

# Regional District of Bulkley-Nechako Industrial Land Use Inventory Study: Summary Report

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# millierdickinsonblais<sub>Inc.</sub>

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## 1 Introduction

In 2007-2008, staff of the Regional District of Bulkley-Nechako (RDBN) undertook the preparation an industrial land inventory and study for Electoral Area B using internal staff resources for the project. This report was well received, and additional reports on each of the District's remaining six electoral areas were commissioned through Millier Dickinson Blais (MDB), Canada's largest specialist economic development agency, with mapping and technical assistance from L&M Engineering of Prince George. These six reports have four primary components:

- Identification of the existing industrial land base in the study area(s)
- Identification of the present and future industrial land use needs in the study area(s)
- Evaluation of the adequacy of the existing and potential industrial land base to meet future demand
- Creation of a detailed parcel-based inventory of industrial lands that are or may be in the future potentially suitable for industrial development.

Each of the six reports deals with these elements for one specific Electoral Area.

The second chapter of this present report is a summary of the six Electoral Area reports (covering Electoral Areas A, C, D, E, F and G), providing the RDBN with an overall view of the industrial lands across the whole of the district. For the purposes of this summary, Electoral Area B has been included. However, as the six MDB-produced reports were more detailed in some areas, the references to Electoral Area B are more limited.

To help offset this distinction, the third chapter of this summary document includes an economic base analysis exercise covering Electoral Area B. In its six Electoral Area reports, MDB provided a detailed demographic and econometric overview of each Electoral Area. As Electoral Area B was excluded from this process, the firm has undertaken an Area B analysis to ensure that the RDBN has full and complete, "apples to apples" information for each of its seven Electoral Areas.

Finally, a fourth brief chapter of this present report attempts to make links between the results of the Industrial Lands Inventory and Strategy as contained in the seven Electoral Area reports, and the recommendations and directions outlined in the RDBN's Economic Development Action Plan. This Action Plan was also undertaken by MDB, and completed in January of 2009. The discussion in this document highlights synergies between the two reports, and updates some information on the basis of new research.

# 2 Industrial Land Inventory & Strategy Summary

## 2.1 Existing Industrial Land

Within the Regional District there are 761.4 ha (this includes land in the Municipality of Burns Lake, which was included in the Area B study) of industrial land zoned as Light Industrial (M1), Heavy Industrial (M2) or Agricultural Industry (M3). Of this only 280 ha (including Burns Lake) is currently developed (wholly or partially utilized for industrial purposes), with 398.8 ha of vacant land (properties that are designated industrial, but not yet developed, as well as properties that are underutilized or have old disused industrial purposes). Of the 398.8 ha of vacant land there is 314.5 ha of vacant usable land.

Across the region Area D has the largest portion (24%) of usable vacant industrial land, with a large portion (83%) of this coming from one site, the lands at the Endako Rail line. Areas A, B and C all have over 50 hectares of usable industrial land; with one site in each of Areas A and C accounting for a significant proportion of vacant land. In Area A it is 2681 Tatlow Road (Area A Map 8) which accounts for 52% of the usable vacant land and in Area C it is a 43 hectare site at the corner of Highway 28 and Tachie Road, accounting for three quarters of the area's usable vacant land. Both Areas F and G have approximately 35 hectares of usable vacant land, each with two significant sites (in Area F, two areas of unsurveyed crown land on Highway 28 and two connected sites in Topley in Area G). Area E has very little industrial land and only 4.1 hectares of usable vacant industrial land.

Table 2.1 – Existing Industrial Land

	Site Size	Industrial Lands							
Area	(ha)	Total (ha)			Usable Vacant (ha)				
Area A	86.1	55.8	4.8	51.2	51.2				
Area B	582.5	338.1	255.7	82.4	55.4				
Area C	172.4	158.6	8.4	67.7	57.3				
Area D	255.7	113.5	1.3	112.2	75.6				
Area E	7.4	5.5	1.3	4.1	4.1				
Area F	234.0	41.9	6.7	35.2	35.2				
Area G	232.6	48.1	2.1	46.0	35.6				
Total	1570.6	761.4	280.3	398.8	314.5				

Note: Area B totals include land within the municipal boundary.

In assessing each of the sites individually (Area B sites are not included in this assessment), five categories can be defined:

 priority sites for development, which are large sites that already have suitable transport and infrastructure to accommodate industrial uses

- secondary sites for development, which are medium sized site, with some transport or infrastructure in place, but which may need some additional work to make them readily developable
- Infill sites, which are generally smaller scale and are well serviced with road and infrastructure, but which have existing uses or are underutilized.

There are three priority sites which offer the Regional District the greatest opportunity to develop for significant industrial uses. The three sites are:

- 1. Endako rail line (Area D site 1)
- 2. Topley (Area G site 3 and 5)
- 3. Fort Fraser rail lines (Area D 3)

The secondary site also offer the Regional District significant opportunity to be developed for industrial uses but on a smaller scale, or which may need some additional infrastructure to take forward. These sites include:

- 1. Tatlow Road, Smithers (Area A site 8)
- 2. Donaldson Road, Smithers (Area A site 10)
- 3. Highway 27 and Tachie Road, Fort St James (Area C site 5)
- 4. Area beyond Conifex Saw Mill, Fort St James (Area C site 6)
- 5. Crown Land at Highway 27 and Dog Creek Road (Area F site 2)
- 6. Crown Land on Highway 27 (Area F site 3)

The infill sites are those that, because they generally have existing uses, may take longer to develop, but can be suitable for some small scale industrial development. These sites include:

- 1. Highway 16 and Highway 118, Topley (Area G site 4)
- 2. 296 Lunan Road (Lunan Estate), Smithers (Area A site 5)
- 3. 3471Old Babine Lake Rd Smithers (Harris Auto Wrecking) (Area A 6site)
- 4. 3950 Tatlow Road, Smithers (Area A site 9)
- 5. 2539 Highway 27, Fort St James (Area C site 2)
- 6. 2880 Highway 27, Fort St James (Area C site 3)
- 7. 2474 Highway 27, Fort St James (Area C site 4)
- 8. 8041 Highway 27, Fort St James (Area C site 7)
- 9. Highway 16 and Lily Lake Road (Area D site 2)
- 10. 26378 Danskin Rd, Danskin (Area E site 3)
- 11. 6900 Teichroeb Road and Highway 16, Vanderhoof (Area F site 7)
- 12. 63305 Highway 16 (Area F site 8)
- 13. Ann's Road, Topley Landing (Area G site 1)
- 14. 6262 Highway 16 (Area G site 2)

The remaining sites (14 in total) are largely very small scale or have existing activities which take up the entire site or may have conflicting uses nearby. Some of the sites may no longer be useful for industrial purposes (i.e. 41522 Highway 16 – Area A site 11 – is a very small site with



an old wooden building which at one time a garage, with a residential property at the rear of the site) and should be considered for a change of use to residential or agricultural uses.

## 2.2 Potential Target Industries

An assessment has also made of the potential industries that could be targeted by each of the electoral areas across the Regional District. This was based on an analysis of the economic and industrial strengths of the regional and matching them to the specific strengths of each of the Electoral Areas. This resulted in the identification of a range of key industries for each Electoral Area which were the most likely to locate to that area within the next 5 to 10 years.

Because of the similar economic and locational advantages of the Electoral Areas a number of these industries were identified as target for multiple Electoral Areas or, as in the case of small scale (value added) manufacturing, all Electoral Areas. When viewing the Regional District as a whole however for each of these sectors, some of the Electoral Areas have locational advantages over other that make them a more logical choice, and should therefore be a priority for the Region's promotion to that industry.

This is not to suggest that the Electoral Areas not identified as a priority for promotion should not be considered for the specific industry, but that the priority area(s) offer the greatest locational advantage for that industry. Any businesses final site location decision will include a range of factors (i.e. labour cost, availability of power, access to rail, etc).

Table 2.2 on the following page identifies all of the industry types identified for each Electoral Area and highlights (circled in red) those Electoral Areas that should be a priority for promotion to that specific industry. In some cases local economic development efforts will not match up with this assessment. For example, Smithers is identified as the priority location for "Pilot Training Facilities/Air Support for Mining" because of it significant airport, however through discussions with economic development staff across the region, this industry is also likely to be a target for Fort St James and Vanderhoof.

Table 2.2 – Summary of Potential Industry Types by Electoral Area

Industry Type	Area A	Area B	Area C	Area D	Area E	Area F	Area G
Co-generation facility	х	х	х	х		х	х
Pellet Plant		X					
Large-scale Secondary (Value Added) Manufacturing			x		х	х	
Small-scale Secondary (Value-added) Manufacturing	х		х	х	х	х	x
Small-scale Specialty manufacturers – i.e. furniture					Х		
Light Manufacturing – assembly and assembly of higher priced goods	х		х	X		х	х
Heavy Equipment Maintenance (Air transport/survey, Green Energy industries)	X						
Heavy Equipment/Transport Maintenance (Truck transport, Green Energy industries) Welding, Fabricating		X					×
Labs or Other Analysis/Testing Facilities	х	Х					Х
Greenhouse Facilities	Х	х	х	Х			Х
Trades Training facility - Mining or Forestry	х		Х		х		Х
Mining/Environmental Remediation – offices/storage/operations	х		Х	х	х	х	х
Trucking/Transportation – related storage	Х	Х	x	х	х	X	х
Pilot Training Facilities/Air Support for Mining	х	) (				) (	
Warehousing	х	х	х	Х	х	Х	х
Pulp-Mill – Pulp and Paper manufacturing			х				
Log yard			х	Х	Х		
Residential/Commercial Building Contractors (Framers, Plumbers, Electricians) – Associated Storage				Х	х		
Small-scale food processing/packaging facilities				x		Х	Х
Log Home Building					Х		
Community Kiln					Х		
Portable sawmill and Lumber Kiln					Х		
Abattoir		х				Х	
Livestock Auction Arena						Х	
Farm/Heavy Equipment repair and sales						Х	
Composting Facility						Х	

# 2.3 Industrial Land Requirements

Using the identified potential industrial types and their typical land/site requirements, an assessment of the possible amount of industrial land required in each Electoral Area can be made. In undertaking this assessment, existing industrial land in each Electoral Area was taken into account, with this assessment representing only the additional industrial land required. Four broad industrial land types were identified:

- 1. Land for Light Industrial Use (warehousing, light manufacturing, transportation, etc)
- 2. Land for small to average Heavy Industrial Use (abattoir and other Agriculture Industry, log home building, asphalt plant, etc)
- 3. Land for large scale Heavy Industrial use (pellet plant, large wood products manufacturing, etc)
- 4. Agricultural Industrial use (greenhouses, other large scale agricultural activities)

It should be noted that this estimate was based on <u>all</u> potential industry types not just those that have been identified as a priority for the Electoral Area, and with the assumption that all of the target industries locate in all of the Electoral Areas.

In total there is an estimated need for a further 580 hectares in industrial land. The most significant need is for 330 hectares of land for large scale heavy industrial land. Most of this is located in Fort St James and is a result of the expectation of a co-generation plant, where the community does not have any existing land of a substantial size (there is a 82.5 ha site beyond the Confiex facility but this was not accessible and therefore was not assessed). There is also a requirement for 120 hectares for light industrial land, with the expected demand for this is distributed throughout the region. There is a need for 116 hectares of land for small scale heavy industrial uses; again this is spread across each of the Electoral Areas. Lastly there is a need for 14 additional hectares of agricultural industrial land, with more than a third of this being required in Electoral Area F.

Parcel Size **Industry Type** Area A Area B Area C Area D Area E Area F Are G Total Requirements Land for Light Industrial Use (warehousing, 0.5 ha. - 5 ha. 20 25 15 20 10 25 5 120 light manufacturing, transportation, etc) Land for small to average Heavy Industrial 4 ha. – 10 ha. 16 20 20 10 20 5 116 Use (abattoir and other Agriculture Industry, log home building, asphalt plant, etc) Land for large scale Heavy Industrial use (pellet plant, large wood products 20 ha. - 40 ha. 20 80 150 0 40 20 20 330 manufacturing, etc) Agricultural Industrial use (greenhouses, 1 ha. – 3 ha. n/a 3 3 1 5 2 14 other large scale agricultural activities) Total 56 130 188 43 61 70 32 580

Table 2.3 – Required Industrial Land by Electoral Area

### 2.4 Potential Industrial Land

In addition to the existing lands which are already zoned industrial, other potential industrial land has also been identified within the Regional District that though not currently zoned industrial offer some potential for industrial uses. The identification and assessment of the parcels was made purely from their potential from an economic development perspective (i.e. close to major transport infrastructure and/or other industrial uses) and did not consider the planning implications. Many of the sites were zoned agricultural, rural resource or large holdings; in addition some of the sites are within the agricultural land reserve. If designated for industrial use, the rezoning process will then be required to allow for further evaluation of each property's suitability for a specific industrial purpose. To bring many of these forward will require substantial effort and they all represent long-term potential, with all of the existing usable industrial land identified above offering more short-term potential.

In total there was 2,302 hectares of potential industrial land identified. The Area B study considered a much wider range of sites for development, identifying 9 sites with 814 hectares of potential industrial land. Five sites were highlighted in Area A, with a total of 359 hectares of potential industrial land; the majority of this land (280 hectares) was in Telkwa and a further 79

hectares in Smithers. All four sites and 190 hectares of the potential industrial land in Area C are in and around Fort St James. Area D has 189 hectares of potential industrial land over 3 sites all in Fraser Lake. Area E has two parcels which are between Burns Lake and Francois Lake with 117 hectares of land and another site in Grassy Plains of 37 hectares. There were 285 hectares of potential land one 3 sites identified in Vanderhoof, Area F. Area G had 311 hectares of potential land on two sites around Houston Airport.

Table 2.4 – Summary of Potential Lands by Electoral Area

District	Number of Sites	Potential Industrial Land (ha)
А	5	359
В	9	814
С	4	190
D	3	189
E	3	155
F	3	285
G	2	311
Total	29	2302

## 2.5 Inventory Highlights

The Regional District of Bulkley Nechako has a significant inventory of existing industrial land, with over 761 hectares of industrial land distributed throughout the Electoral Areas, of this approximately 314 hectares is considered to be usable. Much of this land is well located and serviced being readily available to be used to industrial purposes. Of the individual sites three are identified as priorities as they are large scale and offer both transport and other infrastructure. Target industries have also been assessed for each Electoral Area, with regional priorities for promotion identified within these. An assessment of the industrial land required to meet the demands of the target industries shows that there could be a need for an additional 580 hectares of industrial land, over and above the existing industrial inventory. To meet this potential demand, additional sites have been identified which are not currently zoned industrial but which offer potential for industrial development from an economic development perspective. In total 2,303 hectares of potential industrial lands have been identified.



# 3 Base Analysis Including Electoral Area B

## 3.1 Economic Base Analysis

Since assuming an active role in economic development, local government has aimed at creating more jobs, expanding the tax base and diversifying the economic base. Economic base analysis uncovers the strengths and weakness of the economic landscape, thereby allowing the opportunity for a community to seize opportunities and mitigate weaknesses. It is anticipated that this study will be used as an economic development tool for industrial development and serve as a baseline for future comparisons of economic statistics over time. The sections below provide details on the Electoral Areas in the Regional District of Bulkley-Nechako.

## 3.1.1 Population

Population changes can facilitate or challenge economic development within a particular locale. A steady rise in population can expand the tax base and provide opportunities to expand business and infrastructure services. In some communities the type of population expansion can reveal some interesting facts about business trends within the community, or emerging opportunities.

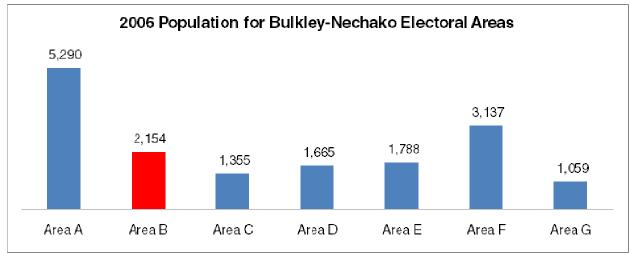


Figure 3.1: Population by Electoral Areas of Bulkley-Nechako

Source: Statistics Canada, 2006

The population figures show that Electoral areas A and F are the largest areas within the Regional District of Bulkley-Nechako. Electoral area B accounts for approximately 6% of the total population within the Bulkley-Nechako census district.

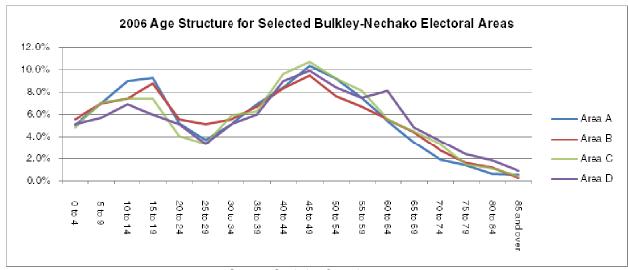
The population change shows that electoral area C experienced the greatest decline in population while electoral area E was the only area to exhibit population growth from 2001 to 2006. During the same period, the region's overall decline in population was 6.4%, with an average decrease of 6.3% in the seven electoral areas. The decline in population of electoral area B was below both the overall decline of the Regional District, and the average change in the electoral districts suggesting a slower decline in population.

Figure 3.2: Population change for Electoral Areas of Bulkley-Nechako

2001 to 2006 Population Change				
Electoral Area A	-7.1			
Electoral Area B	-5.4			
Electoral Area C	-19.7			
Electoral Area D	-2.9			
Electoral Area E	2.2			
Electoral Area F	-7.3			
Electoral Area G	-3.6			

The age structure of a population can reveal certain dynamics over a period of time including advantages or disadvantages a particular location has. The composition of workforce groups such as the feeder cohort (i.e. those within range of joining the labour force), working cohort (i.e. those are active within the workforce) and mature/retired cohort (i.e. those out of the workforce) can determine the type of advantages a community has.

Figure 3.3: Age structure for Electoral Areas of Bulkley-Nechako



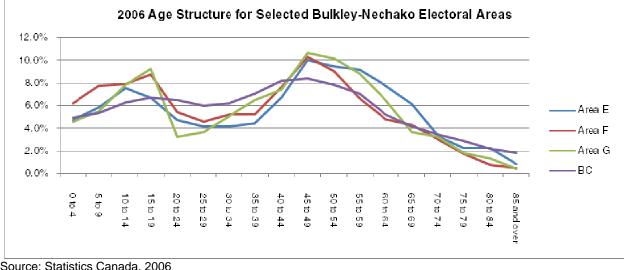


Figure 3.4: Age Structure for Electoral Areas of Bulkley-Nechako

Most of the electoral areas have a similar pattern in terms of age distribution, much less consistent across the age groups than the province as a whole. Generally speaking, the electoral areas have moderately sized youth populations, with a large gap in the 20-39 year old age cohorts, and larger middle-aged populations. However, there are some marked differences that may likely create advantages for certain districts. Electoral area B has among the higher representations of teenagers of the Electoral Areas. Therefore, a priority within that electoral area could be to retain these young people and work to make sure that they can live and work in the electoral area in the future. Should the area retain these young people, it may be in a better position to replace aging workers that other areas of the Regional District.

In terms of the median age, electoral area B was the youngest of all electoral areas in the Regional District in 2006. The median age of Electoral area B (38.3 years) was only slightly higher than the median age in the Regional District as a whole (37.4 years).

### 3.1.2 Labour force by industry

The size and growth rate of an industry can reveal the ability of the community to create jobs for people that participate within the economy and the potential for growth given the nature of economic opportunities that are created within the locale.

2006 Labour Force for Bulkley-Nechako by Electoral Area

3,160

1,220
730
860
1,005

Area A Area B Area C Area D Area E Area F Area G

Figure 3.5: Labour force size for Electoral Areas of Bulkley-Nechako

Source: Statistics Canada, 2006

The graphs generally show a similar type of pattern seen in the population charts with Electoral areas A and F comprising the larger portions of the Bulkley-Nechako labour force relative to the other electoral areas in the comparison. Electoral area B accounts for 7.2% of the total labour force in the Regional District, the third highest concentration of the seven electoral areas.

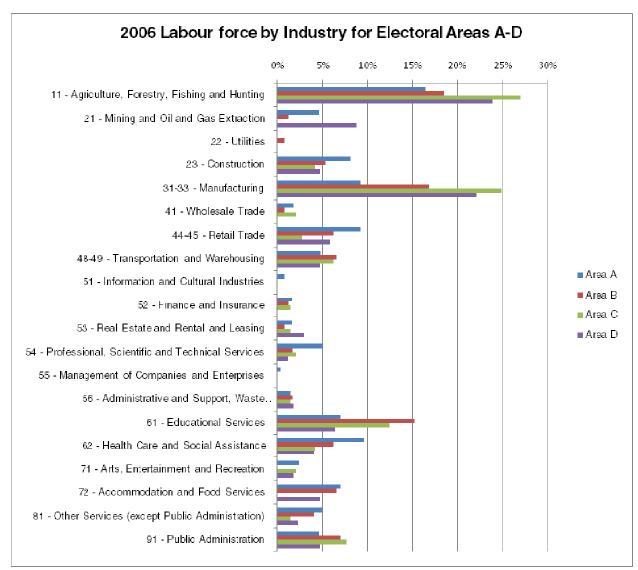
Also important is the structure of the labour force based on industry which can indicate if a community's economy is based on a single industry or diversified in its sectors. One obvious advantage of a diversified economy in comparison to a single industry based economy is the ability to create opportunities for convergence between sectors and weather downturns that may occur in any particular sector. The result is economic flexibility and resiliency.

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Figure 3.6: Labour force by industry for Electoral Areas of Bulkley-Nechako

Labour Force by Industry 2006	Elect Area A	Elect Area B	Elect Area C	Elect Area D	Elect Area E	Elect Area F	Elect Area G
Total employed in industry	3,160	1,220	725	860	1,005	1,775	595
11 - Agriculture, Forestry, Fishing and Hunting	520	225	195	205	295	495	140
21 - Mining and Oil and Gas Extraction	145	15	0	75	15	10	65
22 - Utilities	0	10	0	0	0	10	0
23 - Construction	255	65	30	40	65	85	40
31-33 - Manufacturing	290	205	180	190	95	325	115
41 - Wholesale Trade	55	10	15	0	20	40	0
44-45 - Retail Trade	290	75	20	50	90	140	40
48-49 - Transportation and Warehousing	150	80	45	40	65	80	60
51 - Information and Cultural Industries	25	0	0	0	0	25	0
52 - Finance and Insurance	50	15	10	0	10	30	0
53 - Real Estate and Rental and Leasing	50	10	10	25	15	0	0
54 - Professional, Scientific and Technical Services	160	20	15	10	25	40	0
55 - Management of Companies and Enterprises	10	0	0	0	0	0	0
56 - Administrative and Support, Waste Management and Remediation Services	45	20	10	15	0	30	15
61 - Educational Services	220	185	90	55	90	100	40
62 - Health Care and Social Assistance	300	75	30	35	80	115	30
71 - Arts, Entertainment and Recreation	75	0	15	15	0	0	0
72 - Accommodation and Food Services	220	80	0	40	35	120	15
81 - Other Services (except Public Administration)	155	50	10	20	45	60	20
91 - Public Administration	145	85	55	40	35	65	0

Figure 3.7: Labour force by industry for Electoral Areas A-D of Bulkley-Nechako



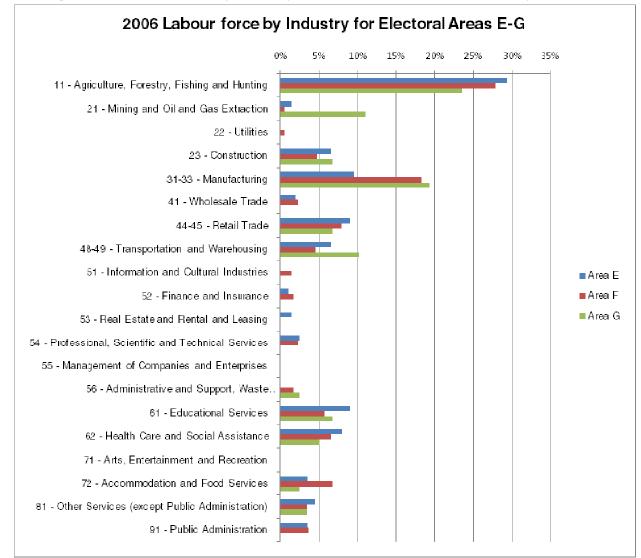


Figure 3.8: Labour force by industry for Electoral Areas E-G of Bulkley-Nechako

The charts show that electoral areas are generally concentrated in sectors such as Agriculture, Forestry, Fishing and Hunting and Manufacturing. Reflecting this, the labour force in Electoral area B is concentrated in the agriculture, forestry, fishing, and hunting and the manufacturing sectors. However, Area B has the highest proportion of labour force of all the electoral areas contained in the educational services industry (15.2%). This is likely due to the close proximity to all of the Colleges in the Regional District, but especially the College of New Caledonia campus in Burns Lake.

#### 3.1.3 Occupations

Labour force by occupation is another way of looking at employment in communities. This perspective shows occupations that could be beneficial to economic development efforts. What is important to note is that some occupations have the advantage of flexibility in terms of transferring skills across different industries and this is a unique aspect that makes a

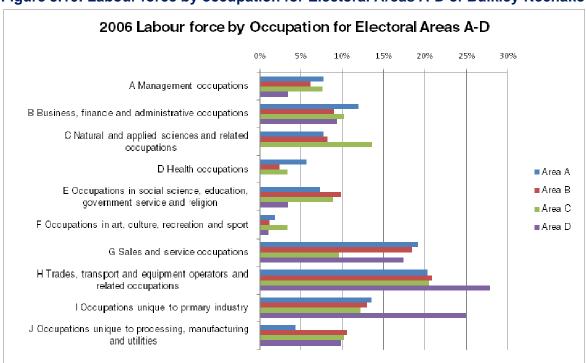
community's economy more robust in difficult economic times. Concentrations in occupations where wages are high also provide revenue opportunities for a community and provide the means to formulate strategies that anchor professionals to a community.

Figure 3.9: Labour force by occupation for Electoral Areas of Bulkley-Nechako

Labour Force by Occupation 2006	Elect Area A	Elect Area B	Elect Area C	Elect Area D	Elect Area E	Elect Area F	Elect Area G
All occupations	3,160	1,220	730	860	1,005	1,780	595
A Management occupations	245	75	55	30	70	95	40
B Business, finance and administrative occupations	380	110	75	80	120	160	65
C Natural and applied sciences and related occupations	245	100	100	0	35	40	10
D Health occupations	180	30	25	0	50	85	20
E Occupations in social science, education, government service and religion	230	120	65	30	90	90	10
F Occupations in art, culture, recreation and sport	60	15	25	10	0	20	10
G Sales and service occupations	605	225	70	150	140	305	100
H Trades, transport and equipment operators and related occupations	645	255	150	240	190	435	230
I Occupations unique to primary industry	430	160	90	215	240	415	45
J Occupations unique to processing, manufacturing and utilities	140	130	75	85	70	125	70

Source: Statistics Canada, 2006

Figure 3.10: Labour force by occupation for Electoral Areas A-D of Bulkley-Nechako



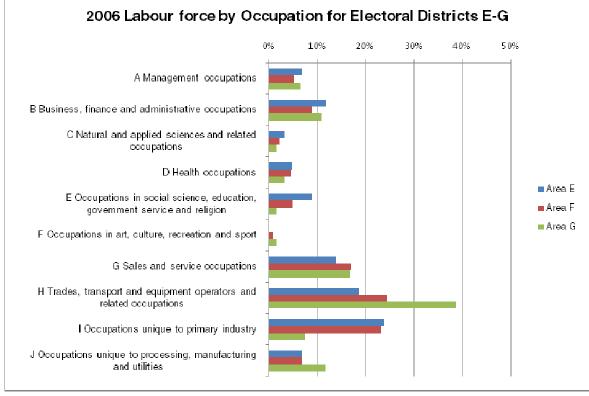


Figure 3.11: Labour force by occupation for Electoral Areas E-G of Bulkley-Nechako

Occupations among the electoral areas are concentrated in Trades, transport and equipment operators and related occupations; Occupations unique to the primary industry; and Sales and service occupations. Electoral area B has the highest concentrations of Social Science, education, government service, and religion occupations of all electoral areas, likely due to the close proximity to educational centres, as well as the head office for the Bulkley-Nechako Regional District in Burns Lake. Area B also had the second highest concentration of occupations unique to processing, manufacturing and utilities.

#### 3.1.4 Education attainment

The type and level of skills possessed by the residents of a community could offer diversification opportunities by way of labour force specializations and can give insight to the Regional District with respect to the type of programs needed to develop certain skills within the community. It should be noted that sectors that are targeted for development also require the Regional District to develop programs that will bring the skills of its workforce up to date so that they are ready to undertake or create new jobs.

The education attainment for the electoral areas shows they are mostly concentrated in the following categories: No certificate, diploma or degree and High school certificate or equivalent. Electoral area B leads all other electoral areas in the proportions of their population that have attained a University certificate below the bachelor's level. Area B also has high concentrations of residents with college diplomas and university bachelor's degrees.

2006 Education Attainment for Electoral Areas in the RDBN 10% 0% 20% 30% 40% 50% No certificate, diploma or degree Area A High school certificate or equivalent ■ Area B ■ Area C Apprenticeship or trades certificate or diploma Area D Area E College, CEGEP or other non-university certificate or ■ Area F diploma ■ Area G University certificate or diploma below bachelor level Bachelor's degree or higher

Figure 3.12: Education attainment for Electoral Areas of Bulkley-Nechako

2006 Major Field of Study for Electoral Areas A-D 1.0% 20% 30% 40% 50% Education Visual and performing arts, and... Humanities Social and behavioural sciences and law Area A Business, management and public administration ■ Area B Physical and life sciences and technologies ■ Area C Mathematics, computer and information sciences Area D Architecture, engineering, and related... Agriculture, natural resources and conservation Health, parks, recreation and fitness Personal, protective and transportation services Other fields of study

Figure 3.13: Education attainment by major field of study for Electoral Areas A-D of Bulkley-Nechako

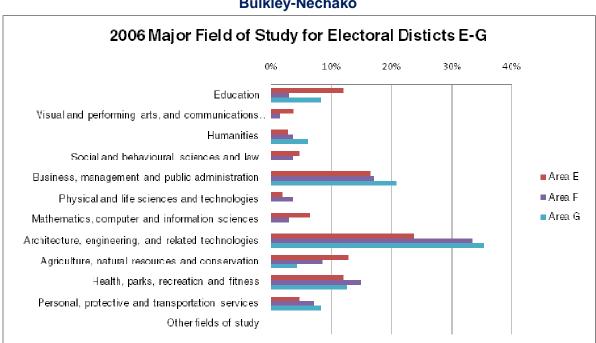


Figure 3.14: Education attainment by major field of study for Electoral Areas E-G of Bulkley-Nechako

Most of the population in the Regional District of Bulkley-Nechako have their major field of study in Architecture, engineering and related technologies; Business, management and public administration; Agriculture, natural resources and conservation; and Health, parks, recreation and fitness. However, Electoral Area B presents a different pattern of concentration. The Area is second only to electoral area E with regards to the proportion of population with education or mathematics, computer and information sciences as major fields of study.

## 3.1.5 Income

Income and earnings are particularly important to look at because they represent revenue opportunities for a community and its business environment. Studies show that communities with higher incomes and earnings generally have a higher economic growth potential than lower ones. Higher disposable incomes suggest opportunities for direct, indirect and induced impacts to a community's tax base, trade, and entire local economy.

Figure 3.15: Average Household income for Electoral Areas of Bulkley-Nechako

2006 Average Household Income					
Electoral Area A	\$69,128				
Electoral Area B	\$66,699				
Electoral Area C	\$72,541				
Electoral Area D	\$56,174				
Electoral Area E	\$57,578				
Electoral Area F	\$66,928				
Electoral Area G	\$83,303				

Source: Statistics Canada, 2006

The household income figures show that electoral area G has the highest average household income in the regional District. However, the average household income for electoral area B exceeded that of the Regional District in 2006 (\$63,397), but was only slightly lower than that of the province (\$67,675).

# 4 Links to Economic Development Action Plan

## 4.1 General Approach

The general links between the RDBN's Economic Development Action Plan and the Industrial Lands Study are strong. In terms of overall approach, the Industrial Lands Study includes an overview and summary of the Economic Development Action Plan. This is used to introduce a discussion of the Action Plan's three key target areas (Mining, Forest Industries and Agriculture) and their relevance to the RDBN's future industrial development potential.

The Action Plan articulates a clear strategy of "value chain" analysis, in which the entire vertical system of each target sector is analyzed for opportunities. Generally, this approach means looking beyond a basic activity (such as mineral extraction) in a target sector (mining) to those opportunities that exist both up (refining, value-adding) and down (supply and services, training) the value chain.

This approach was used by the project team in the Industrial Lands Study as a key tool for identifying and considering future industrial development potential within each of the Electoral Areas.

## 4.2 Economic Base Analysis

The Economic Development Action Plan includes a significant economic base analysis exercise as background research. However, in keeping with the scope of that particular project, the economic base analysis considers and examines the Regional District of Bulkley-Nechako as a whole. In the Industrial Lands Study, the RDBN was broken up by Electoral Area. In order to fully understand the trends and opportunities of each Electoral Area, the project team undertook a series of seven additional economic base analysis exercises (one in each of the six Electoral Areas it was examining, and an additional economic base analysis including data for Electoral Area B in this report).

In both projects, this detailed analysis was used to inform strategic thinking and economic targeting, and to match qualitative assessments and input with substantive quantitative data. However, given the more localized nature of the Industrial Lands Study reports, the data itself needed to be expressed in a more localized context. Close examination of the Industrial Lands Study and the Economic Development Action Plan will demonstrate strong consistency between datasets. This allows future researchers and economic development staff to use both base analysis exercises as a comprehensive information source in examining other economic issues and opportunities.

# 4.3 Target Sectors

The Economic Development Action Plan targeted four primary areas of economic development potential:

- Mining Sector Opportunities
- Forest Industry Opportunities
- Agriculture Sector Opportunities

#### Other Opportunities

While the Industrial Lands Study does not follow this specific breakdown on economic development potential, there is a high degree of concordance between the targeting considered in both projects. In examining future industrial demand, mining, forestry and agriculture (and related activities) were seen as the key demand drivers over the next 10 to 20 years within the RDBN.

In the case of the mining sector, there was widespread agreement among key observers that expansion of the sector in the RDBN has largely ground to a halt in recent months, as the global recession has dramatically decreased commodity prices and made new mineral extraction projects significantly less economically attractive for investors. Within the RDBN, this has had the impact of slowing or stopping several key mining-related initiatives with significant economic potential. However, the project team generally felt that an economic recovery would be accompanied by a recovery in commodity prices which would reignite interest in mineral extraction projects in the RDBN over the next two to five years. Accompanying this renewed interest in mining activity will be a range of spin-off opportunities in fields such as supply and service, equipment maintenance and repair, technical training, trucking, processing and value-adding, and environmental remediation. Most of these "value chain" opportunities will require industrial land for their operations. Although the benefits of this investment will occur and create opportunities across the entire RDBN, it seems clear that much of the future demand will be concentrated in areas in relatively close proximity to mining and mineral exploration activity, such as Electoral Areas A, C and D.

In the forest industry, slumping global demand and the pine beetle infestation have significantly weakened the industry, and the concentration of fibre in the hands on multinational firms has restricted the potential for small-scale value-adding. However, the project team sees both a general recovery in global demand for forest products over the next two to three years, and increasing political pressure that may free up fibre supply for new entrepreneurial ventures. This will be accompanied by increasingly creative approaches to using beetle-damaged wood and biomass in new ventures. As a result, the Industrial Lands Study assumes modest new demand for industrial lands from the forest sector. This will benefit all of the RDBN's Electoral Areas, but particularly those areas with significant community-controlled forest resources, such as Electoral Areas B and E.

On the agricultural front, the Economic Development Action Plan describes a sector that is small but has genuine potential for growth and development. Across Canada, the food and food-processing industries have been a bright spot during the recession, with significant new investment flowing into communities. The Industrial Lands Study envisions this national trend impacting the RDBN more strongly over the next five years, with two main areas of activity. The first will relate to the development of additional greenhouse industry opportunities, a process likely to offer potential for many communities across the RDBN, but with perhaps the largest impact on Electoral Area A and the lands around Topley as they continue to build on an existing presence in this sector. At the other end of the RDBN, in Electoral Area F, the second opportunity is stronger, as outstanding agricultural lands and an entrenched farming tradition

open doors to additional sector opportunities. However, the project team expects that food-processing on a small scale may be possible in a number of Electoral Areas.

In the "Other Opportunities" category, the largest emerging opportunity seems to be the rapid development of a series of cogeneration projects across the RDBN. Cogeneration and other alternative energy initiatives are possible across the entire region, and are projected in the Industrial Lands Study to be a significant source of future demand for industrial land. However, there will be significant advantages for "first movers" in this field, and Electoral Areas B, C and F appear to be well-positioned for this activity at the moment. However, while a number of announcements are expected in this field in the very near future, infrastructure constraints and political processes make it difficult to predict what the final shape of this industry will be in the RDBN.

## 4.4 Specific Development Projects

A number of specific regional developments were cited in the Economic Development Action Plan as potential supports for future economic development opportunities. Many of these were also considered during the Industrial Lands Study process, with an eye to how they might affect the regional distribution of industrial development opportunities. The two projects seen as having the largest potential impact on future industrial demand were the Prince Rupert Container Port and the Prince George Airport.

The Prince Rupert Container Port is the first dedicated intermodal container port in North America, and is poised to bring significant international container traffic through northern BC, en route to destinations across North America and around the world. In the Economic Development Action Plan, opportunities linked to backhaul operations were identified. Since the bulk of traffic coming through the port originates in Asia, there is excess capacity available for exporting goods from the RDBN back to Asian markets. Given cross-ocean transit times, these backhaul opportunities are limited non-perishable goods, but could include mining and forest related products. Those communities closest to the western end of the RDBN (Electoral Areas A, B, E and G) were seen as having the most significant opportunities in this regard, and this was factored into the Industrial lands Study. However, the reliance of the port on rail shipping was seen as a potential constraint, as the port has built its competitive case over other ports on "time to market" calculations using fast rail from Prince Rupert to major distribution nodes in the US Midwest. This makes additional rail service or links to new operations in the RDBN problematic, and will likely shift the focus of the RDBN's intermodal opportunities to the trucking industry.

The Prince George Airport Authority has been working to turn its facilities into a major cargo transit hub as well. It has developed the third-longest runway in Canada, and embraced an ambitious vision of siphoning cross-Pacific air cargo traffic away from Anchorage, Alaska and into Prince George on the basis of significant time and cost savings. As in the case of the Prince Rupert Container Port, this opens significant opportunities for backhaul operations to Asia. However, in this instance, the cost and speed of air cargo favour high-value, perishable goods as an export model, and the location of the Prince George Airport favours those communities at the eastern end of the RDBN. Thus, high-end agricultural products and value-

added food products from Electoral Areas C, D and F may be particularly favoured. It should be noted, however, that in consultations with commercial airline pilots, the prevalence of fog at the Prince George Airport may be seen as a significant barrier to attracting air cargo operations in the longer term.

Both of these projects were viewed as having some potential to support industrial developments related to assembly and light manufacturing using components or parts imported from Asia. This was felt to be of greatest significance in western portions of the RDBN, and particularly in Electoral Area A.

Overall, however, neither project should be seen as an anchor for local development initiatives, as other communities outside the RDBN are better positioned geographically to take advantage of these opportunities (including Prince Rupert and Prince George themselves). As a result, the Industrial Lands Study envisions some entrepreneurial activity in these areas over the next five to ten years, but envisions this activity as being modest within the overall scope of future industrial activity in the RDBN.