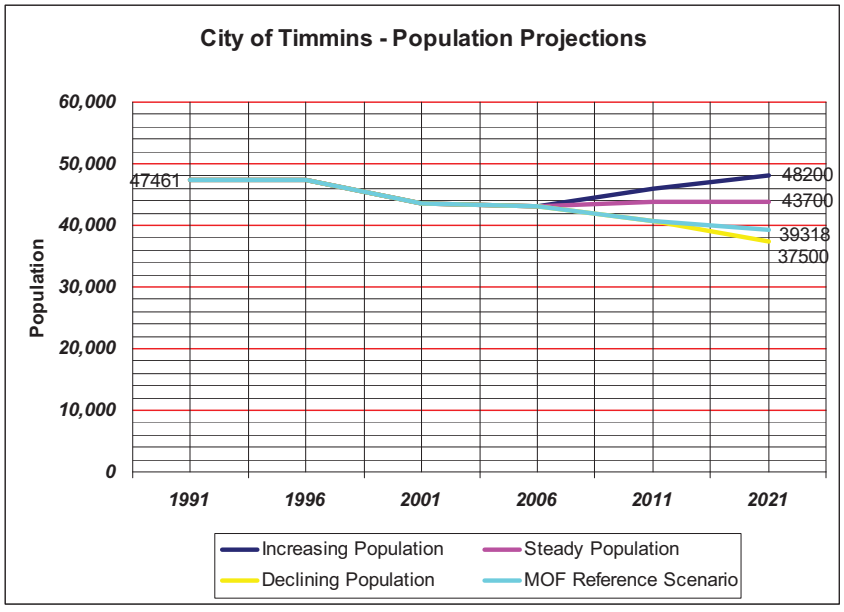
As shown in **Table 10**, the population of Timmins is expected to decline significantly by 2031, as a result of decreasing birth rates, increasing death rates as a result of aging baby boomers, and out migration.

Alternatively, the City of Timmins Community Profile provides more optimistic growth scenarios based on the premise that population growth will follow economic growth. The 'increasing population' scenario assumes that jobs provided by the mining and forestry sector will fall by 25% between 2001 and 2021, off set by a 30% increase in jobs provided by other industries in Timmins. In this scenario, population increases from 43,700 in 2001 to 48,200 in 2021.[37]

The 'steady population' scenario assumes that jobs provided by the mining and forestry sector will fall by 33.3% between 2001 and 2021 (slightly worse than the national average), off set by a 15% increase in jobs provided by other industries in Timmins. In this scenario, the population holds steady at 43,700.

The 'declining population' scenario assumes that jobs provided by the mining and forestry sector will fall by more than 33.3% between 2001 and 2021, without any growth in local industries so that no offset is achieved. In this scenario, population declines by 200 people per year from 43,700 in 2001 to 39,500 in 2021.

Figure 14: City of Timmins, Community Profile Population Projections (1991 – 2021)



City of Timmins, 2004

These scenarios show that economic growth is required in the non-traditional economies in order to sustain the population growth.

[37] City of Timmins, 2004

3.4.9 Synopsis

Between 1996 and 2001, the City of Timmins experienced a significant decrease in population (8%). Since 2001, this trend has slowed with the population decreasing only 1.6%, largely as a result of increased employment in the mining sector. Population projections developed by the Ministry of Finance predict a significant decrease, from 43,000 in 2006 to 38,000 by 2031. Alternatively, the City of Timmins Community Profile estimates that the population will hold steady or increase assuming diversification of the economy is possible and projected employment losses in the mining and forestry sector (resulting from increased efficiencies) will be lower than the national average. If neither assumption holds true, the report indicates that population will decrease to approximately 39,000 (nearing the Ministry of Finance's prediction).

These projections reinforce the importance of the Hollinger Project and potential benefits to the City, as reported in Section 3.3. By sustaining approximately 185 jobs beyond 2010, together with added spin-off employment, this Project will help to slow population decline and support diversification of the economy. It is important to note that recruiting skilled labour will continue to be an on-going challenge, both as a result of population decline and competition in a booming mining sector.

3.5 INFRASTRUCTURE AND COMMUNITY SERVICES

The City of Timmins is a regional hub of Northeastern Ontario, connecting surrounding communities to southern Ontario and the northeastern United States. The City is easily accessible by road, train and air. In terms of infrastructure, a power grid and a gas distribution system, as well as water filtration plants and wastewater treatment plants service the City. The housing stock in the City tends to be low density. There is an abundance of community and recreational services, including extensive snowmobile trails that attract tourists in the winter season. The information provided in this section is based largely on the Timmins Community Profile report, with updates from Timmins Economic Development Corporation and the City.

3.5.1 Transportation

Regionally, Timmins is well connected. Regular flights connect Timmins to destinations northwards and southwards in the province. Freight trains connect Timmins to the main line that runs from North Bay to Moosonee. Highways link Timmins to the surrounding cities, with a system of arterial roads, collector roads and local streets to distribute the traffic thereafter. Additionally, there is a public transit system available. However, within the City, the favoured mode of transportation is by car. Based on the 2001 census, over 70% of the people chose to drive to work, while around 10% chose to carpool and another 12% chose walking or cycling, leaving 3% to take public transit and the rest to find other means of transport.[38]

Air Services

Timmins Victor M. Power Airport, owned and operated by the City of Timmins, is located 11 km north of downtown Timmins.[39] Due to its strategic location in the province, it serves as a base for transportation, communication, medical emergencies and some government services such as forest firefighting. The airport has two runways: the main one is 1829 m (6000 ft) in length; the secondary one is 1494 m (4900 ft).[40] Aircraft services include a flight service station, precision landing aids, a 24-hour weather reporting system and fuelling stations on site. An air terminal building and public parking cater to passengers. The airport is open 24/7.

Because it is located on a 1,012.8 ha site, the airport can accept higher levels of activity without expanding.[41] Just outside the airport are approximately 71 ha of City owned land zoned for airport industrial development.[42] There is a height restriction on certain land parcels and development cannot interfere with airport operations.

Air Canada Jazz, Bearskin Air and Air Creebec have regular service to Toronto, and northern Ontario and First Nations communities along James Bay, shuttling 150,000 passengers every year. Air cargo volumes have been growing; current processing is in the range of 9,000 tonnes per year.[43]

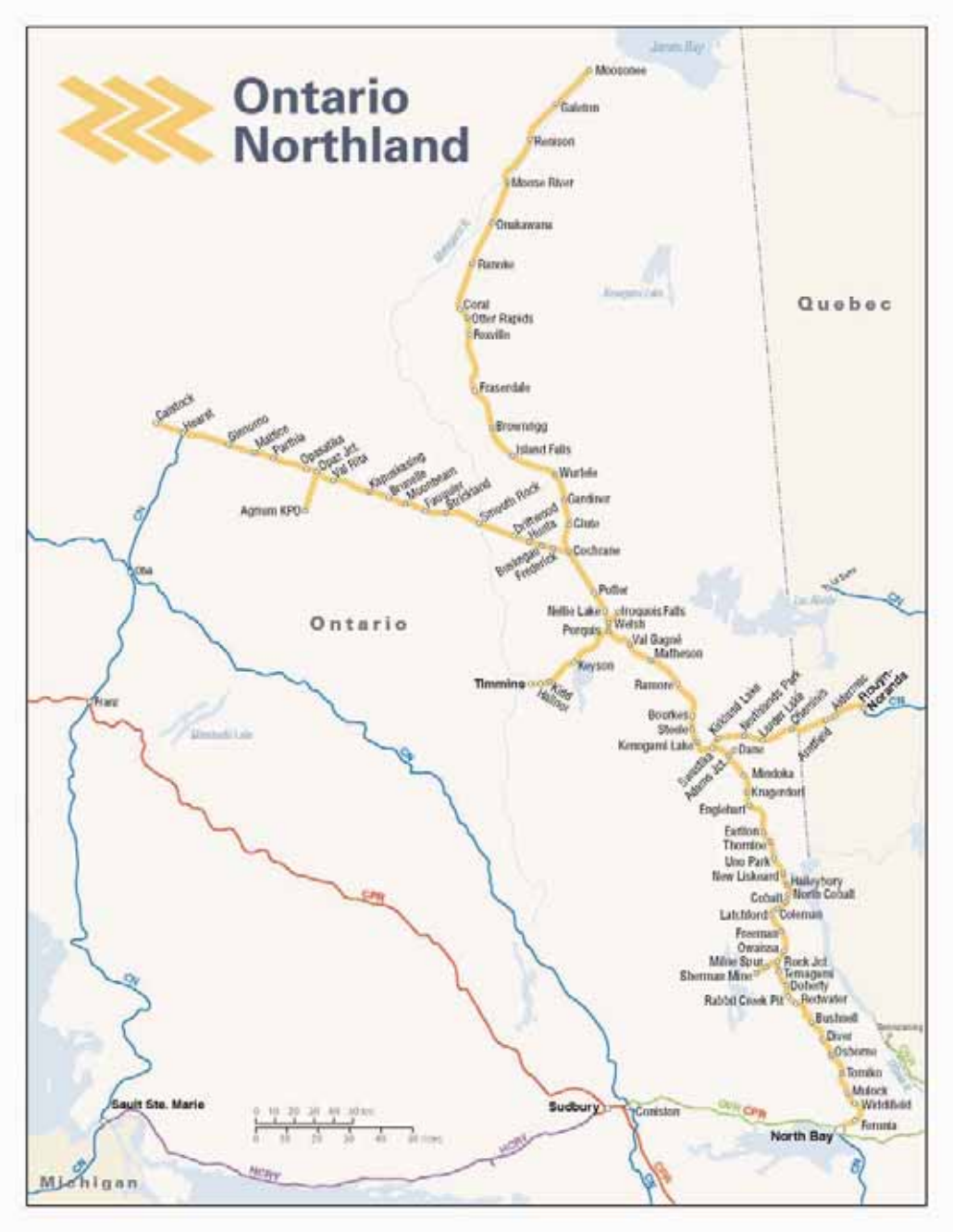
Rail Services

Ontario Northland Transportation Commission (ONTC) is the regional provider of train and connecting coach service in northern Ontario. It provides passenger service from Timmins, with a connecting shuttle bus to Matheson station. The branch Ontario Northland Rail (ONR) is engaged

[38] Statistics Canada, Census 2001
[39] City of Timmins, Community Profile, July 2004
[40] Timmins Community Portal website, 2007
[41] City of Timmins, Community Profile, July 2004
[42] *Ibid*
[43] *Ibid*

in rail freight service, transporting mineral, forest, chemical and other industrial products. Below is a map showing the stations of ONR (**Figure 15**). Within the City, rail is for resource purposes only, such as shipping raw and finished materials and supplies for processing.

Figure 15: Ontario Northland



Source: Ontario Northland, 2007

A 2003 feasibility study undertaken by Canarail Consultants reviewed the potential for a new rail line extending south of the City, crossing the Mattagami River and heading east towards the Dome

Mine. The potential line was reported to be economically viable and would divert heavy truck traffic from the roads.[44]

Roads
TransCanada Highways 11 and 17 are owned and operated by the Ministry of Transportation as part of the TransCanada Highway that offers access to Timmins, connecting the City at the national level. Highways 101, 144 and 655, owned and operated by the Ministry of Transportation, traverse the City limits of Timmins. A section of Highway 101, between the railway tracks in Porcupine and Kamiskotia Road, is maintained by the City as a connecting link. The Ministry imposes different degrees of access control on Highways 144 and 655. [45] In order to connect a new road to a provincial highway, approval from the Ministry is required and additional studies, such as noise, vibration, grading and drainage, may need to be undertaken. Rehabilitation of parts of highways 101 and 144 near Timmins are planned as part of Northern Ontario Highways Strategy.

Arterial roads carry two to four traffic lanes, with a typical right-of-way of 20 to 30 m. Arterials represent the main connections through the City, carrying large volumes of traffic at speeds of 50-80 km/hr. Collector roads have two traffic lanes, typical right-of-way widths of 20 to 26 m, and are designed to carry medium volumes of traffic at speeds of 50–60 km/hr.

Local streets have a typical right-of-way width of 20 m and carry low volumes of traffic at speeds of 40-50 km/hr. Private roads have similar characteristics as local access streets, except that they are privately owned and maintained. Resource access roads are privately constructed, maintained and decommissioned temporary roads that provide access to natural resources extraction sites. [46]

Public Transit
Timmins Transit is operated by the City, with a fleet of over 25 buses running on 12 routes.[47] The main riders are students, seniors and disabled persons. Timmins Handy Transit caters to people who have difficulty accessing conventional buses. Ridership has increased dramatically in the past few years, ending a period of steady decline. This increase is attributed to the improvements made by the company, as well as the improving economy. Despite the increase, dedicated bus lanes in the City should not be needed. Along with typical transit service improvements, there is a proposal for a new bus terminal in downtown that could link the local transit with inter-city bus service.

3.5.2 Utilities, energy and communication

Electricity
Hydro One Networks Inc. owns and operates a power transmission grid in Timmins, serving both residential and industrial consumers. Currently, supply satisfies the demand and any changes would be subjected to an approval process.

Gas
Union Gas operates and maintains a natural gas distribution system in Timmins from a supply in western Canada. Currently, the supply satisfies demand, and it should continue to do so in the near future. However, as with electricity, changes would be subject to approval.

[44] Community Profile, 2004. To date no further work has been taken regarding this potential line.
[45] City of Timmins, Community Profile, July 2004
[46] *Ibid*.
[47] Timmins Transit, 2007

Media
Media is available in both English and French. Print media includes *Timmins Daily Press*, the *Timmins Times*, *Les Nouvelles* and Wawatay News. Two AM and Seven FM radio stations are on offer, and cable TV service is provided by Persona Communications.

Telecommunication
Timmins has in place a modern high-speed telecommunications infrastructure, including fibre optics networks. High Speed ATM services are provided by NorthernTel and Ontera. Internet Service Providers are Ontera, Sympatico and Vianet.

3.5.3 Water and Wastewater

Water Treatment Plant
The City of Timmins Water Filtration Plant services the municipality from its main intake is from the Mattagami River. The rated capacity is 54,600 m^3 per day. This plant has five separate sites for storing treated water, with a combined capacity of 33,500 m^3. Using the average daily flow and based on the total uncommitted reserve hydraulic capacity, between 10,900 and 14,150 people can be added to the system, translating to just under 5000 dwelling units.[48] Advanced filtration technology is being installed at this plant. For South Porcupine, this plant also pumps water into the Tisdale reservoir, which has a capacity of 4500 m^3. Tisdale's four wells have a rated capacity of 2900 m^3 per day and they function as back up. The McDonald Lake Water Filtration Plant is currently being decommissioned.

Waste Water Treatment Facilities
Two plants exist to provide wastewater treatment for the City of Timmins. The Mattagami River Waste Water Treatment Plant services the communities of Timmins, Mountjoy, and Schumacher. As one of the few plants in Ontario that provides primary treatment only, this plant has a rated capacity of 52,500 m^3 per day. It discharges about 1500 to 2000 m downstream from the intake of the City of Timmins Water Filtration Plant, while the sludge is taken to a private landfill. Using the average daily flow and based on the uncommitted capacity, between 21,400 and 24,300 people can be added to the system, translating to about 8500 dwelling units.[49]

The Whitney/Tisdale Waste Water Treatment Plant services the communities of Porcupine and South Porcupine. With a rated capacity of 6,820 m^3 per day, this is a secondary treatment plant using contact stabilization. It discharges into the Porcupine River, while the sludge is taken to a private landfill. Using the average daily flow and based on the uncommitted capacity, between 5,378 and 7,195 people can be added to the system, translating to about 2000 dwelling units.[50] Bob's Lake Lagoon is operated under this plant. It serves the subdivision of about 54 units located near Bob's Lake. It is a biological treatment facility with a volume of 9100 m^3, discharging into the Porcupine River via a drainage creek.

Full Municipal Sewage and Water Services
Four systems exist to provide sewage and water services, dependant on site access: full service, communal service, individual on-site systems and partial services. Full service connections to the municipal sanitary sewer system and water main system are available for planned urban development in areas that are either presently serviced or where there are plans to extend the services. Communal services are not connected to the full municipal system; rather they are for the

[48] City of Timmins, 2004
[49] *Ibid*
[50] *Ibid*

common use of more than five residential units/lots. These systems treat and distribute the water, and also collect and treat the sewage. The systems are owned, operated, and managed by the municipality, another public body, a condominium corporation, or a single owner who has an agreement with the municipality. Several mobile home parks and one subdivision use this system.

Individual on-site systems provide service to rural lots. Studies on the terrain, soil conditions and water are typically required to demonstrate that this system would not have any negative impact on its surrounding environment and that it would be self-sustainable. Partial services are generally a last resort system when it is not viable to provide full service due to extenuating circumstances, whether physical, financial or otherwise. Development in areas where only partial services could be provided is greatly discouraged.

Solid Waste Management System

Five landfill sites operate in Timmins. The main one is Deloro Landfill Site, occupying 63.5 ha approximately 5 km south of downtown Timmins. One hundred and twenty three hectares of city-owned land around the site serves as a buffer.[51] The facility handles 25,100 tonnes annually and it includes residential, ICI and construction waste. Phase 1 of the site is designed to hold 1,192,500 tonnes over 45 years.[52] The other sites are intended to serve the seasonal population; all except one are open year round. There is sufficient capacity for the next two decades, but the City is closely monitoring the impact of each site.

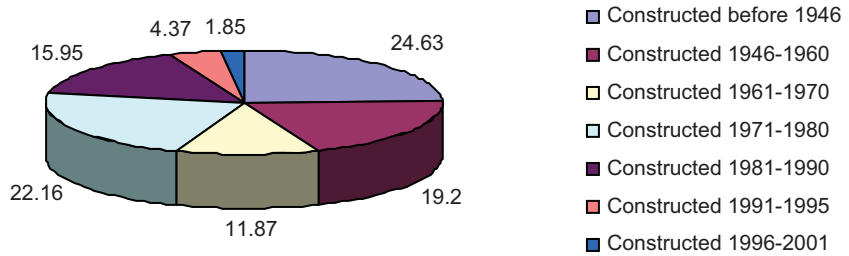
3.5.4 Housing Stock

Although the City's housing stock is diverse, it tends to be low density and aging. In addition, recent demand has skyrocketed resulting in affordability issues. Housing projections show that new units are needed. Fortunately, there is a large amount of residential land available for development in and around the City.

Housing Characteristics

As shown in **Figure 16**, only 6% of the housing stock was built after 1990, meaning a majority of it is over 20 years old. In fact, 45% is at least 40 years old.

Figure 16: Age of Housing Stock



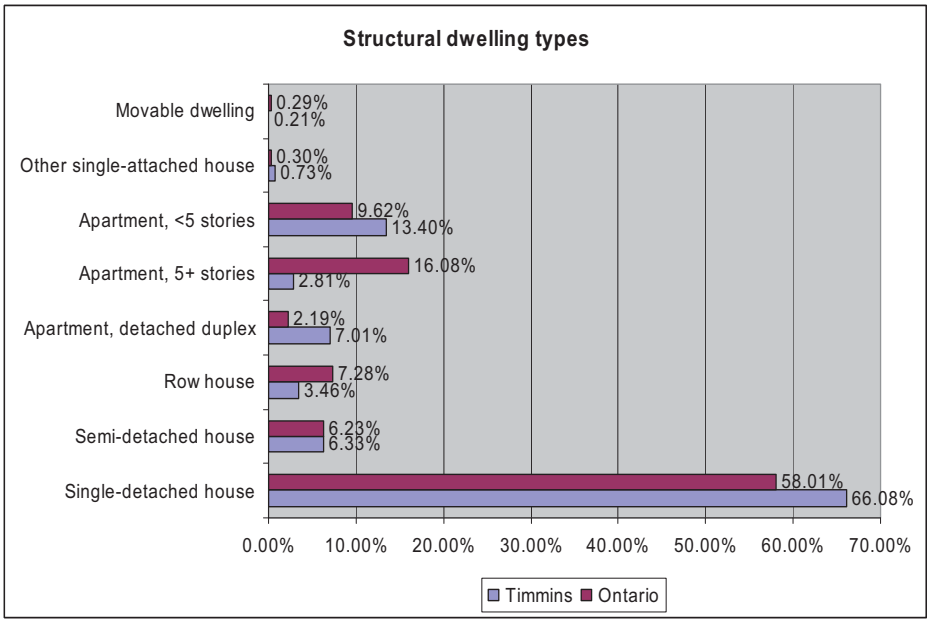
Source: Statistics Canada, Census 2001

[51] City of Timmins, 2004
[52] *Ibid*

The housing mix in Timmins is predominantly low density and owner-occupied. Sixty seven percent of residents live in the houses they own, while the rest rent.

As shown in **Figure 17,** single detached houses make up 66% of the stock. Mobile homes and other forms of single attached houses together represent approximately 1% of housing stock, while high density represents 36%. The balance is representing by medium density housing including row houses and semi-detached homes. New houses that have been built since 1999 have all been low-density housing. The current demand is for three- and four-bedroom homes ranging from 1,200 sq ft to 2,000 sq ft.[53]

Figure 17: Mix of Housing Stock



Statistics Canada, Census 2001

The number of persons per household dropped from 2.7 in 1996 to 2.56 in 2001.[54] An increase in one to two person households and/or single families reflects the affect of out migration of families and an aging population.

5.2.5 Community and Recreational Facilities

Community and recreation are the underpinnings of a good city, especially a medium size city like Timmins, where small town feel is very important. The City of Timmins Leisure Services Department organizes a diverse range of programs and the Parks and Recreation Department administers a host of parks for its citizens. At the same time, school boards, the Mattagami Region Conservation Authority, the Ministry of Natural Resources, private clubs, hotels and religious institutions all provide complementary community services of one kind or another.

Outdoor activities play a big part in any northern community. In the summer, water activities are well catered to, especially with the Mattagami River running through the City. There are many marinas and boat-launching points, allowing access to more than 500 lakes and rivers within the

[53] Larmour, Adelle, 2005
[54] City of Timmins, 2004

municipal boundaries. Well-known canoe and kayak routes abound, and there are 50 km of biking and walking trails in the City. There are also opportunities for bird watching, fishing and golfing. In the winter, many of these trails become multi-use cross-country skiing and snowmobile trails. Timmins Snowmobile Club maintains a trail system in and around the City. Downhill skiing is also very popular catered to by private resorts such as Kamiskotia Ski Resort.

Two provincial parks are located nearby, administered by Ministry of Natural Resources. Within the City of Timmins, Parks and Recreation Department maintains a total of 163.9 ha of parks (including skateboard parks) and scenic areas, giving a ratio of 3.75 ha/1000 people.[55]

The Leisure Services Department provides an extensive list of recreational facilities, catering to all seasons. Data from 2004, provided in the Community Profile, shows a shortfall of parkland at a neighbourhood level. The report also notes that a public survey undertaken indicated that the shortfall was not seen as an issue, possibly as a result of the high accessibility to a range of outdoor recreational activities in nearby open spaces, a characteristic of northern communities. **Figure 18** gives the ratio to population in terms of facilities available.[56]

Figure 18: Leisure Facilities

Leisure Facilities, Ratio to Population		
Facility	**Number**	**Ratio of Supply1**
Arena	6	1:7,283
Ball Diamond2	42	1:1,040
Community Centre	5	1:8,740
Curling Rink	10 sheets	1 sheet:4,370
Football Field	5	1:8,740
Golf Course	2	1:21,850
Gymnasium	28	1:1,561
Hall/Auditorium	28	1:1,561
Indoor Pool	1	1:43,700
Lacrosse Pitch	1	1:43,700
Meeting Rooms	29	1:1,507
Outdoor Rink	27	1:1,618
Playgrounds	38	1:1,150
Soccer Field3	9	1:4,856
Squash/Raquetball	3	1:14,567
Tennis Courts3	17	1:2,571
Track	5	1:8,740
Notes: 1. Based on a 2001 census population of 43, 700. 2. Considers lit diamonds as two fields. 3. Does not include private courts. Source: City of Timmins Leisure Master Plan, Final Report, IER Planning, Research and Management Services, and Moore/George Associates Inc., June 1993, Statistics Canada, 2001, Tunnock Consulting Ltd.		

Source: City of Timmins Leisure Services Department

The Timmins Public Library has two facilities: the Main Library in Timmins and the C. M. Shields Centennial Library in South Porcupine. The Main Library is located in a new barrier free facility. Forty percent of the City's population holds active membership.[57]

The Timmins Police Service employs 72 uniformed officers. It has one police station in downtown Timmins and storefront stations in South Porcupine, Connaught and Third Avenue. A 911 service is operated for fire, police and ambulance services. The OPP covers Timmins from their North Bay Unit, with a detachment operating out of South Porcupine.

[55] City of Timmins, 2004
[56] *Ibid*.
[57] Timmins Public Library, 2007

The Timmins Fire Department employs a Fire Chief, a Deputy Fire Chief, 28 permanent fire fighters, three fire prevention officers, one training officer, and over 150 volunteers. Together, they staff six stations. Though the Fire Department has set targeted response times, those are only met in the urban areas due to the size of the city. Falconbridge provides industrial fire protection services. It operates with a mutual aid program with the City. Forest fires are managed by the Ministry of Natural Resources, which has made Timmins a hub in forest fire fighting and detection.

The following faith groups have churches in the City: Catholic, Methodist, Lutheran, Adventist, United, Presbyterian, Baptist, Pentecostal and Anglican. The Catholic school board provides a variety of services in both official languages.

3.5.5 Synopsis

The City of Timmins enjoys a strategic location within the province and benefits from a robust transportation network. There is an adequate and stable energy supply and the telecommunication infrastructure is advanced. A host of service providers cater to domestic and industrial communication needs. Within the urban areas, the municipality has in place the infrastructure for potable water distribution and wastewater management, as well as an adequate supply of landfill sites monitored by the city. Currently, the water and wastewater systems would allow a total of 6.000 new dwelling units to be added without any expansion needed.

In terms of housing, there is more than enough residential land available. With the economic boom, houses are sold as fast as they are built. Houses tend to be single detached homes although some cater to more specific clients. A host of community and recreational activities are available in and around the City of Timmins, offered by a range of organizations.

A plethora of outdoor activities are available and a range of indoor recreational, community and religious facilities cater to different needs and tastes. Police, fire and ambulance are on hand to deal with emergencies.

Although the shortfall in parklands noted on a neighbourhood level does not seem to be seen as an issue to residents, there may be an opportunity for the Hollinger Project to provide increased recreational areas during operation of the mine (e.g. in buffer areas, assuming safety is not an issue) or as part the closure plan.

3.6 INDIVIDUAL, FAMILY AND COMMUNITY WELLNESS

The City of Timmins has excellent facilities to provide healthcare, education and social services for its population. Since the city serves as a hub for healthcare, a number of major facilities are based there. Education is offered from junior kindergarten onwards. A number of colleges and trade schools have campuses in the city. A wide range of social facilities and protection services are available, catering to different cultures, languages and genders.

3.6.1 Health Care Facilities and Public Health

Health Care Facilities

Timmins is a centre for healthcare, serving the region well beyond the boundaries of the City. The Porcupine Health Unit (PHU), the Timmins & District Hospital, and Cochrane District Social Services, all located in Timmins, represent the three main healthcare facilities. Porcupine Health Unit, whose head office is located in downtown Timmins, concentrates on public health prevention and protection. The province and the municipality share the cost of this public health unit. The Timmins & District Hospital, located close to the downtown, offers health care services. The hospital is funded by the Ministry of Health and is a partner in the recently consolidated Ontario Telemedicine Network. Cochrane District Social Services, which is also located downtown, provides many different services, including emergency medical services. Services are funded by all three levels of government. All three of these facilities serve the City of Timmins and the Cochrane District. The Porcupine Health Unit and the Timmins & District Hospital also extend their services to certain additional nearby communities.

A host of smaller facilities add to the medical services in Timmins. There are many types of clinics, catering to dental needs, sports injuries, etc. Chiropractors, massage therapists and physiotherapists are on hand to provide care. Rehabilitation centres are available for those recovering from injuries. For mental health, there are psychological assessment and counselling services. For general physical fitness, there are fitness centres as well as weight management centres, complemented by food and nutrition services. Medication is offered by a number of pharmacies.[58]

In addition, a number of organizations provide services to the Aboriginal community located in and around Timmins including Timmins Native Friendship Centre, the Ojibway and Cree Cultural Centre and Wabun Health Services. The later is responsible for coordinating and delivering federal and provincial services at the local level to a number of First Nations communities, while the first two organizations provide counselling and referral services.

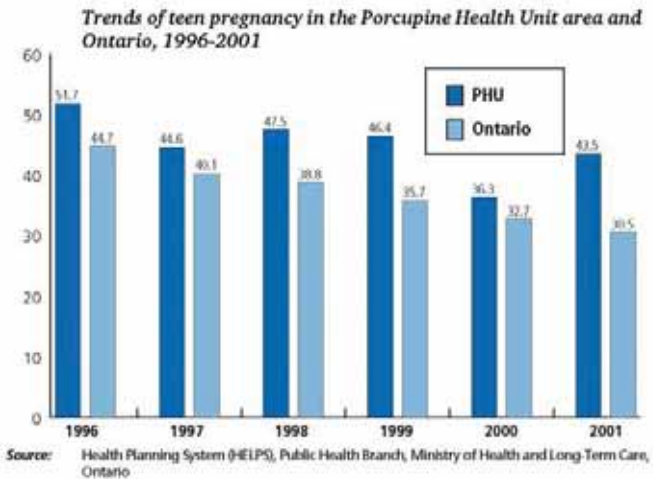
Public Health

The Porcupine Health Unit serves public health in Timmins. **Figures 19-26** compare the Porcupine Health Unit area with provincial and national statistics. The Porcupine Health Unit covers the City of Timmins, the Cochrane District and the Town of Hornepayne. The graphs show statistics on some key indicators of public health.

The teen pregnancy rate has been steadily decreasing in the past few decades. Though the rate in the Porcupine Health Unit is higher than that of the province, **Figure 19** shows that the downward trend is still reflected in the area. This is attributed to greater awareness of sexually transmitted diseases and availability of contraceptives.

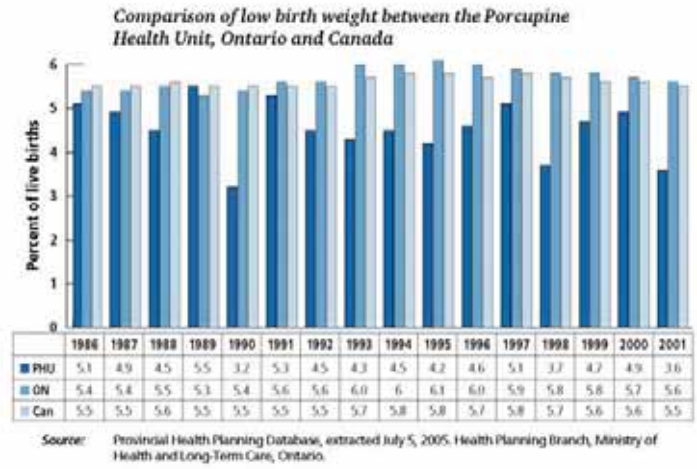
[58] Timmins Economic Development Corporation, 2006

Figure 19: Teen Pregnancy



Any baby born weighing less than 2,500 grams is considered having a low birth weight. **Figure 20** shows that low birth weight occurs less in the PHU than provincially or nationally. Less than 4% is the target rate set out by the Ministry of Health in their Mandatory Health Programs and Services Guidelines, and in 2001 PHU was at 3.6%.

Figure 20: Low Birth Weight



Infant mortality has gone down over the past few decades in Canada. The major causes are congenital anomalies and sudden infant death syndrome. **Figure 21** shows that the infant mortality rate in the PHU is comparable to the provincial and national average except for three years (1997,1998 and 2002) when it was significantly higher.

Figure 21: Infant Mortality Rate

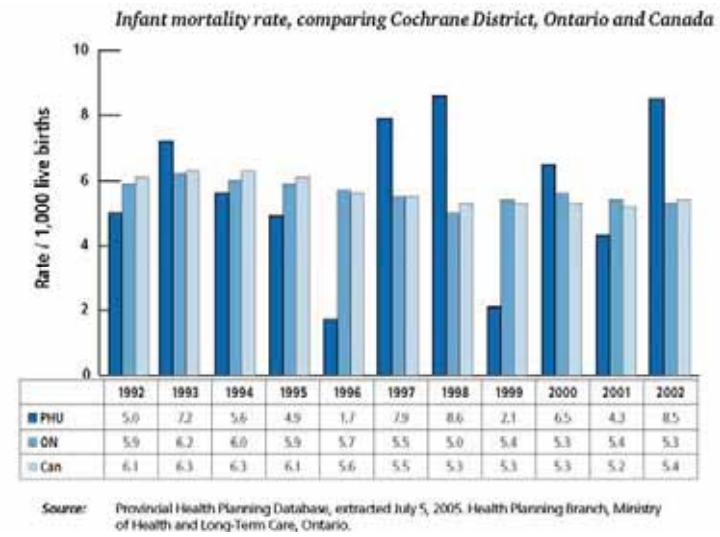


Figure 22 shows that although the incidence of trachea, bronchus and lung cancer in the PHU is higher than the provincial rates, it has shown a significant drop of 34% vs. the provincial decline of only 10%.

Figure 22: Incidence of Trachea, Bronchus and Lung Cancer

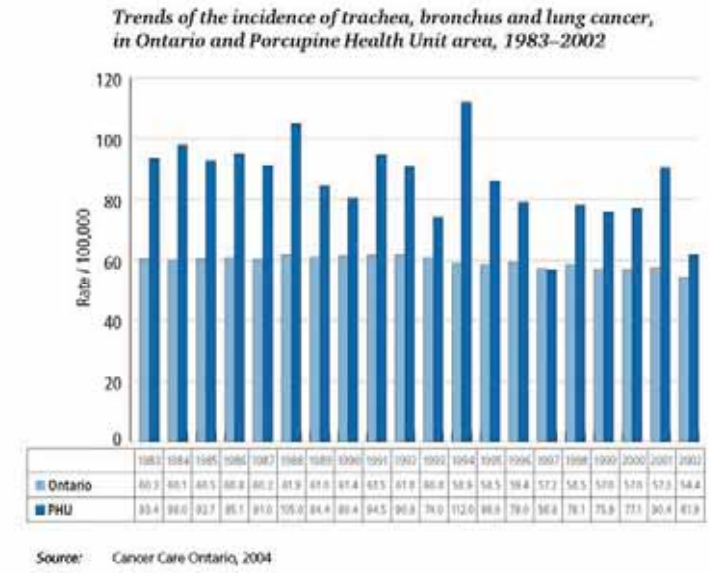


Figure 23 shows the leading causes of hospitalization. In the PHU, the leading cause is cardiovascular disease. The leading causes of hospitalization in the PHU are similar to those in the province.

Figure 23: Leading Causes of Hospitalization

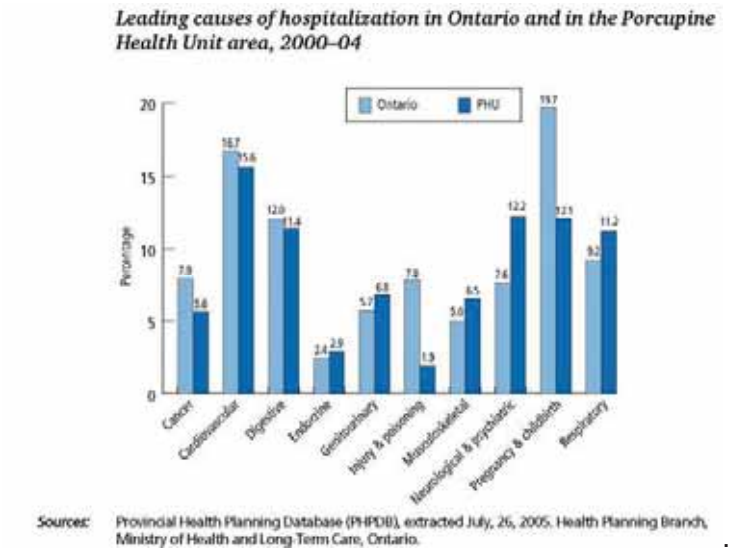


Figure 24 shows that most cases of mental illness in Timmins stem from either schizophrenia / psychotic disorder or personality disorders. Together these two categories make up 85% of all mental illness in the region.

Figure 24: Prevalence of Mental Illnesses

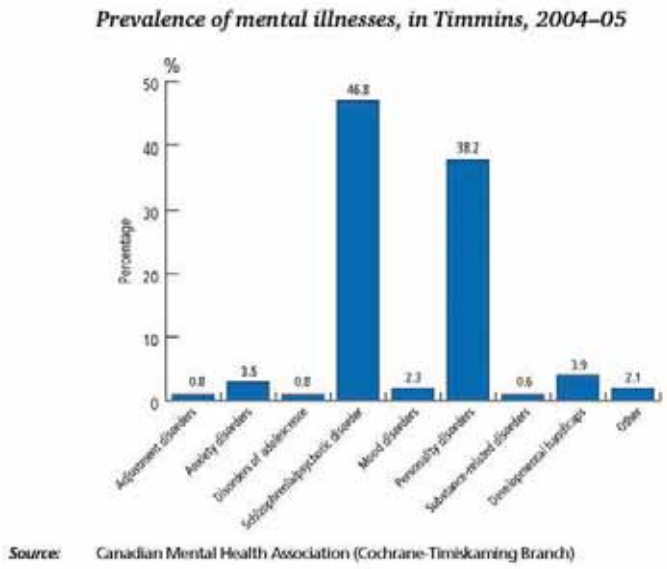
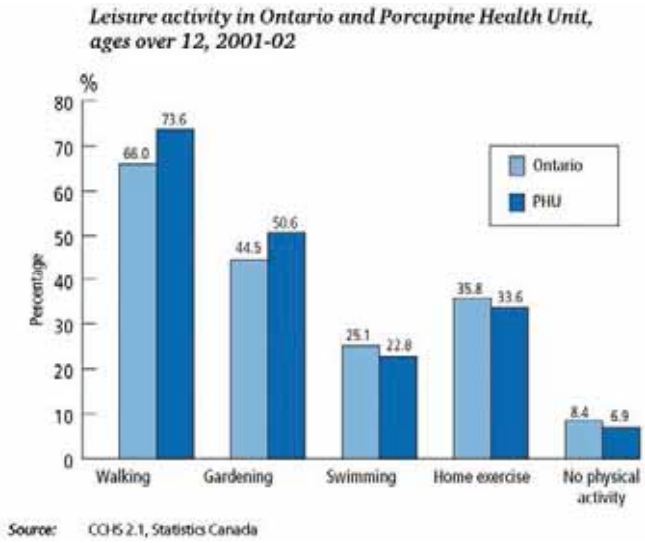


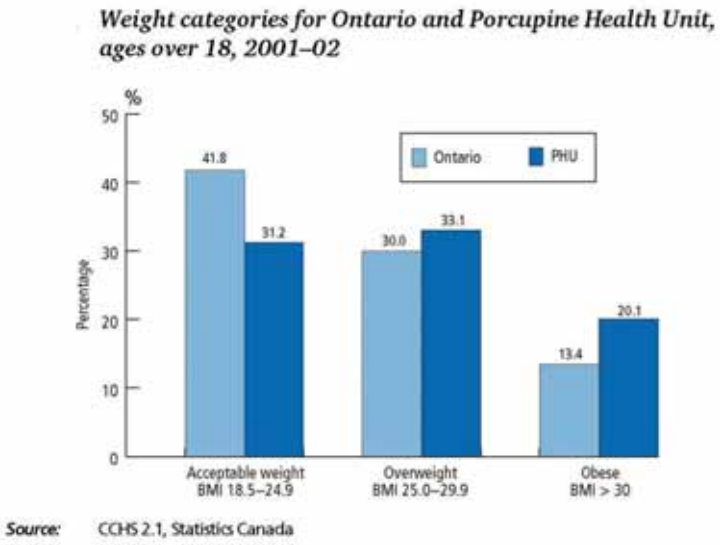
Figure 25 shows the different kinds of leisure activity favoured by those in the PHU versus the provincial average. The rates are comparable, but people in the PHU definitely enjoy walking and gardening more and fewer people are sedentary.

Figure 25: Leisure Activity



Despite the fact that the region has fewer inactive people, (**Figure 25**), the rate of obesity is 7% higher than the provincial average (**Figure 26**).

Figure 26: Weight Categories



3.6.2 Education, Training and Academic Institutions

There is a full spectrum of education offered in Timmins, from Early Childhood Education through to Post Secondary Education. A total of 11 licensed daycare facilities exist within Timmins, Porcupine

and Schumacher, catering to different needs and income groups.[59] Private groups, YMCA, Northern College and others operate these centres. A few offer care in French and/or with an emphasis on Aboriginal programs. The Porcupine Regional School offers education for developmentally handicapped students.

Timmins has four school boards, two English and two French. One board in each language is Catholic. Currently, there are a total of 26 elementary schools, five secondary schools and one adult continuing education program distributed among the four School Boards within Timmins, Porcupine and Schumacher.[60] The detailed distribution is as follows:

Figure 27: Elementary and Secondary Education Facilities

School Board	Elementary Schools		Secondary Schools	
	Timmins	Porcupine	Timmins	Porcupine
District School Board Ontario North East Board	7 Public Schools offer anywhere from JK-8 with two French Immersion programs	3 Public Schools offer anywhere from JK-8	1 High School and Vocational School PACE (Adult Continuing Education)	1 Secondary School
Northeastern Catholic District School Board Elementary Schools:	3 Separate /Catholic Schools	1 Separate /Catholic Schools	1 High School	
Conseil Scolaire de district du Nord-Est de l'Ontario	2 French Public Schools		1 French Public School	
Conseil Scolaire de district catholique des Grandes Rivieres	9 French Catholic Schools	1 French Catholic School	1 French Catholic School	

Source: Ontario Ministry of Education, 2007

With respect to post secondary education, there are a range of full- and part-time certificate and diploma programs, various apprenticeship courses, and distance education available.

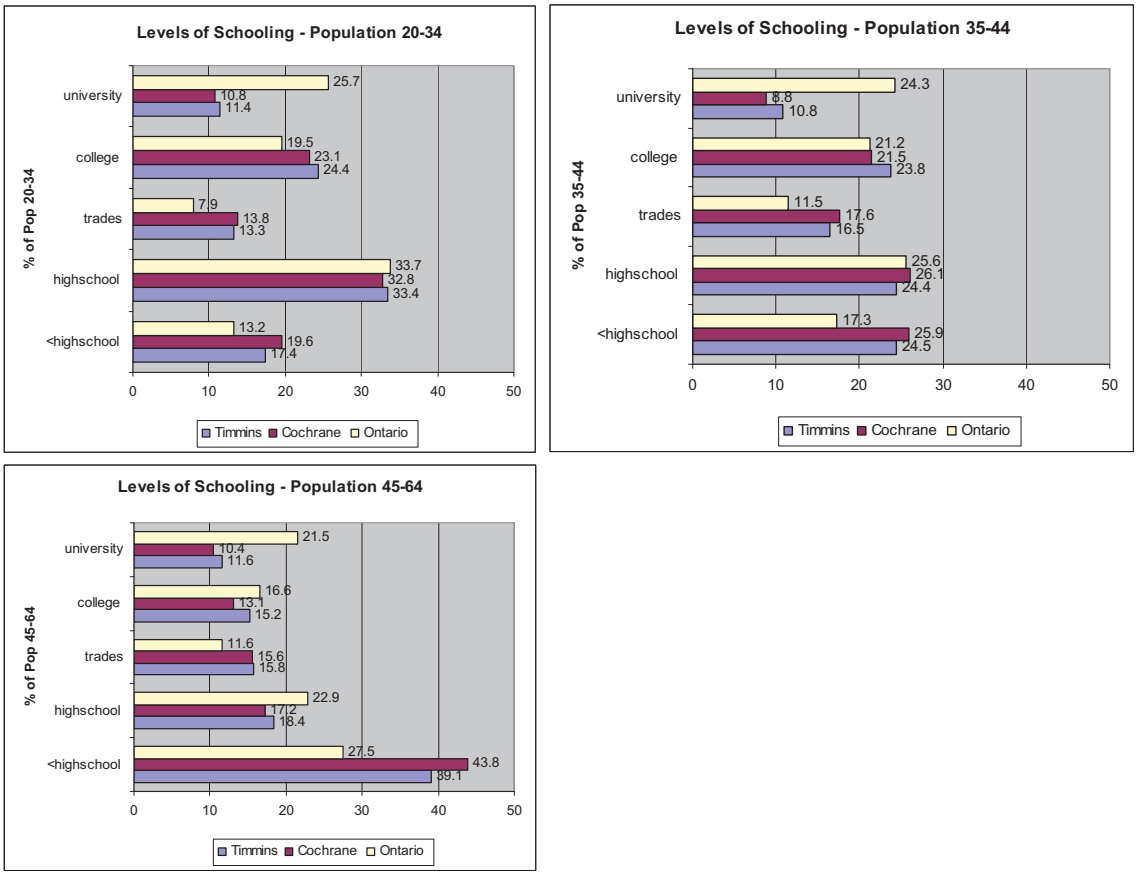
- Northern College is a college of applied arts and technology offering certificate, diploma and apprenticeship programs and one collaborative degree. It has four campuses, one of which is in South Porcupine. Currently, Northern College is running a joint partnership with Cambrian College to set up a Federated School of Mines.
- College Boréal is another college of applied arts and technology with seven campuses across Ontario. This college allows students to pursue post secondary education in French.

[59] Timmins Business List 2006 and Timmins Chamber of Commerce "New Residents Information Package"
[60] Ontario Ministry of Education, School Board Profiles, 2007

- Transport Training Centres of Canada has one of their campuses in Timmins. It is a private career college offering training in driving transport and operating heavy equipment.
- Contact North is funded by the Government of Ontario for distance education in the north. With the Internet and 90 access centres, it delivers a host of certificate, diploma and degree programs to remote communities. Timmins' access centre is located in South Porcupine.
- Université de Hearst caters to the francophone community in Northeastern Ontario. It has three campuses. The campus in Timmins offers three to four year degree programs in French, geography, history, sociology and psychology. Other campuses also offer programs in business administration. It is a Federated School of Laurentian University.
- The closest publicly funded universities to Timmins are Lakehead University in Thunder Bay, Laurentian University in Sudbury, and Nipissing University in North Bay.

Generally, education levels in Timmins are fairly high. About 80% of the population have attained a high school education or higher.[61] These levels are similar to the statistics for the district and the province across all adult age groups. However, there is a significant drop when it comes to university education levels; both the City and the district lag behind the provincial average.

Figure 28: Levels of Schools



Statistics Canada, 2001

In the age group 35 to 44, the same trends can be seen. The number of high school graduates is similar to regional and provincial statistics while college and trade school graduates exceed the

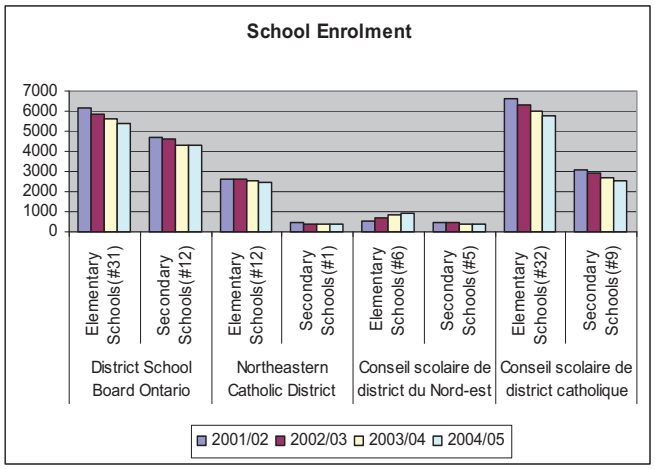
[61] Statistics Canada, 2001 Census

Ontario average. The number of university degree holders continues to lag behind that of the province.

In the older adult age groups, there is a significant difference in education levels. A third of the population has not graduated from high school. Except for those who hold trades certificates, there are fewer people proportionally who have either graduated from high school or some other form of higher education.

The Ontario Ministry of Education requires that elementary and secondary schools keep records of enrolment for audit purposes. Enrolment is a record of the number of students who have been admitted, transferred and retired. As shown in **Figure 29**, the number of students enrolled has decreased in Timmins. Since the 2001/02 school year, elementary schools have lost an average of 484 students annually and secondary schools, 353 students.[62] The drop in school enrolment correlates with the drop in the percentage of school age children in the total population

Figure 29: Enrolment



Ministry of Education, 2007

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3.6.3 Social Facilities and Protection Services

Timmins has a full range of facilities and services run by cultural groups, charitable organizations, etc. Below is only a sample covering public safety, women and children welfare and Aboriginal needs.[63]

Public Safety

- Timmins Community Safety Committee is a charitable organization that runs a broad spectrum of programs including neighbourhood watch, Halloween safety, drug awareness, anti-bullying, etc. It also runs a bicycle registration program.
- Mothers Against Drunk Driving has chapters across North America, fiercely publicizing the consequences of drinking and driving. In addition to their public education campaigns, they run various services for victims.

[62] Ministry of Education, 2007
[63] Community Information Directory, 2007

Women

- Timmins and Area Women in Crisis is a centre that provides bilingual services to women. It runs a 24-hour hotline. It offers services to women with low incomes and to inmates at the Monteith Correctional Centre.
- Timmins itself does not have any women's shelter. The closest ones would be one in Matheson, where there is a ten bed shelter operated by the Canadian Mental Health Association (CMHA), and at Habitat Interlude located in Kapuskasing.

Children & Family

- Child & Family Services of Timmins & District (CFSTD) has five locations, with the head office located near downtown Timmins. It is an amalgamation of the former Porcupine and District Children's Aid Society, and the former South Cochrane Child and Youth Service. The CFSTD provides many services, including mental health issues and child protection services.
- Kunuwanimano Child and Family Services is a non-profit Children Aid's Society geared towards the people of First Nations. With the main office in Timmins, it serves 11 First Nations in the eastern portion of Nishnawbe Aski Nation. Offering a wide range of services from foster care to supportive counselling, it also works in conjunction with Nishnawbe-Aski Legal Services Corporation to assist in dispute resolution.

Other

- Cochrane Temiskaming Resource Centre offers a wide variety of services for the community. In addition to running group homes, it runs support services for those with a development disability. It also runs infant development services and music therapy, among others. Its head office is located in Timmins.
- AIDS Committee of Timmins & District educates the public on AIDS while providing support and referral services.
- Ojibway & Cree Cultural Centre, located in Timmins, is dedicated to promoting the languages and culture of First Nations. The centre runs a First Nations-oriented library, an online library and language programs.
- Kapashewekamik Native Outpatient Hostel Services, located in Timmins, is for patients who come from the coastal community to Timmins for care. Since there is no same day return flight, the patients stay overnight. The hostel offers translation services to the mainly Cree-speaking clientele, in addition to health care.
- CMHA Cochrane Timiskaming Branch, with a head office in Timmins, offers a range of mental health-related services in both official languages.
- Jubilee Centre is part of Drug and Alcohol Registry of Treatment (DART), a service supported by Ontario Ministry of Health. The one in Timmins offers assessment, day treatment, residential treatment and aftercare programs.
- Access Better Living Inc. in Timmins offers housing and/or attendant services in both languages to those with disabilities. It is funded by the Ministry of Community and Social Services.

3.6.4 Synopsis

Timmins boasts a wide range of facilities and services for a city of its size. With a comprehensive regional hospital and the public health unit, the population is well taken care of. The population is also well educated, many with diplomas and certificates from the colleges and trade schools that

are based in the city. The schools form an educational hub, attracting students from the region. A range of social services are available, catering to the Francophone community and First Nations community, as well as providing critical services to vulnerable groups. Community safety is headed by a charitable group and complemented by other public education campaigns. Timmins has the capacity to serve its citizens, as well as catering to people in surrounding regions.

3.7 PLANNING POLICY AND LAND USE

As mentioned in Section 3.2, mining activities are subject to the Official Plan and Zoning Bylaw of the corresponding municipality or planning area. The general objective of the Official Plan is to guide the future development of an area, taking into account the best interests of the community as a whole. The Official Plan contains land use designations for all areas within the municipality, which set out the general permitted uses within these areas -- the general purpose of which is to minimize conflict between non-complementary activities, ensure public safety and adequate provision of parks, open spaces and required infrastructure, and provide a balance of uses to ensure the long-term viability of the community.

The City of Timmins is currently undergoing a review of the Official Plan. A draft revised Official Plan was provided for public comment in early 2007. A public meeting was held in March 2007, with an additional meeting set for the fall. It is anticipated that the final revised Official Plan will be submitted to the Ministry of Municipal Affairs and Housing for approval towards the end of 2007. The Official Plan was originally written in 1976, in order to consolidate the Official Plans for Timmins, Tisdale, Mountjoy and Whitney Planning Areas. Approximately 150 Official Plan Amendments have been adopted since that time, resulting in a Consolidated Official Plan in 1999. It is anticipated that the revised Official Plan will address the changes in growth patterns, infrastructure needs, sustainability, and a range of other issues, and create a strong and well-balanced policy framework for the future needs of the City.

It is also important to note that the Official Plan Review is timely in that it has provided the City with an opportunity to consider introducing flexible land use policies (e.g. Goldfields) that protect proven mineral resources and support an important component of the City's economic base. This section provides a summary of pertinent policies of the existing and revised Official Plan, as well as other planning policies and trends, and concludes with a profile of the areas around the Hollinger Mine.

3.7.1 Land Use - Existing Official Plan

The Timmins Official Plan (1999) designates areas to the north and west of the Hollinger Mine as Highway and Service Commercial, and Major Open Space and Hazard Lands, respectively. Further west of the Ontario Northland Rail (ONR) lands, the downtown area falls within a Central Area. The Schumacher residential area is designated Residential Neighbhourhood with a Central Area included in the southwest portion of the neighbourhood on the west side of Vipond Road, and a District Commercial area along Highway 101. The residential area west of the Hollinger Golf Course is designated Residential Neighbhourhood, while the area further to the west is considered Manufacturing Industry. North of Highway 101, Little Pearl Tailings Pond and portions of the MacIntyre Mine are considered Mining Industry. The area within the fence line representing the Hollinger Mine falls within the rural land use areas and is designated Wilderness. **Figures 30-32** show the urban and rural land use designations for the Social Study Area.

Within the Urban Land Use areas, mining is permitted in Mining Industrial areas; new or resumed mining activities outside the Mining Industrial area will require an amendment to the Official Plan and Zoning Bylaw (Section 2.14). In Rural Land Use areas, mining is permitted in all areas except provincial parks (Section 3.2).

In order to ensure safety and avoid conflict between adjacent land uses, it is common for municipalities to introduce minimum separation distances for industrial areas. Section 3.2.3 of the Official Plan states that mining activities are prohibited in both urban and rural areas:

- Within 45 m of the right-of-way of an arterial
- Within 150 m of any residence or other urban zoning
- Within 150 m of any residence, cottage, lodge, other human habitation, public park or commercial intensive or linear recreation facility

The plan thus indicates that a 150 m buffer would be required surrounding potential Hollinger mining activities, since the areas around the mine are generally urban zones.

In addition, Section 34 of the Mining Act states, "Where a mining claim adjoins or is adjacent to a highway or road maintained by the Ministry of Transportation, no surface mining operations shall be carried out within 45 m of the limits of the highway or road without the written consent of the Minister."[64]

In order to avoid unsuitable development on old mine workings or other hazards in urban areas, Section 2.2.6 states, "Where mine workings exist below the surface, a professional engineer has certified that the ground conditions are not hazardous or liable to subsidence" (to enable development). Similarly, for rural areas, Section 3.20 states, "In addition to the areas shown on Schedule F and its excerpts, all areas underlain by mine workings and all tailings, rock dumps and other mining waste material are deemed to be hazard lands unless they are otherwise declared to be safe by the professional engineer competent in such analysis."

[64] Mining Act, 2007

Figure 30: Urban Land Use - Timmins

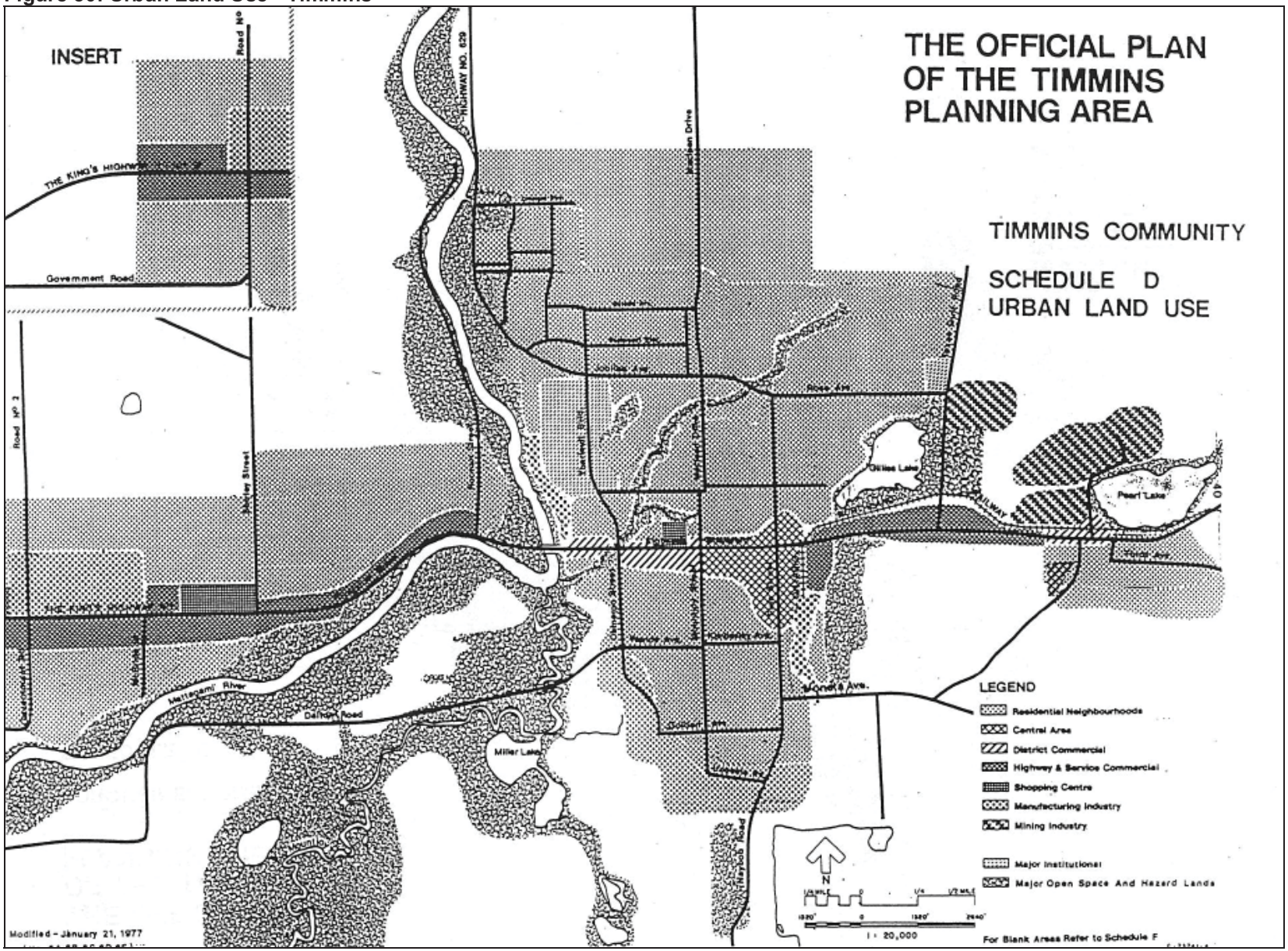


Figure 31: Urban Land Use - Porcupine

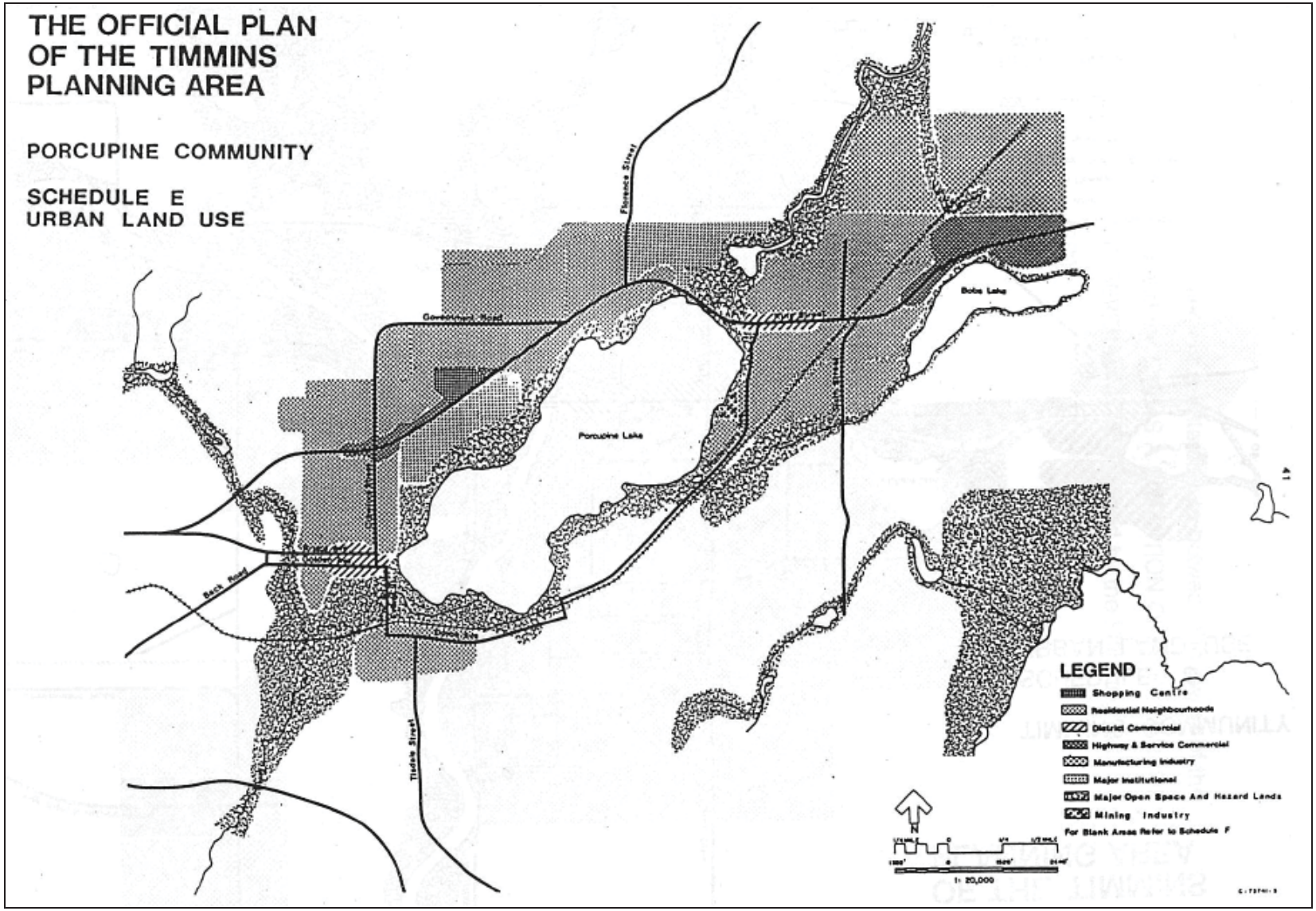
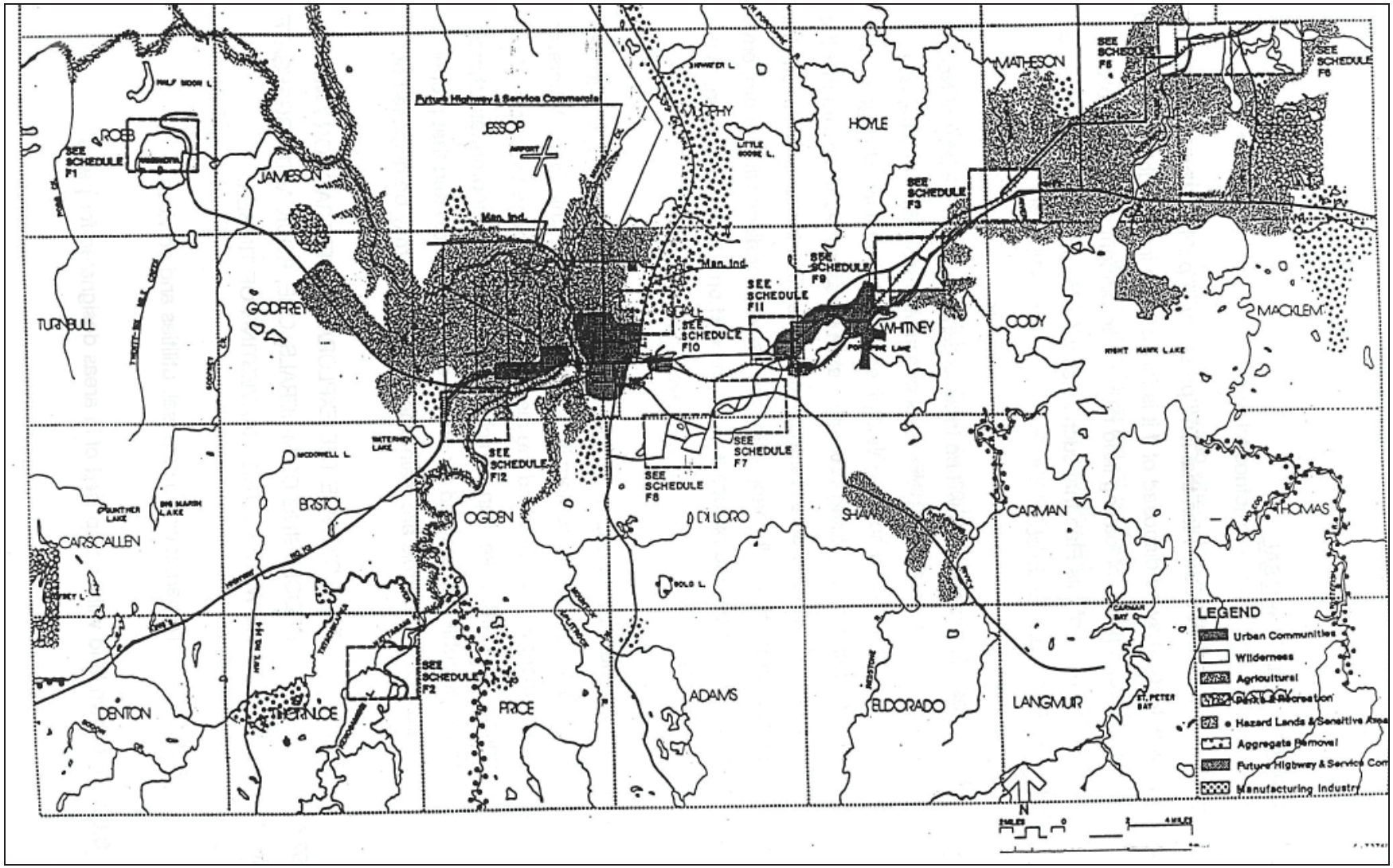


Figure 32: Rural Land Use – Timmins



3.7.2 Land Use - Revised Draft Official Plan

The Revised Draft Official Plan (2007) proposes a simplified land use framework based on the following designations: Neighbourhood Area, Employment Area, Goldfields Areas, Resource Development Area and Provincial Interest Areas (**Figure 33**).

Neighbourhood Areas include all types of residential development and limited commercial, institutional and public services. Employment Areas include a full range of commercial, industrial, institutional and limited residential uses. Goldfields Areas, generally representing the former McIntyre and Hollinger Mine areas, recognize the potential for renewed mining operations, and the longer term closure and rehabilitation of the Goldfields Area. Resource Development Areas are for larger land use activities - primarily resource-related activities. Provincial Interest Areas include significant wetlands, habitat areas, wildlife corridors, mine hazard areas, contaminated sites and flood plains, conservation areas and Crown Land.

Mining activities are permitted in the Employment, Goldfields and Resource Development Areas, with the qualification for Employment Areas that mining activities must be limited to Class 1-3 industrial uses and related service commercial uses.[65]

The proposed changes, particularly the introduction of the Goldfield land use area, recognize and support the on-going role of the mining sector in the development of the City of Timmins. In addition, policies outlined in the Plan (e.g. Section 2.8.2) direct development away from potential resource areas if the development would preclude or hinder the establishment of new operations or access to these resources. Goldcorp has noted that clarification is required with respect to several sections of the draft text, in order to clearly understand the Goldfields land use implications, as well as the role and responsibility of the mining sector.[66]

The former Hollinger Mine falls within the Goldfields Area.

Sensitive Uses

The Revised Draft Official Plan proposes, "...separation distances and buffers (influence areas) from affected land uses, notably sensitive land uses, be determined through technical studies undertaken in accordance with Ministry of Environment guidelines." Goldcorp is currently undertaking the technical studies needed to determine appropriate separation distances from affected land uses.[67] **Figure 34** shows a preliminary assessment of sensitive uses within one

[65] The Ministry of Environment Guideline D-6 provides a definition for Class 1-3 industrial uses.

[66] Goldcorp communications sent to the City of Timmins, February and August 2007

[67] The Provincial Policy Statement defines sensitive uses as "buildings, amenity areas, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more *adverse effects* from contaminant discharges generated by a nearby major facility. *Sensitive land uses* may be a part of the natural or built environment. Examples may include, but are not limited to: residences, day care centres, and educational and health facilities." In addition, the Provincial Policy Statement refers to the *Environmental Protection Act* as defining adverse effects as "one or more of:

a) impairment of the quality of the natural environment for any use that can be made of it;
b) injury or damage to property or plant or animal life;
c) harm or material discomfort to any person;
d) an adverse effect on the health of any person;
e) impairment of the safety of any person;
f) rendering any property or plant or animal life unfit for human use;

kilometre of the former Hollinger Mine (one kilometre represents the maximum separation distance required by the Ministry of the Environment for Class III Industrial Uses).

Cultural Heritage and Archeological Resources

To date, the City has not designated any heritage sites within the municipality, although the Timmins Museum has developed a list of candidate heritage sites, shown below, and the City has the power to designate properties (including buildings and structures) by by-law, according to Part IV of the Provincial Ontario Heritage Act. Designation usually involves public consultation and does not require that the property be restored, but owners must obtain municipal approval for any alterations to the property. Potential heritage sites located within the vicinity of the former Hollinger Mine is shown on **Figure 34**: Cultural Heritage Sites and Sensitive Uses.

List of Potential Heritage Sites[68]

- Airport Hotel, South Porcupine
- Dome Manager's House, South Porcupine
- McIntyre Headframe, Schumacher
- McIntyre Lodge (now a Bed & Breakfast), Schumacher
- Hollinger concrete headframe, buildings, black dome, Timmins
- Hollinger management homes, Hemlock Street, Timmins
- St. Anthony's Cathedral, Timmins
- St. Alphonsus Church, Schumacher
- Train Station, Timmins (1912)
- Mascioli residence, First Avenue, Timmins (Italian villa style, 1930's)
- Dalton Home, Cherry Street, Timmins (art deco)
- Timmins Public Library (façade - original post office)
- CFCL Television Station (1950), Pine Street, Timmins
- St. Antoine School (first school in Timmins)
- Two log homes, one on Wilson Avenue and the other on Croatia Avenue, Schumacher

The Ministry of Natural Resources has also identified a number of archaeological or historic sites or features, but all are located well outside the 1000 m area around the former Hollinger Mine. This list should be referred to in the future if the Project scope changes.

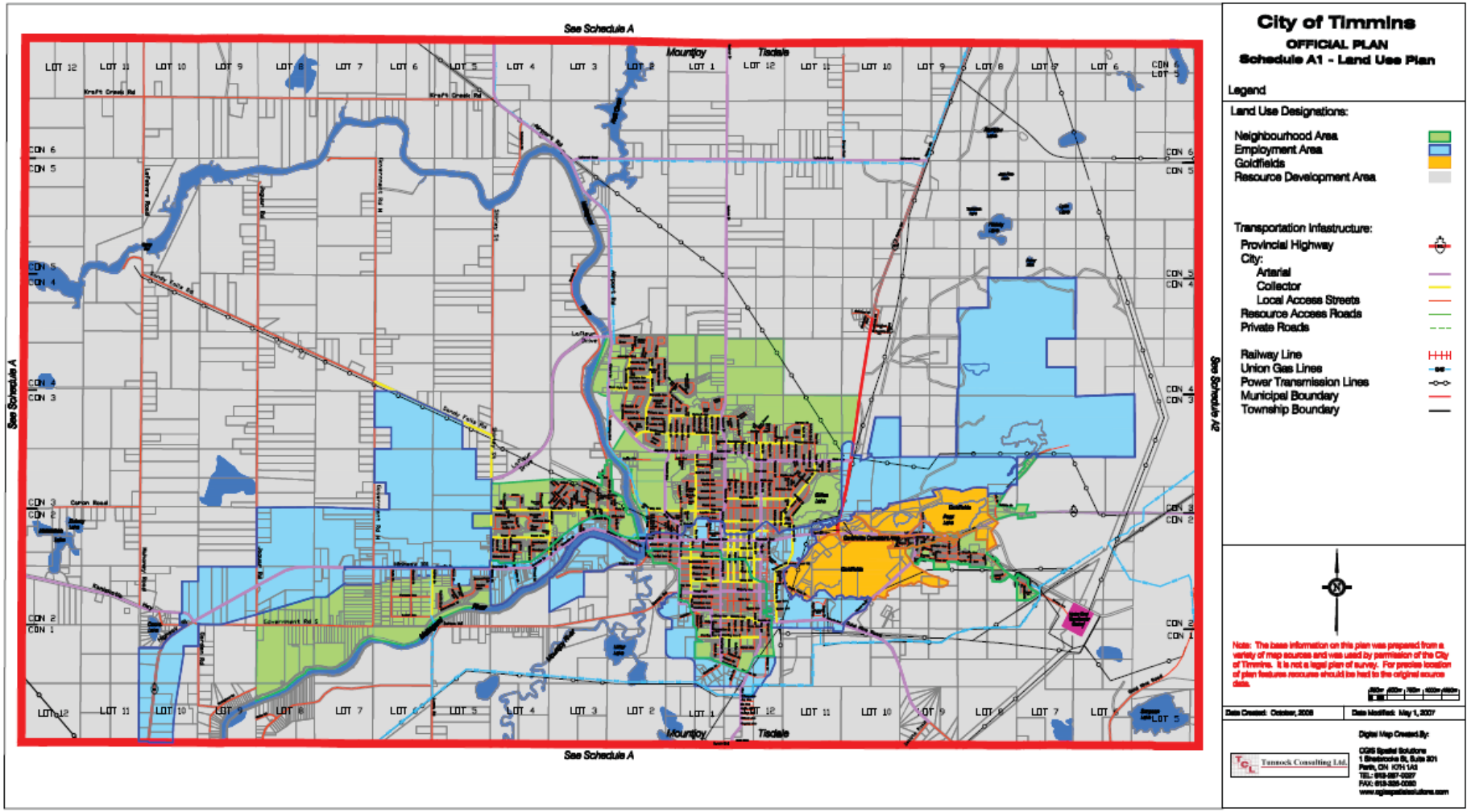
In addition, cultural heritage assessment work carried out by Woodland Heritage Services as part of the Environmental Baseline Studies for the Hollinger Project have identified a number of additional sites and recommended protection/enhancement strategies.[69]

g) loss of enjoyment of normal use of property; and
h) interference with normal conduct of business." Provincial Policy Statement, 2005

[68] Candidate heritage sites provided by Timmins Museum, Community Profile, 2004

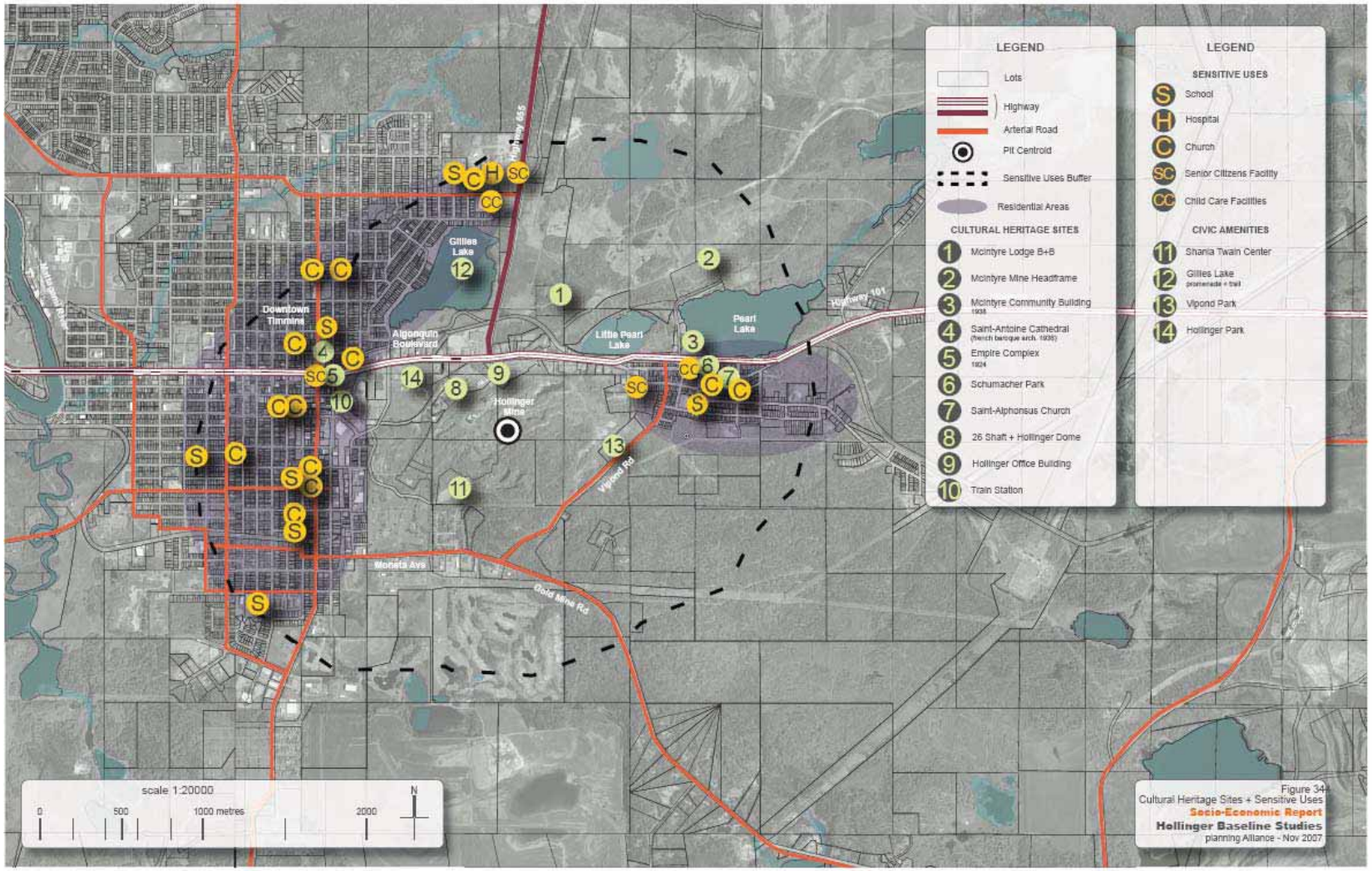
[69] Archaeological and Cultural Heritage, Built Heritage & Cultural Heritage Landscapes Assessment, Woodland Heritage Services, December 2007.

Figure 33: Proposed Land Use: City of Timmins Draft Revised Official Plan



Source: City of Timmins Draft Revised Official Plan, 2007

Figure 34: Cultural Heritage Sites and Sensitive Uses



3.7.3 Zoning

The purpose of the Zoning By-law is to provide more specific regulations for the use of land, and the character, location and use of buildings and structures. Similar to the Official Plan, the Zoning By-law is currently being reviewed and updated. To date, a Draft Revised Zoning By-law has not been made publicly available, although this is anticipated prior to the end of 2007. A review of the existing bylaw for the Hollinger Mine was undertaken, but in the future specific zoning should be confirmed with the City based on detailed plans and the latest version of the zoning by-law.[70]

The former Hollinger Mine falls within an area currently zoned Rural: Wilderness - AW. The area to the north, bordering highway 101 incorporates a range of zones, including:

- Rural: Open Space - AO
- Industrial: Industrial General – IG
- Residential: Medium Density - RM2 and Holding Residential - DR
- Commercial: Highway General - CHG and Commercial General - CG

North of Highway 101, the McIntyre mining area is zoned Industrial: Mining - IM and Rural: Wilderness - AW. Schumacher is predominantly zoned residential, with some commercial and institutional. West of the mine, the Hollinger Golf Course and the Goldcorp – Old Hollinger Golf Course are zoned Rural: Recreation – AR and Rural Hazard – AH, and the Fairway Trailer Park is zoned Residential: Mobile Home – RMH. Further to the west is a mix of industrial and residential zones.

Mining is permitted in Industrial: Mining – IM zones, therefore to allow mining activities to proceed in the former Hollinger Mine area certain zoning by-law amendments would be required. As mentioned previously, the City's intention is to revise the zoning by-law in conjunction with the land uses proposed in the revised Official Plan, which would presumably eliminate the need for zoning by-law amendments to allow mining activities to proceed in the Goldfields area.

3.7.4 Urban Expansion

The revised draft Official Plan encourages compact urban expansion in the Neighbourhood Areas, as well as infill development in the downtown core. The Plan of Development Study (**Figure 35**) completed for the City in 2005 identified potential development areas for commercial and industrial uses. Four sites were recommended for further evaluation, including the Noranta Industrial Park, located south of the downtown area on Pine Street, Timmins Square, located west of the downtown on Algonquin Boulevard, the Highway 101 corridor, located further west of Timmins Square, leading out of town, and the airport.[71]

Due to the availability of commercial real estate and a surge in the economy, Timmins has recently been experiencing a development boom on the west side of town, along Riverside Drive. Winners and Sports Check have moved into the former Sears building at Timmins Square, Montana's Restaurant has a new location and Future Shop has received Site Plan approval for a new store in the same area. Sears has moved to the former Wal-Mart location and Wal-Mart has relocated to

[70] City of Timmins Zoning By-law No. 1977-850, 2003
[71] City of Timmins, 2005

Riverside Drive between Timmins Square and Government Road. A Dollarama is currently being constructed in front of the Wal-Mart.

In addition, Home Depot, Canadian Tire and Marks Work Warehouse have new locations on Riverside Drive west of Government Road, and a Michael's is under construction in the same area. Shopper's Drug Mart has opened a new location on Algonquin Boulevard at Cameron Street, east of the Mattagami River Bridge.

Residential development has been directed towards Melrose Gardens, west and east of the existing residential area, in order to support compact development. New subdivisions have been approved as far north as Lafleur Drive and west as MacLean Drive (Conrad Court and Tamarack Street). Land available for residential development is considered sufficient for future demand, but servicing limitations have restricted the amount of industrial and commercial lands available for development.

3.7.5 Strategic Initiatives

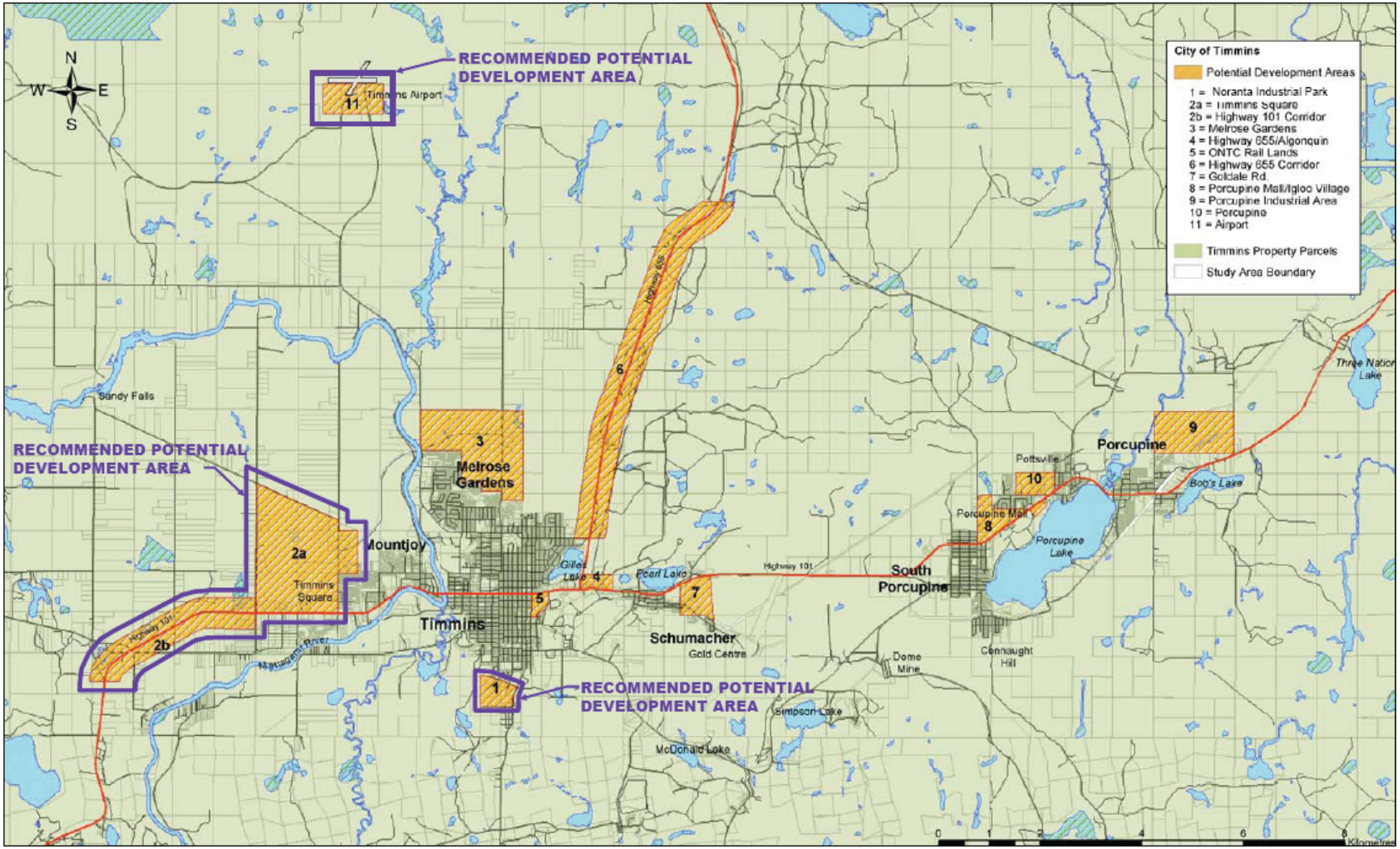
As part of the smart growth movement, the Province recently revised the Planning Act and added powers for planning jurisdictions to encourage brownfield remediation through the use of Community Improvement Plans. Once a designated Community Improvement Area is included in the Official Plan, the municipality can develop specific policies and financial tools to encourage development in underdeveloped or post-industrial areas. In July 2007, the City approved a Community Improvement Plan for downtown Timmins, downtown South Porcupine and Schumacher. The Community Improvement Plan makes grants available to property owners for facade improvement, energy efficiency projects, tax increment rebates, study assistance, demolition assistance and building code upgrades.

Further to this, Streetscape Master Plans for downtown Timmins and downtown South Porcupine have been developed based on input from key stakeholders, including residents and business owners.[72] The process involved identifying a range of urban design initiatives to revitalize the downtowns areas, including developing landmark features, creating dynamic public spaces, and improving connectivity and the pedestrian environment in an effort to create a sense of place and draw people back into the downtown. The Streetscape Master Plan for downtown Timmins proposes an outdoor civic place on the east side of Spruce Street between Algonquin Boulevard and Second Avenue. The location would include a ceremonial plaza featuring a 15 m high replica headframe, a multi-use parking area with decorative paving, the addition of a cupola on the heritage train station at the west end of the site, a central plaza for events with crowds of over 1200, and a walk of fame to commemorate community heroes.

Two additional initiatives mentioned in the Plan of Development Study include a possible highway bypass and the introduction of gateway features at key entrance points to the City. The intention of the by-pass is to provide an alternative route for traffic travelling along highway 101, which currently passes through the downtown. Although the draft revised Official Plan shows a route for the proposed highway by-pass, the City has since expressed that the by-pass is not currently considered a priority and no further feasibility or cost studies are anticipated for the near future. With respect to the gateway features, the City has expressed an interest in continuing to discuss ideas with potential partners with the objective of creating a landmark representative of the history and culture of the area.

[72] City of Timmins, October 2007

Figure 35: City of Timmins Plan of Development Study: Potential and Recommended Development Areas



Source: City of Timmins, Plan of Development Study, 2005

3.7.6 Profile of the Areas Around the Hollinger Mine

A profile of the areas surrounding the former Hollinger Mine is provided below:

West of the Hollinger site: Downtown Timmins / Former ONR Lands

The former Hollinger Mine is located on the outskirts of downtown Timmins. Hollinger Park, a large recreational area with a water park and baseball diamonds, is located southeast of Algonquin Boulevard and Brunette Road, on the site of the former Miller Lake. Between the park and the Hollinger fence line, a number of light industrial activities are located on Water Tower Road, including Luzenac Inc., K&C Mechanical and the municipal pump house and water tower. Further south is a mix of low-density housing and industrial facilities. This area has a traditional grid street pattern with residential lots typically 30 ft by 120 ft. Recent construction along Spruce Street, on the former ONR lands, includes the Timmins public library and Teletech.[73]

East of the Hollinger site: Schumacher

The Schumacher neighbourhood is located to the east of the former Hollinger Mine, along Highway 101. Small-scale commercial businesses are located along the highway with primarily residential lots located further to the south. The McIntyre Community Centre and Timmins Chamber of Commerce are located on the north side of the Highway 101, at the McIntyre Road intersection. The McIntyre headframe is an iconic symbol on the north side of Pearl Lake. A number of churches and a school are located within the community. In more recent years, residential growth has occurred on Carium Road and in Gold Centre. The area has a traditional grid street pattern with residential lots typically 30 ft by 113 ft. Schumacher was one of the first settlements in the area, and residents of Schumacher are known to have strong ties to their community.

North of the Hollinger site: Highway 101 Commercial Corridor

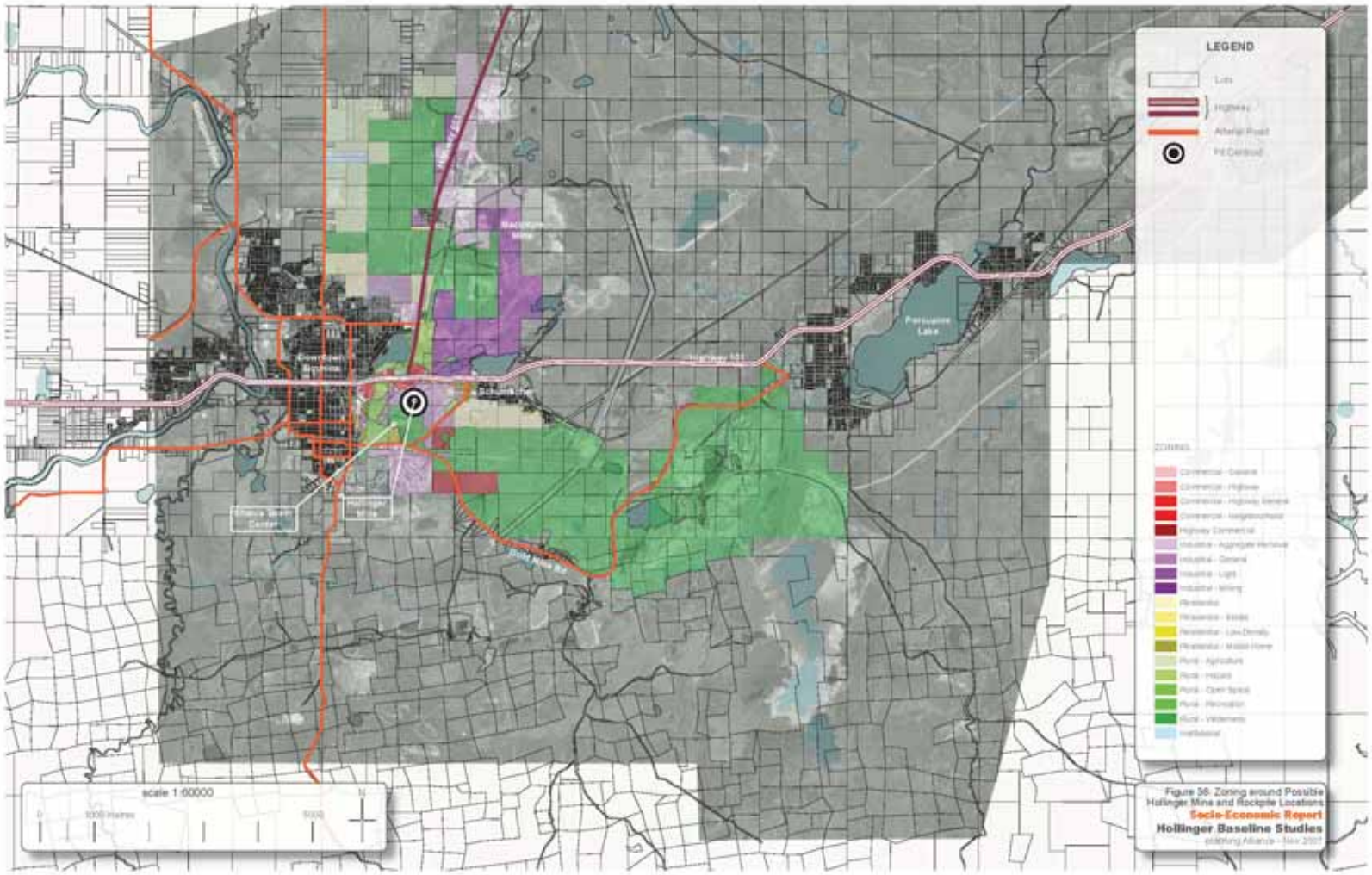
North of the former Hollinger Mine, Highway 101 is lined on both the north and south sides by low-rise, commercial strip developments, including the Comfort Inn, Casey's, Super 8 Motel, Feldman Timber and Acklands-Grainger Inc. Highway 101 is the main thoroughfare for traffic traveling east-west, representing an important link between downtown Timmins, Schumacher and South Porcupine further to the east. The former McIntyre Mine is located on lands further to the north. Highway 655 intersects Highway 101 near the western edge of the corridor, providing a north-south connection.

South of the Hollinger site: Shania Twain Centre

The mine is bordered on the south by the old Hollinger Golf Course, the Hollinger Golf Course, Shania Twain Centre and the Fairway Trailer Park. On the south side of Moneta Avenue/Gold Mine Road is the Kayorum (Hollinger) tailings facility. The areas southeast of the mine are primarily rural, forested lots.

[73] Community Profile, 2004

Figure 36: Zoning Around Possible Hollinger Mine



3.7.7 Synopsis

Since the early 1900's, the City or Timmins' growth patterns have been affected by the existence of past and present mining activities. As a result, a significant portion of the former Hollinger Mine is surrounded by built up urban areas. Consequently, the renewal of mining activities will need to consider the nature of adjacent uses. The technical studies currently being undertaken by Goldcorp will seek to identify separation distances that protect the quality of life and safety of human activities on surrounding properties.

With respect to land use and zoning, the effective policies will need to be reviewed with the City once the scope of the Project is understood, in order to assess the required Official Plan and Zoning by-law amendments. It may make more sense for Goldcorp to consider revising designs to avoid lands that would require such amendments.

Consultations with the City should also incorporate a review of requirements with respect to cultural heritage sites, considering the location of a few of the former Hollinger buildings on the northwest of the site. Potential synergies with on-going City initiatives, including the development of gateways and the Downtown Streetscape Plan's proposed civic space located just west of the former mine, should also be considered.

3.8 TRADITIONAL VALUES & CULTURAL HERITAGE

In order to identify and assess high potential cultural heritage and archaeological areas as well as the built environment and any cultural heritage landscapes that may be impacted by a future Goldcorp Hollinger Project, Woodland Heritage Services was contracted by Goldcorp to undertake a cultural heritage baseline study.[74] The study included a Stage 1 and preliminary Stage 2 assessment undertaken by a licensed archaeologist, which involved field visits and was undertaken in accordance with Ontario Heritage Act Regulations. The study also provides a comprehensive history of First Nations and mining activities in the area.

The study found that "there are no registered archaeological sites either within or near (within 2 km) of the Hollinger study area". There are, however, three high potential pre-contact site areas, several historic archaeological sites and cultural heritage landscapes within the study area. All are recognized as significant, but protection and/or preservation is recommended for only certain sites.

The high potential areas for buried pre-contact sites consist primarily of the former Aboriginal and early prospectors' portage trail between the Mattagami River and Night Hawk Lake (Frederick House River), located in the vicinity of the Highway 101 corridor. As these areas have generally been disturbed by past mining operations, it is recommended that follow-up work in these areas consist of monitoring future construction activities.

Historic archaeological sites and cultural heritage landscapes identified in the in the Hollinger Mine area include the Hollinger Mine site, the Central Shaft, the Main Shaft Headframe, the ruins of the Mine Manager's Residence, (located within the fenced-off area of the former Hollinger Mine), the former Hollinger Office, the Hoist House, Number 26 Shaft and the Ore Bin, the Hollinger Golf Course, the Hollinger Townsite Miner's House and the baseball diamond in Hollinger Park,

Historic archaeological sites and cultural heritage landscapes identified in the McIntyre Mine area include the McIntyre Mine site and headframe (located within the fenced-off area of the former McIntyre Mine), the stamp mill ruins, the McIntyre Community Centre, the Doctor's Residence (building currently used by the Chamber of Commerce), the Executive Lodge (now the McIntyre Bed and Breakfast) and Company Housing (consisting of five houses located in Schumacher). The report provides more detailed information on the location and description of each of these sites, as well as recommended mitigative measures.

[74] Archaeological and Cultural Heritage, Built Heritage & Cultural Heritage Landscapes Assessment, Woodland Heritage Services, December 2007.

4.0 EVALUATION AND DISCUSSION

4.1 SUMMARY OF POTENTIAL SOCIO-ECONOMIC CONSIDERATIONS

The following is a summary of the potential socio-economic considerations resulting from the proposed Hollinger Mine.

- **Mining-related employment:** As one of the top three employers in the City, representing annual expenditures expected to be in the range of $50 million, the Hollinger Mine would have far-reaching economic implications. Approximately 185 existing mining jobs (including both pit and mill operations) and related spin-off economic activity would be sustained well beyond 2014 (from 10-15 years), in addition to supporting diversification of the economic base.

- **Slowing the population decline:** By sustaining well-paying employment opportunities, the mine would slow the decline in the population, a trend being seen across northern Ontario but most significantly in the District of Cochrane.

- **Elimination of hazard areas:** The Hollinger site is currently fenced off and restricted to public access due to the presence of former mine workings. An open pit mine would eliminate these hazards in the long run. Rehabilitation of hazard lands may result in upwards of 100 hectares of currently unusable land restored for a range of land use activities.

- **Remediation cost savings:** Due to the elimination of hazards, the provincial government and Goldcorp will save in the range of $2-6 M, representing the amount required for remediation of the site.

- **Nuisance effects:** Technical studies will need to be undertaken to determine appropriate separation distances to protect adjacent land uses from nuisance effects, including noise, dust and vibration. Case studies of urban mines have shown that despite ensuring enforcement of minimum separation distances, adjacent landowners may still complain of nuisance effects. Additional nuisance effects may include temporary or permanent road closures, and increased traffic as a result of employees arriving at the site for work during construction and/or operation of the mine.

- **Interim uses:** During operation of the mine, the provision of direct benefits to the community should be considered, including allowing existing uses to remain in the separation areas, assuming safety is not an issue, and providing new opportunities, such as recreational uses and viewing platforms for tourists.

- **Public scrutiny:** Due to the uncommon occurrence of urban mining, the Hollinger Mine will likely be a high profile project, attracting attention from a range of observers, including environmentalists and community groups. Actions undertaken by Goldcorp will be closely scrutinized, requiring consistent messaging and a well-developed approach to managing effects.

- **Uncertainty and speculation:** Residents and business owners inquiring about how the project will affect them in the future have already contacted Goldcorp. The presence of the

drill rigs and the purchase of the Fairway Trailer Park and other properties have spurred rumours and speculation. More vulnerable groups and/or individuals with higher sentimental attachment to their properties may be experiencing concern.

- **Tourism and educational potential:** The project represents a unique tourism and educational opportunity. Located adjacent to a highly accessible urban area, the project provides individuals with an opportunity to view a large open pit mining operation. Other urban mines, including the Martha Mine (Waihi, New Zealand) and the Kalgoorlie Super Pit (Western Australia) have found the educational and tourism potential to be significant. It will be important for Goldcorp to assist the City in capitalizing on these opportunities, ensuring tourism features are developed according to an overall plan that fits with the desired image of the City.

- **Mine closure:** Potential redevelopment opportunities will be evaluated as part of the closure plan, possibility resulting in new recreational and residential development opportunities following rehabilitation of the mine. Although a long-term effect, the outcome may be a considerable benefit to the City by eliminating a large hazard area adjacent to the downtown core and, once rehabilitated, providing lands that could be used for recreational or development activities.

- **Shortage of skilled labourers:** At the present time there is a shortage of skilled workers resulting from the boom in the mining and oil industries. By assuming employees from the Pamour Mine are transferred to the Hollinger Mine, this project would contribute to this dilemma (but not make it any worse). However, the project would not be in operation until 2011-2012 and by then the predicted loss of jobs in the mining sector might have improved the availability of skilled labour.

- **Changes to land use:** Once more information is known about the scope of the project, it will be possible to determine whether land uses adjacent to the mine will be affected, potentially requiring relocation of parks, infrastructure or private lands. Relocation can be disruptive to individuals as well as neighbourhoods, requiring careful and well thought out management strategies.

- **Vulnerable groups:** Within potentially affected areas, it will be important to identify vulnerable groups that may experience greater hardship because of the project. For example, the City is currently experiencing a shortage of affordable housing, so relocation of both homeowners and tenants would require careful consideration of housing availability.

- **Heritage sites:** To date, the City has not formally identified and protected heritage sites within the Study Area, but the Hollinger headframes and dome building have been informally listed. These and other sites will require specific consideration.

- **Property values:** The potential effect of the project on property value is a significant concern among stakeholders. In general, sustaining economic activity in Timmins will have a positive effect on property value. However, Goldcorp recognizes that the effect may be different for landowners immediately adjacent to the potential project, depending on perceived and real nuisance effects, among other issues, and is committed to developing a strategy to ensure these landowners are not negatively affected by the project. The strategy will be based on studies undertaken by Goldcorp and the outcome of public engagement activities. Goldcorp is currently undertaking research to understand trends in

property values across the City, and specifically within the immediate vicinity of the potential project.

4.2 STRATEGIES FOR PROTECTING AND ENHANCING SOCIAL CONDITIONS

The following is a preliminary list of strategies that should be considered in order to enhance potential benefits and mitigate negative effects of the project:

- **Consult with key stakeholders:** Develop strong partnerships with all stakeholders and develop community liaison committees in order to ensure consistent messaging. Identify potential vulnerable groups.

- **Evaluate closure opportunities:** Consider a range of rehabilitation opportunities post closure. Evaluate costs and technical feasibility, meet with potential public and private partners to discuss ideas, e.g. cost sharing of redevelopment opportunities.

- **Understand international best practices:** Continue to document international best practices with respect to urban mining and resettlement practices. Hold an internal workshop to ensure Goldcorp staff adequately understand precedents, expectations and minimum standards, as well as lessons learned from other urban mines.

- **Heritage sites:** Ensure heritage sites are identified and protected in accordance with provincial and municipal heritage guidelines.

- **Capitalize on City-wide strategic initiatives:** Meet with City representatives to identify strategic initiatives to which Goldcorp can contribute. Possible opportunities include the highway bypass, infrastructure upgrades, construction of entranceway features, assisting with the Timmins Downtown Streetscape Plan and enhancing mining heritage through the use of public art.

4.3 POTENTIAL CONSTRAINTS AND SENSITIVITIES

During the detailed feasibility stage of the project commencing in 2008, Goldcorp should obtain further clarification on the following issues:

- **Separation distances:** Since August 2006, Goldcorp has been meeting with staff at the City, Ministry of Northern Development and Mines and the Ministry of Environment in order to understand separation distance requirements. As a result, baseline studies are being undertaken by Goldcorp in order to provide guidelines with respect to safety and nuisance affects. Further meetings will be required once the results of these studies are available. Even small differences in the separation requirements will have a significant impact on the feasibility of the project; flexibility and a commitment by regulatory agencies and Goldcorp to exploring innovative solutions will be required.

- **Official plan and zoning by-law amendments:** It is anticipated that the City will have a final revised Official Plan and Zoning By-law available for review in early 2008. Once this is available, a review of land use and zoning should be undertaken for the mine in order to identify any required amendments. In addition, other policies presented in these documents that may have an affect on the project should be reviewed, e.g. separation distances or treatment of heritage sites.

- **Affected areas:** As the project progresses and more information becomes available regarding the potential size of the pit, Goldcorp will need to identify affected land and infrastructure, including all residential, industrial, recreational and commercial areas, the number of people, households, and sensitive uses impacted, etc. It is possible that some individuals will be greatly concerned and/or upset by the project.

4.4 RECOMMENDATIONS

Goldcorp should undertake the following actions during the project feasibility phase, to ensure that social and economic benefits delivered during the life of the project translate into sustainable long-term benefits for the City and the region. These actions build on the results of the baseline investigations and comprise a dynamic, continuous process that should be incorporated in Goldcorp's overall management system for the project. They involve employee participation and community engagement wherever possible and their purpose is to minimize negative effects on all parties. As the feasibility phase progresses, these actions should be revisited in order to ensure continuous improvement of social benefits.

1. **Develop a consensus regarding separation distances:** Goldcorp should continue to meet with staff at the Ministry of Northern Development and Mines, the City and the Ministry of Environment in order to develop an understanding, or consensus, regarding separation distances in order to reduce uncertainty and obtain a general commitment from the regulatory authorities regarding the approval process and expectations. As the project proceeds, it will become increasingly important for Goldcorp to establish (1) the setback distances required, (2) the range of uses permitted within the buffer area, if any, (3) additional set back requirements for sensitive uses, and (4) the approval process: requirements and expectations.

2. **Identify permitting requirements:** As part of a larger undertaking to identify all regulatory requirements for the project, Goldcorp will need to ensure that the latest information regarding land use and zoning is incorporated in scheduling and costing. If either an Official Plan or zoning by-law amendment is required, Goldcorp should meet with the City to identify the most effective and efficient approach, e.g. bundling amendments, in order to minimize potential project delays.

3. **Identify potential affected areas:** Develop a detailed evaluation of potentially affected areas, including amount of land, land use, number and size of buildings and structures, etc. Identify temporary and permanent use and access restrictions on landowners, including public and access roads, in addition to potential cultural heritage sites that may be affected.

4. **Develop a Resettlement Plan:** Develop a plan to compensate landowners fairly for both the temporary disturbance and permanent displacement of land use activities associated with the project. Define and implement a Resettlement Plan, with appropriate principles, policies, rates and procedures for negotiation with affected landholders. Specific objectives of the plan, in keeping with international best practices, will be to:

    - Consult with and facilitate the informed participation of affected landowners in decision-making related to compensation planning and implementation activities
    - Identify vulnerable groups and ensure additional resources, (e.g. legal or financial counselling,), etc. is available.
    - Develop plans to address relocation or compensation requirements for all affected lands including infrastructure, servicing and cultural heritage sites;

- Mitigate adverse social and economic impacts from project-related land acquisition by:
  - Providing compensation for loss of assets at replacement cost
  - Ensuring the informed participation of those involved in the implementation of resettlement activities
  - Improve or at least restore the livelihoods and standards of living of displaced persons
  - Establish a transparent grievance dispute resolution mechanism

In addition, either as a separate activity or as part of the Resettlement Plan, **a strategy to address the potential effect on property values** should be developed.

5. **Identify economic development opportunities:** As the project continues, Goldcorp should identify opportunities to demonstrate its commitment to participate actively in the development of the project area and contribute to a sustained improvement in the quality of life in Timmins. Potential opportunities include employment, both during construction and operation, interim and long-term rehabilitation plans, and contributing to City-wide initiatives, such as developing education and tourism potential, using waste rock to create landscaped gateways, etc.

6. **Develop a Public Consultation Plan:** Recognizing that prior consultation and informed participation with affected communities is crucial to the management of social effects, a Public Consultation Plan should be developed to provide project stakeholders with accurate and timely information regarding the changes underway in the project area and to provide various consultation mechanisms to receive feedback. Specific objectives of the plan should include:

   - To raise awareness of the project's effects on stakeholders
   - To develop a feedback mechanism and ensure follow-up of complaints and concerns
   - To ensure consistent and clear messages
   - To minimize uncertainty and speculation
   - To provide a forum through which project stakeholders can meaningfully participate in project planning, including the identification of mitigation and compensation measures
   - To inform the participatory development and implementation of the compensation, relocation and mitigation plans, if required

7. **Develop a Mine Closure Plan:** Develop a Mine Closure Plan that incorporates public input and considers a wide range of rehabilitation opportunities. The Closure Plan should also identify interim uses appropriate for buffer areas. Specific objectives of the plan should include:

   - To review international urban mining precedents and technologies for mining in urban areas that support rehabilitation opportunities (e.g. phased mining and backfilling techniques)
   - To identify a range of post-closure development opportunities
   - To develop a working group that includes Goldcorp team members as well as a range of potential stakeholders in order to identify partnerships and development meaningful relationships

- To identify a preferred option for mine closure based on an evaluation of economic, social and environmental costs and benefits to the community, and commitments from stakeholders, as required
- To revisit and update the mine closure plan on an on-going basis, in order to ensure that the plan incorporates social, economic, technical, political and environmental changes to the project environment.

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