

Wawa Mining Sector Growth Strategy

Economic Development Corporation of



Prepared by:



In Association with:



December 20, 2013



Mining Sector Growth Strategy
for the Economic Development Corporation of Wawa

Prepared by:
McSweeney & Associates Consulting Inc.



McSweeney & Associates
201 - 900 Greenbank Road
Ottawa, Ontario
CANADA K2J 1S8
Phone: 1-855-300-8548
Fax: 1-866-299-4313
Email: consult@mcsweeney.ca
Website: www.mcsweeney.ca

Table of Contents

1	Purpose of Strategy/Background.....	1
2	Inventory of Wawa Area Mining Activity	2
3	Mining Sector Supply Chain	5
4	Wawa’s Mining Sector Demand Analysis	9
4.1	General Observations.....	9
4.2	Current & Future Workforce Requirements.....	10
4.3	Infrastructure Needs.....	12
4.4	Materials and Equipment Needs.....	12
4.5	Predicted Supply and Service Requirements.....	13
4.6	Mining Sector Demand Analysis Conclusion.....	14
5	Wawa’s Mining Sector Supply Analysis.....	15
5.1	Procurement Processes	15
5.2	Services Suppliers.....	15
5.3	Materials & Equipment Supply	16
5.4	Identifying other Potential Supply Opportunities.....	18
6	Supply-Demand Gap Analysis	20
6.1	Infrastructure Supply-Demand Gap	20
6.2	Services Supply-Demand Gap	20
6.3	Michipicoten First Nation	21
7	Phase 2.....	22
7.4	Business Threshold Analysis	22
7.5	Business Input	23
7.6	Marketing and Investment Attraction.....	23
7.7	Community & Investment Readiness, Business Friendliness.....	24
8	Study Conclusions.....	25
9	Growth Strategy Action Plan	26
	Appendix A – Mining Operations/Exploration Projects Overview	29
	Appendix B – Contacted Mining Related Companies	31
	Appendix C – Marketing Recommendations	32

List of Tables and Figures

Table 1: Typical Mining Supply Needs by Mining Phase	7
Table 2: Workforce Summary	10
Table 3: Potential Local Supplier Opportunities by Mining Supply Need.....	18
Figure 1: Wawa Location Map.....	2
Figure 2: Locations of Wawa Area Mining/Exploration Properties.....	4
Figure 3: Mining Life Cycle.....	5

1 Purpose of Strategy/Background

The Wawa Economic Development Corporation is undertaking a Wawa Mining Sector Growth Strategy Study to develop economic strategies that align with the goals of Province and the Northern Ontario Growth Plan, in particular Section 2.3.8. This section of the Growth Plan includes provincial priorities to expand the mineral development and mining supply and services industry, to increase exports, to enable new mining opportunities and to facilitate partnerships to optimize community employment and benefits.

Mining has been part of Wawa's economy for many years. Peak mineral development activity occurred in the 1980's and bottomed out in the 1990's. Iron ore production ceased in the 1990's, when Algoma Steel decided to increase its use of low cost taconite ore from the U.S.

Increases in gold prices over the last decade have led to increased mineral development in the area, which has minimized some of the economic stresses imposed on Wawa and the neighbouring communities. Gold mining and exploration activity is strong in the Sault Ste. Marie Mining District.

In order to maximize the benefits and embrace this shift in economic development, the Economic Development Corporation (EDC) of Wawa has taken a proactive approach to develop a Wawa Mining Sector Growth Strategy (the "Strategy"). The purpose of the Strategy is to help Wawa and its surrounding neighbours, including the Michipicoten First Nation, to optimize growth in mining and supporting industries.

The Study was conducted in two phases and delivers the following specific outcomes:

- Identify current and estimated future regional mining sector supply and service requirements.
- Identify an inventory of all regional and local companies as well as outside suppliers that currently support the area mining industry.
- Identify current local entrepreneurship and business capacities to adapt to meet identified current and future regional mining sector supply and service requirements.
- Identify actions to build the value-chain to develop and strengthen mining clusters (economic gardening) by:
 - Encouraging new business creation to meet mining sector needs, and
 - Encourage and support existing businesses to grow, expand, or adjust to provide services and supplies to the mining sector.
- Identify and propose actions to reduce any skills gaps, labour and supply chain shortages anticipated.
- Prepare a marketing plan to improve the marketing readiness of Wawa, to strengthen Wawa's marketing position and branding presentation, and provide direction on how to improve signage, marketing materials, and how to reach target audiences.
- Identify strategic actions to increase business friendliness, address investment readiness gaps, and other actions required to related to community and economic development.

2 Inventory of Wawa Area Mining Activity

Wawa is located within the Sault Ste. Marie Mining District, as shown on Figure 1. The Sault Ste. Marie Mining District boundary was recently altered to include the Wawa area and the associated Michipicoten greenstone belt.

Figure 1: Wawa Location Map



Source: Knight Piésold Ltd. from MNDM, 2013

Mining operations have been increasing in the Wawa area over the last decade. This includes Wesdome Gold Mines Ltd.'s Eagle River Mine and Wesdome's Mishi Pit. The Mishi Pit operations are currently temporarily halted while the mill is being expanded. The start-up of Richmond Mines Ltd.'s Island Gold Mine in 2007 was a major milestone for the area.

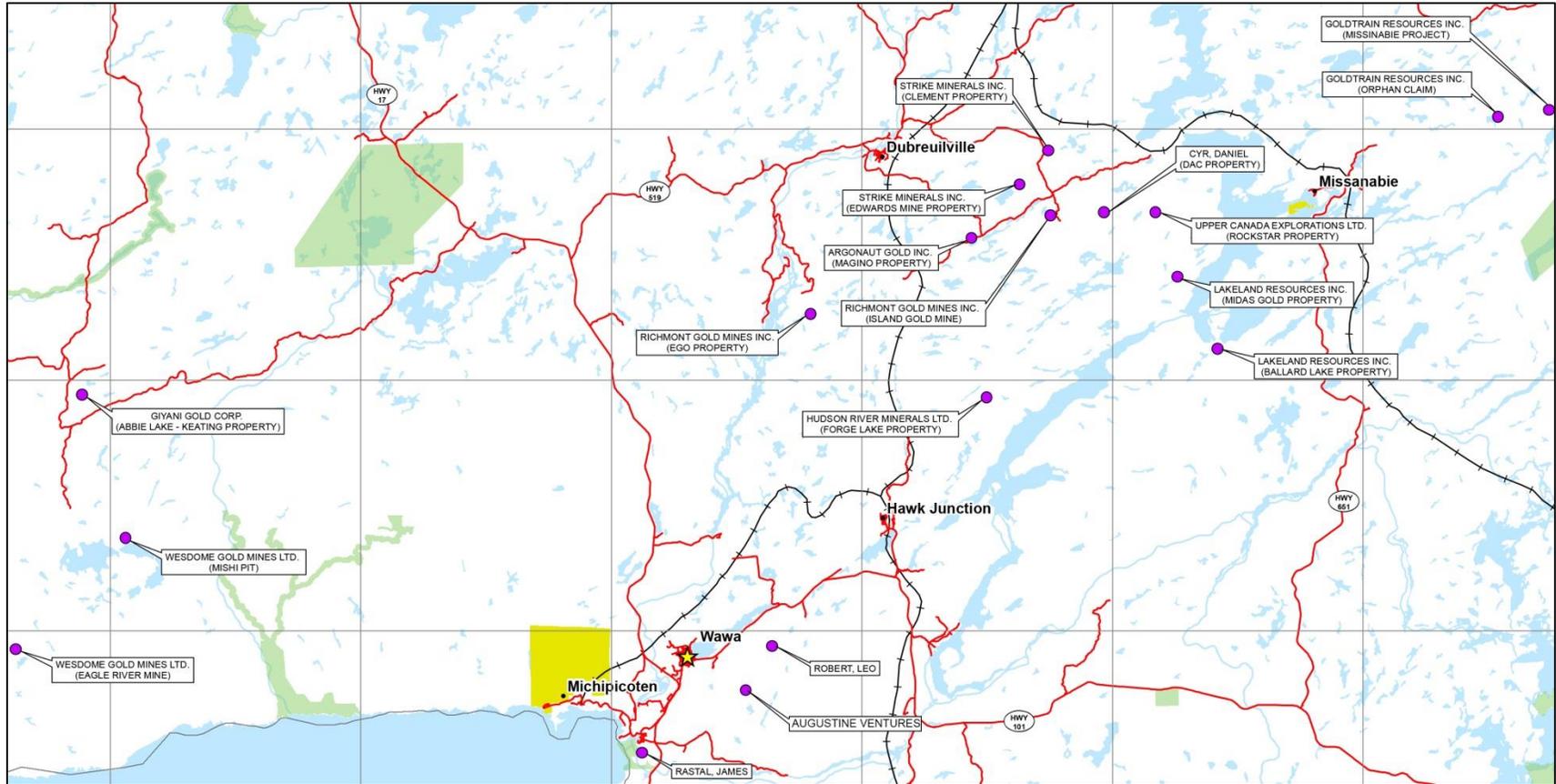
There are also two prospective developments that could initiate full scale production in the near future: Strike Minerals Inc.'s Edwards Mine and Argonaut Gold Inc.'s Magino Project. The Magino Project is waiting for approval of their environmental assessment. The current schedule shows construction beginning in the 4th Quarter 2014. Strike Minerals is currently sitting on a fully permitted property and can re-initiate mining activities as soon as financing is obtained.

Exploration activity is prevalent in the area, with 16 exploration properties. This includes ongoing exploration by Wesdome. Richmond is planning 80,000 metres of additional underground exploration in 2013 within their highly prospective Island Gold Deep deposit.

The location of the exploration and mining properties are illustrated on Figure 2. Appendix A provides a summary overview of each operation/exploration project, and wherever possible, the following information has been provided in the table:

- Location of the Project
- Commodity
- Phase of Development
- Projected Mine Life
- Reserves if known
- Mining Method/Exploration Activity
- Current Work Force
- Predicted Work Force.

Figure 2: Locations of Wawa Area Mining/Exploration Properties

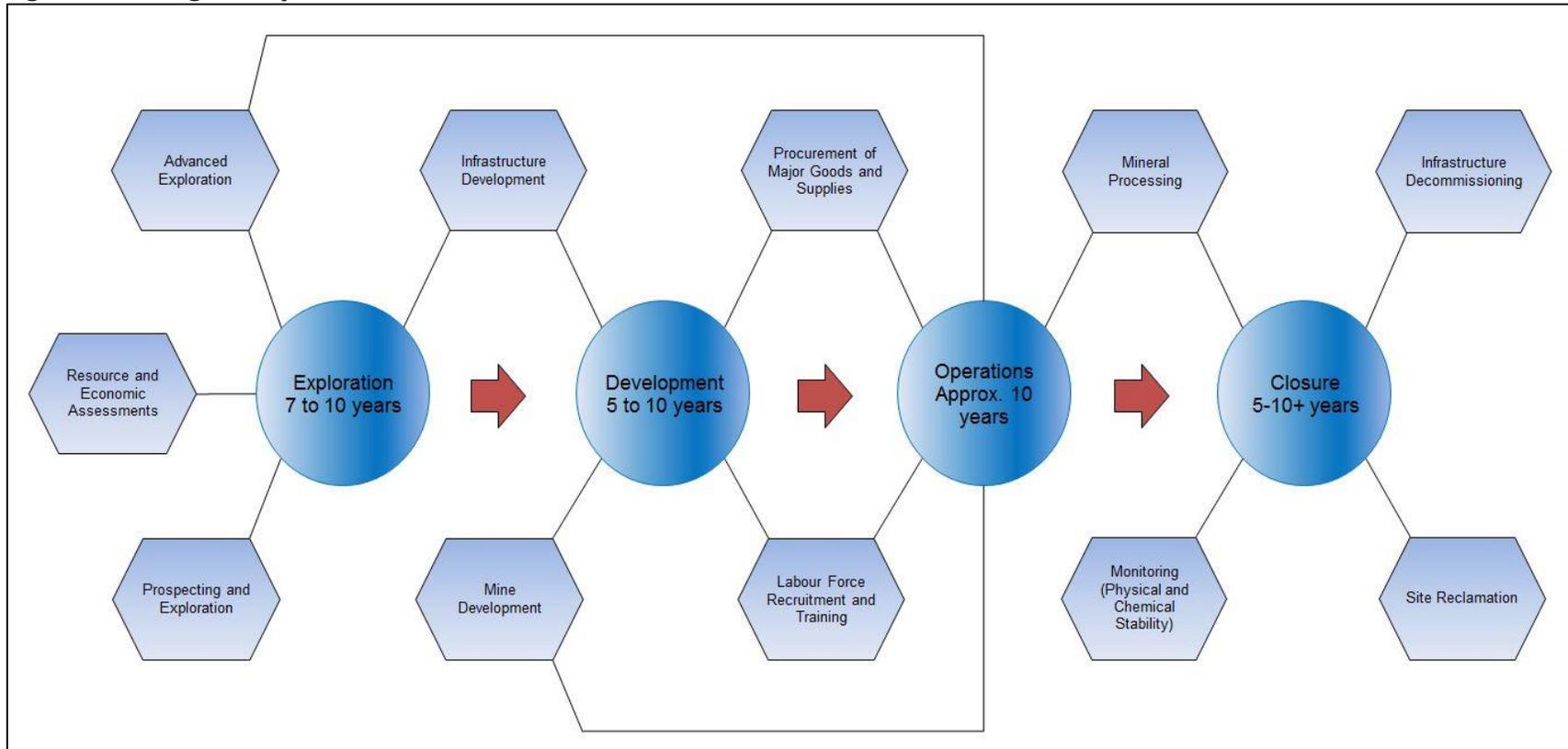


Source: Knight Piésold Ltd.

3 Mining Sector Supply Chain

Each phase of the mining life cycle has its own requirements in terms of equipment, materials, supplies and services. Figure 3 illustrates the four phases in the mining life cycle and outlines the typically expected timelines and the major activities associated with each phase.

Figure 3: Mining Life Cycle



Source: Knight Piésold Ltd.

Typical activities that occur during the **Exploration Phase** include:

- Prospecting and Exploration
- Advanced Exploration
- Resource and Economic Assessments
- Depending on the scale and remoteness of the exploration project additional activities may also include infrastructure development (i.e., access road development, airstrip, camp, etc.).
- Community/public relationship building, First Nations discussions/negotiations
- Environmental studies, permitting, and socio-economic studies

Typical activities that occur during the **Development Phase** include:

- Mine Construction
- Infrastructure Development
- Procurement of Major Goods, Services and Equipment
- Labour Force Recruitment and Training

Typical activities that occur during the **Operations Phase** include:

- Further/continuing Mine Construction - Infrastructure Development
- Mine Development and Production - Open Pit / Underground
- Mineral Processing
- Ongoing Exploration.

Typical activities that occur during the **Closure Phase** include:

- Infrastructure Decommissioning
- Site Reclamation (i.e., bulk earth works and revegetation)
- Monitoring (Physical and Chemical Stability).

The following table illustrates the equipment, materials, supplies and services typically required at each phase of the mining life cycle for the types of mining activities in the Wawa area. The “++” symbol indicates an extensive requirement that is more likely to be located at the mine site or in the Wawa area, whereas the “+” symbol indicates a minimal requirement or a requirement likely to be fulfilled from outside of the Wawa area.

Table 1: Typical Mining Supply Needs by Mining Phase

Materials, Supplies, Services Needs	Exploration	Development	Operations	Closure
Management & administration: purchasing, accounting, human resources, general administration, training, security	+	++	++	+
Infrastructure development:				
• access roads	+	++	++	
• camp development	++	++	+	
• air strip/heli-pad development (depending upon remoteness)	+	++	+	
• storage/warehousing	+	++	++	
• line cutting, deforestation, site prep	++	+	+	
• power supply	+	++	++	+
Construction:				
• general contractor		++	+	++
• construction trades, skilled trades		++	+	+
• metal fabrication	+	++	+	
• building fabrication/erection	+	++	+	
Professional services:				
• surveying: airborne, ground geophysical	++			
• mining consultants	++	++	++	
• engineering & environmental	++	++	++	+
• lab support: assays, environmental samples	+	++	++	+
• human resource consultants		++	+	
• training: health & safety, WHMIS, Common Core, etc.		+	++	
• engineering, procurement and construction management (EPCM) firms for large projects	+	++	+	
Equipment supply & servicing:				
• heavy equipment supply:				
○ excavators, graders, bulldozers, etc.	++	++	+	+
○ jumbos, muckers, haul trucks, rock bolters, etc.		++	++	
• heavy equipment maintenance and parts supply	+	++	++	+
• small equipment supply, parts, rental, maintenance (light trucks, ATV's, pumps, boats, generators, motors, etc.)	++	++	++	+
• milling equipment supply, parts, maintenance: conveyors, crushers, mill reagents, etc.		++	++	
• communications equipment	+	++	++	+
Materials, supplies:				
• safety, emergency, first aid	++	++	++	+

Wawa Mining Sector Growth Strategy

Materials, Supplies, Services Needs	Exploration	Development	Operations	Closure
• explosives supply/storage	++	++	++	
• office supplies, printing, copying		+	++	+
• fuel: diesel, gasoline, propane.	++	++	++	+
• lubricants		+	++	+
• building materials (concrete, lumber, aggregate, etc.)	+	++	+	+
• mining supplies, equipment	+	+	++	
• potable water treatment equipment, supplies	+	++	++	+
• ventilation equipment, supplies		++	++	+
Other Services:				
• drilling	++	++	++	
• explosives	++	++	++	+
• accommodations on-site	++	++	+	+
• off-site accommodations (hotels, motels, housing)	+	++	++	+
• food supply & catering	++	++	++	+
• caretaking & cleaning	+	++	++	+
• metal fabrication	+	++	++	+
• machine shop	+	+	++	+
• skilled trades: construction, maintenance, heavy duty, truck/auto, small equipment mechanics	+	++	++	+
• tire shop/on-site service	+	+	++	
• information technology support		+	++	+
• printing/copying		+	++	+
• uniform rental/cleaning		+	++	+
• waste management	+	++	++	+
• waste water treatment/management	+	++	++	+
• road maintenance, snow clearing	++	++	++	+
• general maintenance		+	++	
• specialized: pump repairs, motor rewinding/repairs, cylinder service		+	++	
• logistics, transportation/freight	+	++	++	+
• instrumentation		+	++	
• general industrial supplies	+	+	++	
• other specialized mining services			++	

Source: Knight Piésold Ltd. and McSweeney & Associates

4 Wawa's Mining Sector Demand Analysis

The preceding supply needs table outlines the general supply needs of mining by phase of development. The consulting team consulted with local mining/mineral development stakeholders to more specifically understand their needs.

A 35 question interview guide was utilized during the eight interviews that were conducted during this study. The interviewees were provided with copies of the questionnaire prior to the interview (when possible). The interviews were conducted with the following companies during the months of June and July, 2013:

- Argonaut Gold (Magino Gold Project) (two separate interviews were conducted)
- Augustine Ventures Inc. (Jubilee-Surluga Project)
- Giyani Gold Corp. (Abbie Lake-Keating Project)
- Richmond Gold Mines Inc. (Island Gold Mine)
- Strike Minerals Inc. (Edwards Mine Project)
- Wesdome Gold Mines Ltd. (Assay Lab)
- Wesdome Gold Mines Ltd. (Mishi Pit and Eagle River Mines).

Attempts to interview the other companies with mineral development activities in the area were unsuccessful. For the companies that did not participate in the interviews, information was sourced from MNDM's Resident Geologist Program's Monthly Reports and online press releases (as available). The companies contacted for participation are listed in Appendix B¹.

4.1 General Observations

Generally speaking, the equipment, materials, supplies and services needs of the mining and mineral exploration companies captured by the Supply Needs Table. The specific supply needs of each company are dependent upon where each company is at in the mining cycle.

- Two companies, Augustine Ventures Inc. (Augustine) and Giyani Gold Corp. (Giyani), identified themselves as being in the exploration phase.
- Argonaut Gold (Argonaut) indicated they completed their exploration activities in 2012 and are in the process of completing their environmental assessment.

Strike Minerals Inc. (Strike), Richmond Gold Mines Inc. (Richmont) and Wesdome Gold Mines Ltd. (Wesdome), are currently in production - although, Strike is awaiting financing confirmation and is currently operating with a minimal crew.

- All companies are either currently mining or exploring for gold in the area.

¹ Superior Aggregates (Trap Rock) is currently not operational and is without a known contact person. and the NWMO – possible selection of Wawa for Nuclear Waste in the report. I tried to explain that NWNO – Nuclear too far away in the future and this is a snapshot report of today's mining supply requirements. I also explained that Superior Aggregates is not operating or planning to operate and our contact Bruce Staines not working for the company anymore...really not relevant. Other potential exploration projects such as Leadbetter-Diamonds or projects not directly related to mining such as the Nuclear Waste Management Organization's search for a spent fuel repository have not been included.

- Argonaut is proposing open pit mining techniques, which are currently being utilized for Wesdome’s Mishi Pit Mine. Underground mining techniques are being utilized by Strike, Richmond and Wesdome. It is too soon to determine the anticipated mining methods of Augustine and Giyani.
- The estimated life of each of the operating or proposed mines ranges from 5 to 12 years.
- Richmond is currently operating at a peak production rate of 800 tonnes per day. An expansion to 1,000 tonnes per day is planned for 2016-2017.
- Strike is currently working with a minimal crew and is planning to reach peak production in approximately 1 year (this is dependent on funding).
- Wesdome has temporarily halted mining activities at the Mishi Pit. Mining activities will resume once the mill expansion is completed.

Wesdome Assay Lab was also interviewed as part of the study. The lab is located in Wawa and does assays for Wesdome and other mines in the region. For example, Strike uses the services offered at the lab for their assays. Wesdome Assay Lab indicated they are not currently running at peak capacity and are able to expand. The maximum capacity reached by the lab was 85%.

4.2 Current & Future Workforce Requirements

A breakdown of the current workforce requirements for each of the companies interviewed is included in Table 2.

Table 2: Workforce Summary

Company	Phase of Development	Number of Employees	Rotation	Contractors
Augustine	Early exploration	N/A	N/A	N/A
Giyani	Early exploration	Varies	N/A	Unknown/varies
Argonaut	Pre-construction	15	7 days on - 3 days off 5 days on - 2 days off	1 (400-500 for construction in future)
Strike	Production	10-12	2 weeks on - 1 week off	0
Richmont	Production	218	7 days on - 7 days off 8 days on - 6 days off 4 days on - 3 days off	122
Wesdome Assay Lab	Production	16	7 days on - 7 days off	0
Wesdome (Mishi Pit and Eagle River)	Production	270 (including mining contractors)	Varies depending on position	50

Source: Knight Piésold Ltd.

Additional key observations with respect to the workforce are summarized below:

- Of Argonaut's 15 employees:
 - 4 are salary, 11 are hourly
 - 14 are full time and 1 is a contract (health and safety)
 - 8 are local to the region, 1 is from Michipicoten First Nation
 - 400 to 500 contract workers are estimated to be required during the construction phase
- All of Strike's employees are hourly and local to the region
- Of Richmond's 218 employees:
 - 70 to 75% are local to the region and about 5% are Aboriginal
 - 35% are salaried employees and the remainder are hourly
 - 135 are contract workers
- Although Giyani does not currently employ local workers (employees are based in the head office with one geologist in Sault Ste. Marie), when contractors are retained by Giyani they are encouraged to hire local workers including from First Nations.
- Of Wesdome Assay Lab's 16 employees:
 - All are local employees
 - 1 is a salaried position and 15 are hourly
- Of Wesdome Mishi Pit and Eagle River's 270 employees
 - 173 are hourly and 44 are salaried employees
 - 50 to 60 are contract workers
 - Approximately 150 are local employees and all but 5 are from Ontario

None of the companies interviewed have any issues or concerns with hiring local workers. The current staffing requirement for the operating mines and for the exploration activities is being met, and there is no substantive need for additional local workers at this time. Of the companies that do have current vacancies (or are expected to in the near future), the following positions are/will be required:

- Geologists
- Mill Superintendent
- Engineers
- Mechanics
- Electricians
- Janitorial staff
- Administrative personnel.

In the future (next 12 months), all of the positions identified above will be required in addition to:

- Diamond drillers
- Waste management staff/services
- Housekeeping staff/services.

All the interviewed companies believed that the majority of positions required can be filled by the local workforce; however this will depend upon the availability of capable individuals (appropriate training) and competition with other local mines and industries (e.g., local lumber mill possibly reopening). All of the interviewed companies indicated they would look for a local candidate for a position prior to hiring from outside of the region. The companies have indicated they are interested in advancing their relationships with Michipicoten First Nation and other First Nation communities in the region in order to facilitate future employment of community members.

The general perception of the workforce is positive. The companies indicated that the local employees are hard workers and are eager to get the job done. The work experience some of the employees gained from the forestry industry have proven to be beneficial when working at the mining operations.

Maintaining clear communications while on the mine site is paramount to ensure the safety of workers. Any language differences between the workers and the mine operating language can represent a potential mine safety risk, although mines currently operating in the region have not identified this as a concern.

The lack of professional accreditation for skilled trade workers (e.g., mechanics, electricians) was however identified as a concern by the mining companies in the region.

In order to improve the local workforce, all companies interviewed indicated that relevant training would be an asset. Richmond provides its own training to employees and in partnership with Northern College has developed a 12 week common core program that is offered at the mine site. The training program has proven to be effective, with employees excelling at their jobs after having gone through the training. The common core program will be required as other mines become operational or have worker needs.

4.3 Infrastructure Needs

The region is serviced by a railway and Highway 17. There is a local airport in Wawa (helicopter & aircraft charters available, but no scheduled air services) and the area is also serviced by Michipicoten Harbour. The community has telephone and internet access, although cell phone and internet access at or near the mine sites could be improved. There is commercial lodging for visitors in Wawa, but not in Dubreuilville, so most Richmond business visitors stay in Wawa.

4.4 Materials and Equipment Needs

Strike, Wesdome and Richmond estimate that approximately \$5 to \$10 million is spent on material and equipment annually. Wesdome Assay Lab spends approximately \$250,000 annually on assay supplies. The more specific demands and the current supply sources are indicated in "Wawa's Mining Sector Supply" section of this report.

4.5 Predicted Supply and Service Requirements

4.5.1 Exploration Supply and Service Requirements

It is hard to predict the future exploration supply and service requirements, since the majority of exploration companies depend on investors to fund their exploration programs. Funding depends on global commodity markets and factors that are outside the control of the mineral development or mining company. Among other things, gold prices have dropped approximately 20% over the last year causing a decline in funding and exploration activity.

Based on the information presented in the Inventory of Mining Activity, there were 16 projects/properties in the exploration phase. Typical supply and service demands during the exploration phase are outlined in the previous Supply Needs table. Based on responses provided during the interviews and the available on-line press releases, the following future activities are planned:

- Augustine Ventures Inc. (Augustine Ventures Inc., 2013)
 - Diamond Drilling
 - Airborne Magnetic Surveys
 - Open Pit Optimization and High Grade Underground Zone Definition
 - Analytical Lab Testing
 - Conceptual Mill Design Planning
 - Mapping of Environmental Permit Process, Schedules and Cost Estimates
 - Employee Requirement, Hiring and Training Strategy
 - Requirements for a 2,000 ton/day mill
 - Power Supply Process and Cost
- Giyani Gold Corp. (No information available)
- Zara Resources Inc. (Zara Resources, 2013)
 - Results of NI43-101, released May 21, 2013, recommended that an Induced Polarization survey be done over the property to be followed by a further diamond drilling program. The proposed total budget for the drilling campaign was \$1,000,000.
- Strike Minerals Inc. (No information available)
- Conquest Resources Ltd. (Conquest Resources Limited, 2013)
 - Prospecting, mapping, and sampling will commence in the spring following break-up in 2013
- GoldTrain Resources Inc. (No information available)
- Lakeland Resources Inc. (No information available)
- Richmond Gold Mines Inc. (Richmont Mines Inc., 2013)
 - Diamond Drilling 80,000 metres planned in 2013 (at Island Gold Mine and Island Gold Deep)
- Upper Canada Explorations Ltd. (No information available)

4.5.2 Construction Supply and Service Requirements

There were two companies that indicated that construction activities may occur in the near future, pending permit approvals and necessary funding. The scope of construction activities include:

- Argonaut
 - Construction anticipated to begin 4th Quarter 2014
 - Mine and Mill Infrastructure Development
- Wesdome
 - Mill and Tailings Facility

These construction activities will likely result in an increased demand for the following supplies and services:

- | | |
|---|----------------------------------|
| • General Contractor | • Skilled Trades Workers |
| • Heavy Equipment | • Labourers |
| • Small Equipment | • Food Supply and Accommodations |
| • Fuel | • Training |
| • Lumber and building supplies | • Metal Fabricators |
| • Building Erectors | • Waste Management |
| • Engineering and Environmental Consultants | • Explosives Contractors |

4.5.3 Production Supply and Service Requirements

The key production service and supply requirements are outlined in the preceding Supply Needs table. The service and supply requirements will increase if/when Strike Minerals and Argonaut go into production. Additional demand will also be realized once Wesdome has completed their mill expansion.

4.6 Mining Sector Demand Analysis Conclusion

The companies interviewed for the purposes of this study have expressed a desire to use the local labour force to fill the positions required by their exploration, construction and operation activities. Furthermore, the companies have indicated that their preference to use local services and local material/equipment suppliers. Wawa already has in place many of the services and equipment suppliers that are being utilized by the mining and mineral exploration operations in the region. It would be beneficial for these businesses to make their mining clients aware of all the services, materials and equipment that they are able to provide them.

There is also opportunity for Wawa to help foster a larger mining support industry by communicating with, and encouraging local service and material/equipment suppliers to expand their product/service offering to replace those currently sourced from outside of the local area. For example, a trucking or road construction company could expand their service offering to include heavy duty equipment maintenance and parts services. An auto or truck repair or auto body business could expand to provide machine shop services.

5 Wawa's Mining Sector Supply Analysis

5.1 Procurement Processes

It is important that potential local suppliers understand the procurement process of each mine/mineral exploration company. The following bullet list summarizes the procurement process for each interviewed company:

- **Richmont** - Purchasing is generally handled through the corporate office and through a tender process. The local purchaser interacts with local suppliers; the information provided by the local suppliers is then passed onto the corporate office by the local purchaser. Richmont indicated that 95% of the time they contact the suppliers with their needs.
- **Strike** - No defined procurement process, however they do intend to have one developed in the near future. The focus will be on the procurement of local services and materials.
- **Argonaut** - No defined procurement process at this time. They hope to develop a procurement process in cooperation with the community during the EA process.
- **Giyani** - No defined procurement process. However, local exploration managers determine what is required and where to purchase the required material or service. The emphasis is on supporting local services and materials/equipment providers as much as possible.
- **Wesdome (Assay Lab and Mines)** - No defined procurement process, however local service and materials/equipment are sought out prior to going outside of the community.
- **Augustine** - No defined procurement process identified at this time.

Although most of the companies interviewed do not currently have a defined procurement process, they indicated that there is a focus on obtaining services and materials/equipment locally as often as is possible. This often involves the companies contacting the local suppliers.

5.2 Services Suppliers

Various local services and service providers are used by the mining companies to support their mineral exploration and mining activities in the area. Services are typically sourced from Wawa, Dubreuilville and White River. All companies have indicated that at the moment, the services obtained from local companies are meeting their needs. Services generally utilized by companies in Wawa and the surrounding communities include:

- Mechanical services
- Electrical services
- Fuel services
- Housekeeping services
- Food Supply

- Lumber, building supplies
- Heavy equipment rentals
- Tire Supply
- Small Equipment supply, rental, sales, service
- Machine shop and cylinder work
- Auto & truck sales, service
- Waste management.

Approximately 30 Wawa businesses and service providers were interviewed to determine their current supply relationships with mining companies, and their interest and capacity to expand their service offerings. Generally, Wawa's service providers are very entrepreneurial, already engaged in supply relationships, and quick to recognise and act on business opportunities.

Examples of services identified that would benefit the region include:

- health and safety training (including mine rescue),
- common core training, and
- accredited trade skills services (including mechanical and electrical).

Argonaut indicated that it is too early to tell what services can or should be expanded to meet future needs and would not want local business to take on too much risk. Other projects are in the early exploration phase and are many years away from mine development. As such, they were uncertain as to which services could best be expanded to meet their future needs.

Services currently obtained outside of the local region include:

- Laboratory services (metallurgical and environmental, for example ACT Labs)
- Drilling contractors (Timmins and Thunder Bay)
- Printing and binding services (Sault Ste. Marie)
- Airborne geophysical survey (GTA)
- Petrographic analysis (Vancouver)
- Mining contractors (Sudbury)
- Food supply
- Pre-employment medicals, hearing tests, drug testing

5.3 Materials & Equipment Supply

The material and equipment being purchased (and current source) includes:

- Orica: Explosives (Coniston)
- McMiner (Amos, QC)
 - Mine Screen
 - Pipe & Accessories
 - Rails & Accessories
 - Heavy Equipment

- Milling Equipment
- Mining Equipment
- Electric Equipment
- Anchor Chain
- Structural Steel
- Flannigan Foodservice (Sudbury)
- Brenntag (Chemicals, Toronto)
- Anachemia (Mine Assay Supplies, Kirkland Lake)
- Acklands-Grainger Inc. (Timmins)
- Webber (Janitorial Supplies, Sault Ste. Marie)
- BDI (Industrial Supplies, Sault Ste. Marie)
- Atlas Copco (North Bay)
- Boart Longyear (North Bay)
- Dixon Electrical (Sault Ste. Marie)
- Toromont (Ontario)
- Nedco Electrical Supply (Sault Ste. Marie)
- Mansour Mining Technologies (Sudbury)
- ECS and Noramco (Electrical Cable, Toronto)
- Lumber (Wawa, Dubreuilville)
- Building supplies (Wawa, Dubreuilville and outside of local area)
- Light trucks (Wawa)
- Mining equipment (outside of local area)
- Mechanical spare parts (e.g., tires, nuts and bolts) (Wawa, Dubreuilville and outside of local area)
- Office supplies (Wawa and outside of local area)
- Wawa Rent-all (Wawa).

In general, specialized equipment such as mining equipment, ground support supplies and mill equipment, are provided from outside of the region (e.g., Timmins, Thunder Bay, Toronto, North Bay and Sudbury).

5.4 Identifying other Potential Supply Opportunities

The following table has been prepared to assist local entrepreneurs in identifying additional potential supply opportunities. Wawa businesses that have been interviewed, have been provided with this information. The table indicates a few examples of current local suppliers, examples of potential suppliers, and “*” in the potential suppliers column suggests the supply opportunity could be filled by a local company or entrepreneur. As many of these opportunities were not identified by mining and mineral exploration companies, they may represent potentially less viable opportunities in a Wawa location, and the business viability of serving these opportunities from Wawa needs to be validated.

Table 3: Potential Local Supplier Opportunities by Mining Supply Need

Materials, Supplies, Services Needs	Examples of Local Suppliers	Examples of Potential Suppliers
Management & administration: purchasing, accounting, human resources, general administration, security		
Infrastructure development:		
<ul style="list-style-type: none"> • access roads 	Provost, MacIntyre Trucking	
<ul style="list-style-type: none"> • camp development 		Millette, *
<ul style="list-style-type: none"> • air strip/heli-pad development (depending upon remoteness) 	Provost	
<ul style="list-style-type: none"> • storage/warehousing 		Millette, *
<ul style="list-style-type: none"> • line cutting, deforestation, site prep 		Provost, *
<ul style="list-style-type: none"> • power supply 		
Construction/trades:		
<ul style="list-style-type: none"> • general contractor 		Millette, *
<ul style="list-style-type: none"> • construction trades/skilled trades 		Millette, BCER
<ul style="list-style-type: none"> • electrical contractors (industrial) 		TopLine Electric, *
<ul style="list-style-type: none"> • structural metal fabrication 		
<ul style="list-style-type: none"> • building fabrication/erection 		Millette, Geldhart, *
Professional services:		
<ul style="list-style-type: none"> • surveying: airborne, ground geophysical 		Wilderness Helicopters
<ul style="list-style-type: none"> • mining consultants 		
<ul style="list-style-type: none"> • engineering & environmental 		
<ul style="list-style-type: none"> • lab support: assays, environmental samples 		Wesdome Assay Lab
<ul style="list-style-type: none"> • human resource consultants 		*
<ul style="list-style-type: none"> • training: health & safety, WHMIS, Common Core, etc. 		*
<ul style="list-style-type: none"> • engineering, procurement and construction management (EPCM) firms for large projects 		
Equipment supply & servicing:		
<ul style="list-style-type: none"> • heavy equipment supply: <ul style="list-style-type: none"> ○ excavators, graders, bulldozers, etc. ○ jumbos, muckers, haul trucks, rock bolters, etc. 		United Supply/United Equipment Rentals, *
<ul style="list-style-type: none"> • heavy equipment maintenance and parts supply 		*

Wawa Mining Sector Growth Strategy

Materials, Supplies, Services Needs	Examples of Local Suppliers	Examples of Potential Suppliers
<ul style="list-style-type: none"> • small equipment supply, parts, rental, maintenance (light trucks, ATV's, pumps, boats, generators, motors, etc.) • milling equipment supply, parts, maintenance: conveyors, crushers, mill reagents, etc. • communications equipment 	Wawa Rent-All Jones PowerS. Auto dealers	* *
Materials, supplies: <ul style="list-style-type: none"> • safety, emergency, first aid • explosives supply/storage • office supplies, printing, copying • fuel: diesel, gasoline, propane. • lubricants • building materials (concrete, lumber, aggregate, etc.) • mining supplies, equipment • potable water treatment equipment, supplies • ventilation equipment, supplies 	United Supply Davidson Fuels Davidson Fuels, Superior Propane Davidson Fuels Home Building Centre	United Supply, Davidson Fuels, * * Davidson Fuels, Superior Propane, * Davidson Fuels Home Building Centre, * *
Other Services: <ul style="list-style-type: none"> • drilling • explosives • accommodations on-site • off-site accommodations (hotels, motels, housing) • food supply & catering • caretaking & cleaning • metal fabrication • machine shop • skilled trades: construction, maintenance, heavy duty, truck/auto, small equipment mechanics • tire shop/on-site service • information technology sales/support • printing/copying • uniform rental/cleaning • waste management • waste water treatment/management • road maintenance, snow clearing • general maintenance • specialized: pump repairs, motor rewinding/repairs, cylinder service • logistics, transportation/freight • instrumentation • general industrial supplies 	Wawa hotels Royal Tire Provost United Supply, Canadian Tire	Provost * Wawa hotels, * * Body Lines by Crack, * * Royal Tire, * * * Provost, * * Provost, McIntyre* * * United Supply, Canadian Tire, Home Hardware, *
<ul style="list-style-type: none"> • other specialized mining services 		

Source: Knight Piésold Ltd.

6 Supply-Demand Gap Analysis

6.1 Infrastructure Supply-Demand Gap

The interviewed companies noted the following infrastructure requirements that need to be filled:

- an improvement in housing availability²
- improved cell phone service (particularly at/near mine sites)
- improved internet service (particularly at/near mine sites)
- and hotel accommodation (Dubreuilville).

6.2 Services Supply-Demand Gap

Services identified by interviewees as lacking in the local area that would be beneficial to the mining sector if provided locally include:

- Office supplies and related electronic services (e.g., photo copy, faxing)
- General contractor services
- Accredited skilled trades and related contractors
- Accredited heavy duty & equipment mechanics
- Housing (and commercial lodging in Dubreuilville)
- Commercial cleaning/janitorial services
- Food supply services and catering
- Health and safety training (including mine rescue)
- Common core training
- Reliable fuel supply (in Dubreuilville)
- Pre-employment medicals, hearing tests, drug testing (& counselling).

In addition, as mining activity increases, there will be a supply gap/opportunity for:

- Machine shop services
- Metal fabrication
- and possibly massage therapy and expanded chiropractic services.

Limited capacity machine shop and metal fabrication services are currently available in Dubreuilville, but not in Wawa.

Although not identified by the interviewees, a review of Table 3: "Local Suppliers & Potential Local Supplier Opportunities by Mining Supply Need", identifies several other additional potential supply opportunities for local companies or entrepreneurs. As many of these opportunities were not identified by mining and mineral exploration companies, they may represent potentially less viable opportunities in a Wawa location.

² As the demand for labour grows, housing availability could become an acute deterrent to labour force attraction.

- camp development, storage and warehousing
- electrical contractors, industrial/maintenance
- building fabrication & erection
- human resource consultants
- heavy equipment supply, parts, maintenance
- small equipment supply, parts, rental, maintenance
- communications equipment supply and maintenance
- explosives supply & storage
- potable water treatment equipment, supplies
- on-site accommodations management, maintenance, cleaning
- accredited skilled tradesman and contractors, particularly heavy truck/equipment maintenance
- on-site tire service
- uniform rental/cleaning
- waste management
- waste water treatment/management
- general maintenance contractors
- logistics/transportation/freight

Argonaut noted that although a local lab would be helpful, it may not be economically feasible. However, they did feel that a small boutique of services offered as a subset to a larger company may be viable. All of the interviewees indicated that if the services they currently use outside of the region were available locally they would use them. All companies noted that there is the potential for both cost and time savings by using local services and service providers.

6.3 Michipicoten First Nation

Michipicoten First Nation is the closest First Nation to these projects. The interviewees indicated they have good working relationships with the First Nations community and that they hire its members at their projects provided that they are eligible and qualified to complete the work. Richmond noted that it would be worthwhile for the First Nation to pursue the development of some of the businesses that are required to service the mines in the area as a means of enhancing the economic relationship between the First Nation and the regional projects.

An interview with Michipicoten Chief Buckell indicated an interest in a band-supported mining and industrial supplies business.

7 Phase 2

Most of the preceding parts of this report were compiled from work completed in Phase 1 of the project.

Phase 2 of the project involved:

- Sharing the findings of the Phase 1 work with Wawa business community, the Municipality of Wawa, and the Economic Development Corporation of Wawa; This included conveying information on business opportunities arising from Phase 1;
- Determining the potential interest and capacity on the part of Wawa business owners to pursue fulfillment of the identified opportunities
- Interviewing thirty Wawa businesses to determine any barriers or constraints (or gaps in business support or infrastructure) to doing business generally, and specifically anything that would hinder or prevent them from successfully pursuing the identified opportunities.
- A “business threshold” analysis to augment the findings of Phase 1.
- A marketing review and marketing design/recommendations to successfully achieve the actions recommended in this strategy. The marketing recommendations are found under separate cover.

7.4 Business Threshold Analysis

A business threshold analysis was conducted to augment the results of the interviews undertaken. This analysis essentially determines the population size required to support a retail/service business establishment based upon the Ontario average, to determine potential market opportunities based upon the population of Wawa and its potential trading area.

The analysis revealed that there may be a market opportunity for the following retail/service establishments:

- 3-4 legal services/lawyers
- 1-2 physician offices
- 1-2 employment agencies
- 1-2 dental offices
- 1 securities/commodities broker
- 1 women’s clothing store
- 1 computer/software store

The analysis is consistent with the Phase 1 findings, but also identifies some additional potential retail/service business opportunities that might be pursued.

7.5 Business Input

As noted, Phase 2 consisted of a number of study components, the largest of which was further direct contact and confidential interviews with 30 Wawa businesses most likely to benefit from mining activity in the area. The purposes of the interviews were:

- To convey information on business opportunities arising from the Phase 1 work,
- To determine potential interest and capacity on the part of the business owners to pursue fulfillment of the identified opportunities
- To understand from the selected businesses point of view, any barriers or constraints (or gaps in business support or infrastructure) that would hinder or prevent them from successfully pursuing the opportunities (as well as business expansion generally), and any supports they may require to do so.

The results of the interviews were utilized to:

- Refine the list of opportunities that will be actively pursued by one or more local companies (Table 3)
- Refine the list of opportunities that are not known to be pursued by one or more local companies (Table 3 and Section 6.2)

The business input was also utilized in drawing conclusions with respect to Wawa's state of community and economic development, and concluding what the barriers and constraints to business growth are in Wawa. These conclusions are included in Section 8.

7.6 Marketing and Investment Attraction

Prior to conducting the Phase 1 work, it was expected that a marketing campaign would be required to attract businesses to Wawa to fulfill the mining sector supply needs. However, the Phase 1 work clearly indicated that most business opportunities were currently being actively served or pursued by Wawa businesses. The limited number of remaining opportunities did not warrant a general business attraction program, but rather a targeted efforts to attract labour force (residents) and specific entrepreneurs to Wawa.

Based on the feedback from 30 businesses, the largest limiting factor to growth for most Wawa businesses is the availability of a qualified workforce. The Mining Sector Growth Strategy therefore includes six Action Plans to address this need (Section 9). Quality of place and housing suitability/affordability are very important factors in the attraction and retention of population and qualified labour force participants. Both factors are most greatly influenced by the Municipality. The Marketing Plan (Appendix C) addresses the attraction of residents, labour force, and entrepreneurs.

The following business opportunities could most likely be responded to by the recruitment of specifically skilled entrepreneurs to Wawa:

- Skilled trades contractors
- Heavy duty truck & equipment repair business
- Commercial cleaning entrepreneur

- Food supply/commercial caterer
- Health and safety training specialist (could also provide other forms of training)
- A health professional to organize/provide pre-employment medicals, hearing tests, drug testing (& counselling)
- Human resources consultant
- A machine shop/fabrication business

There are no specific location requirements that the above entrepreneurs would have that Wawa cannot meet, although the following (potentially limiting) factors will be carefully considered by entrepreneurs who would consider a move to Wawa (assuming the business viability requirement has been satisfied):

- Quality of life factors in Wawa
- The availability of suitable housing
- The availability of suitable business accommodation
- The availability of an appropriately skilled work force

Given the specific nature of the entrepreneurial skills required, a direct approach by the EDC to potential candidates is recommended. The primary market from which to attract these entrepreneurs is Sault Ste. Marie. The Marketing Plan (Appendix C) provides specific marketing recommendations and marketing collateral to support entrepreneurship attraction.

7.7 Community & Investment Readiness, Business Friendliness

As noted, the largest impediment to business growth is the lack of a qualified labour force. The ability to attract a labour force (employers report they conduct recruitment efforts in Sault Ste. Marie) is impacted by the perceptions that potential candidates have of Wawa. A large number of closed and deteriorating hotel properties conveys a negative impression of Wawa, for potential residents, workers, entrepreneurs and investors. This complex problem should be acted on as soon as possible.

Potential employees considering Wawa will also be influenced by their view of the quality of life and the quality, availability and cost of housing. The perception of employers interviewed is that there is a limited supply of quality housing, with extremely limited capacity to build new homes.

There are a number of recommendations that have been made in terms of investment readiness in the Marketing Plan (Appendix C), which includes consistency in branding, the preparation of a "Quick Facts" brochure and local business success stories, and other supporting marketing collateral.

The business interviews revealed a majority of businesses have had positive business dealings with the Municipality, but that a number of businesses have had difficulties. This would suggest opening up lines of communication between the Municipality and business to ascertain whether municipal service delivery is inconsistent, either in perception or in reality. The EDC could facilitate this communication.

8 Study Conclusions

Reviewing and analyzing the data and information collected throughout the Strategy preparation leads to several conclusions that can be made at this time.

- Interviews with Wawa supplier businesses revealed a very strong entrepreneurial orientation. Interviews with mining companies revealed a satisfaction with their current business supply relationships. Almost all Wawa supplier businesses currently have working business relationships with the mines; understand where their future opportunities lie; in many cases have assessed their opportunities; and in some cases have communicated their desire to service that opportunity to their mining purchasing contact. Most have positively considered the investment required to service the opportunity and are prepared to make that investment.
- There are relatively few supply opportunities that are not being currently pursued, but given the strong entrepreneurial spirit in Wawa, there is a slim chance that any will be passed over once these opportunities are made more widely known.
- Business opportunities have been identified directly to Wawa entrepreneurs. The need to “attract” investment and businesses to Wawa to service the supply opportunities is very limited, and in some cases, involve very specific expertise. Should Wawa entrepreneurs fail to respond to the identified opportunities within a reasonable timeframe, then the business/supply opportunities should be marketed by the EDC to attract investment and/or entrepreneurs from outside of Wawa.
- It would be beneficial for current Wawa businesses and entrepreneurs to make their mining clients aware of all the services, supplies, materials, and equipment that they are capable of servicing (or intend to become capable of servicing).
- Based upon interviews, in most cases the capacity to service new opportunities is not limited by capital or facilities. The most limiting factor to growth for most Wawa businesses will be attracting a qualified workforce to service the needs. In addition to having to compete in a tight labour supply market, business owners indicate the lack of available housing will most likely limit their ability to attract qualified workers to Wawa.
- A broad based business attraction program is not warranted at this time. However, employers identified the availability of a qualified labour force to support business growth as their biggest challenge. Wawa must therefore be very conscious of the quality of life being offered to residents, and *potential residents/labour force*. Resident/labour force attraction will be critical to support future business development, especially as mine construction and operations increase, tightening the local labour market even further. This suggests the need for a targeted program to attract residents, labour force and specific types of entrepreneurs (to address opportunity gaps).
- Based upon interviews conducted, the quality of municipal service from the business owner point of view may be inconsistent, suggesting business consultation and review by the Municipality. A tension exists between the Municipality and businesses in some cases.

9 Growth Strategy Action Plan

Addressing Labour Force Related Issues

1. That Wawa and EDC prepare and undertake a program of resident/entrepreneur/labour force attraction (in cooperation with local business) to address the biggest challenge of local business, and to address outstanding entrepreneurial opportunities identified in this strategy.
2. That Wawa and the EDC implement the Marketing Action Plan in support of the resident/entrepreneur/labour force attraction program.
3. That the EDC assist the community in understanding the mining and supply services sector educational and skilled labour needs as documented in previous studies completed on this topic.
4. To house a workforce that will need to expand – that Wawa prepare a housing needs analysis and housing development strategy for both temporary and permanent housing needs and continue to remain engaged with mining companies as they move closer towards and through the construction and operational phases to ensure their employee and supplier employee housing needs are understood and addressed.
5. That the EDC work with appropriate partners to engage local youth to ensure they are exposed to the mining industry and mining supply services sector and the local career opportunities available. For example:
 - Organize and conduct site visits and youth camps (i.e. Discovery Camps) to give youth a better understanding of what a mining operation really looks like and how it functions – give them exposure to the industry.
6. That the EDC work with appropriate partners and with local/regional schools (secondary and post-secondary) to conduct business visits (broadening the scope of career possibilities) and to prepare the incoming/young workforce by encouraging participation in training/apprenticeship programs in occupational fields such as:
 - Miners
 - Mechanics
 - Electricians
 - Construction
 - Heavy equipment operation
 - Welders, machinists
 - Geologists
 - Administrative services

Addressing Mining Sector Growth & Business Opportunities

7. That Wawa and the EDC jointly conduct semi-annual meetings of the mining industry, suppliers, and economic development supporters (including Municipality of Wawa and Michipicoten First Nation) to identify and address barriers that may be challenging mining growth with the objective of fostering continuous growth of the sector³.
8. That the EDC undertake actions to inform the local business community of mining sector supply opportunities, such as conducting an annual mining industry showcase/forum to better identify, understand, and promote business supply opportunities within the mineral exploration and mining sectors.
9. That the EDC update and maintain a database of contacts of companies as well as specific individuals responsible for purchasing arrangements within the mineral exploration and mining companies.
10. That the EDC prepare a mining and mineral exploration business services directory.
11. That the EDC work with appropriate partners to ensure assistance to new entrepreneurs pursuing mining related opportunities. This could be a program of targeted services marketed to these potential entrepreneurs (mining awareness and mining development updates, business planning, businesses counselling/coaching, assistance in accessing financial and other support programs, incentives, etc.)

Other Action Plans

12. An identified issue for mining supply businesses requiring a retail type space, is the simple lack of such space in Wawa, which could result in either business uses inappropriately locating, or simply locating outside of Wawa. This issue must be addressed jointly by Wawa and the EDC.
13. That the EDC continue to work with the Michipicoten First Nation to develop and implement mutually beneficial economic development projects – one example cited would be an investigation of the feasibility of a supply co-op.
14. This Mining Sector Growth Strategy is being prepared in the absence of a broader strategic context – it has been more than 10 years since a community economic development strategy or business retention and expansion program has been completed. It will be difficult to achieve optimal success in the mining sector if there

³ One example of a task that could be pursued is getting the Ministry to commission an updated geo-science investigation of the Michipicoten Greenstone Belt area to determine if there are other mineral exploration opportunities in the area. Another example is the development of a regional mining development web portal to provide updates on mining developments, to post jobs, to post common core and other training courses, etc.

are broader community and economic related issues that will impede growth and labour force and investment attraction. It is recommended that Wawa and the EDC prepare an economic development strategy as soon as possible to avoid the potential loss of opportunities.

15. To gain insight and knowledge of what impressions are formed by outside visitors to Wawa, it is recommended that Wawa and the EDC participate in the Ontario Ministry of Food and Agriculture's "First Impressions Community Exchange" Program. The "full picture" version of the program will provide excellent feedback on how Wawa can improve its "quality of place" as seen by potential residents, visitors, and entrepreneurs.
16. Before undertaking an entrepreneurship attraction program, the lines of communication between the business community and Municipality need to be opened up to uncover and address any real or perceived deficiencies with service levels. It is not sufficient to simply declare it, the Municipality and EDC need to really be "Open for Business". Any business community dissatisfaction is quickly discovered by any potential newcomer and can be a real hindrance to Wawa's success. The EDC should facilitate this process.
17. That the Municipality and the EDC work cooperatively to develop a program to address all of the preceding actions in 2014. To start this process, we recommend a full day economic development day/economic summit for Council and EDC. Topics would include economic development best practices, economic issues identification, solutions brainstorming, building ED collaboration & momentum and next steps.

Appendix A – Mining Operations/Exploration Projects Overview

Company(Commodity) • Mine/Project	Mining Method/ Exploration Activity	Expected Mine Life (Years)	Reserves ⁴			Present Work Force	Predicted Work Force		
			Proven and Probable (g/t)	Measured and Indicated	Inferred Resources		Construction	Operations	Closure
Operations									
Wesdome Gold Mines Ltd. (Au) • Eagle River • Mishi Pit	Underground	Complex 10+	435,000 (10 g/t)	-	-	Approximately 270 including mining contractors (50). Mining contractors (Mishi Pit) currently on standby due to surplus in ore stockpile caused by mill expansion)	-	-	25 to 50
	Open Pit		1,100,000 (2.2 g/t)	-	-		-	-	25 to 50
Richmont Gold Mine Inc. (Au) • Island Gold Mine	Underground	10 to 12	785,221 (5.5 g/t)	502,910 (6.26 g/t)	1,473,658 (10.73 g/t) ²	218 + 118 contractor staff	-	-	25 to 50
Strike Minerals Inc. (Au) • Edwards Mine Project	Underground	5 to 10	-	-	-	10 to 12	200 to 500	100 to 400	25 to 50
Exploration									
Argonaut Gold Inc. (Au) • Magino Gold Project	Open Pit	7 to 8 ³ (Pit) 14 to 15 (Process Plant)	-	223,479,790 (0.87 g/t)	13,809,410 (0.80 g/t)	15	400 to 500	300 to 400	25 to 50
Augustine Ventures Inc. (Au) • Jubilee-Surluga Project	DD, Airborne Magnetic Survey	-	-	-	32,200,000 (1.14 g/t) ³	-	-	-	-
Zara Resources Inc. (Au) • Forge Lake Property	Assays, Diamond Drilling	-	-	-	-	-	-	-	-
Strike Minerals Inc. (Au) • Clement Property	Assays, Geological surveys, Prospecting, Sampling	-	-	-	-	-	-	-	-
Giyani Gold Corp. (Au) • Abbie Lake-Keating Project	Airborne Magnetic Surveys, Airborne electromagnetic Surveys, Diamond Drilling, Prospecting, Trenching, Ground Magnetic Surveys, Geological Survey, Induced	-	-	-	-	-	-	-	-

⁴ Tonnes, as of 2012 unless otherwise stated.

Wawa Mining Sector Growth Strategy

Company(Commodity) • Mine/Project	Mining Method/ Exploration Activity	Expected Mine Life (Years)	Reserves ⁴			Present Work Force	Predicted Work Force		
			Proven and Probable (g/t)	Measured and Indicated	Inferred Resources		Construction	Operations	Closure
	Polarization Survey								
Conquest Resources Ltd. (Au) • Smith Lake	Diamond Drilling, Induced Polarization Survey	-	-	-	-	-	-	-	-
Cyr, Daniel (Au) • DAC Property	Prospecting, Sampling	-	-	-	-	-	-	-	-
GoldTrain Resources Inc. (Au) • Orphan Claim	Assays, Prospecting, Sampling	-	-	-	-	-	-	-	-
GoldTrain Resources Inc. (Au) • Missinabie Project	Assays, Diamond Drilling	-	-	-	-	-	-	-	-
Lakeland Resources Inc. (Au/Ag) • Ballard Lake Property	Prospecting, Sampling	-	-	-	-	-	-	-	-
Lakeland Resources Inc. (Au) • Midas Gold Property	Assays, Prospecting, Sampling	-	-	-	-	-	-	-	-
Lakeland Resources Inc. (Cu) • Kam Property	Diamond Drilling, Sampling	-	-	-	-	-	-	-	-
Rastel, James (Diamonds)	Prospecting, Sampling	-	-	-	-	-	-	-	-
Richmont Gold Mines Inc. (Au) • Ego Property	Assays, Diamond Drilling	-	-	-	-	-	-	-	-
Robert, Leo (REE)	Prospecting, Radiometric Survey	-	-	-	-	-	-	-	-
Upper Canada Explorations Ltd. (Au) • Rockstar Property	Geological Survey, Trenching	-	-	-	-	-	-	-	-

Appendix B – Contacted Mining Related Companies

Company	Mine	Phase	Contact Person
Wesdome Gold Mines Ltd.	Eagle River	Operations	Jeff Hutchings
	Mishi Pit		Gilbert Wahl
Wesdome Gold Mines Ltd.	Assay Lab		Scott Carruthers
Richmont Gold Mines Inc.	Island Gold Mine	Operations	Sylvie Belisle
	Ergo Property	Exploration	Alain Grenier
Prodigy Gold Inc./Argonaut Gold	Magino Gold Project	Exploration/EA	Michelle Tanguay/Chris Turner Thomas Gunthardt Lyndsie Gangnon (HR director)
Zara Resources Inc.	Forge Lake Property	Exploration	Alan Aubut
Strike Minerals Inc.	Edwards Mine Project	Operations /Exploration	Bob Young
Strike Minerals Inc.	Clement Property	Exploration	
Augustine Ventures Inc.	Jubilee-Surluga Project	Exploration	Bob Dodds
Giyani Gold Corp.	Abbie Lake-Keating Project	Exploration	Chuck Allen (President)
Conquest Resources Ltd.	Smith Lake	Exploration	
Cyr, Daniel	DAC Property	Exploration	No contact info
GoldTrain Resources Inc.	Orphan Claim	Exploration	Carl McGill (CEO)
GoldTrain Resources Inc.	Missinabie Project	Exploration	
Hudson River Minerals Ltd.	Forge Lake Property	Exploration	Sold all claims to Zara
Lakeland Resources Inc.	Ballard Lake Property	Exploration	Jonathan Armes (CEO)
Lakeland Resources Inc.	Midas Gold Property	Exploration	
Rastel, James		Exploration	No contact info
Robert, Leo		Exploration	No contact info
Upper Canada Explorations Ltd.	Rockstar Property	Exploration	No contact info

Appendix C – Marketing Recommendations