Economic Overview:
West Kootenay Boundary

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Report Summary

Purpose
The purpose of this report is to provide background information on the past, present and future economy of the West Kootenay Boundary. Where available, comparable data for Revelstoke are included, but references to West Kootenay Boundary or to Central Kootenay or Kootenay Boundary Regional Districts do not include Revelstoke data. In addition to historical data gathered from BC Stats, Stats Canada and other sources, available trend projection or forecast information is summarized. Available information on trends in the major employment sectors is also summarized. Finally, the possible future impacts of key changes in the social, economic and environmental contexts including climate change, peak oil on current key economic sectors will be considered.

What Drives the Economy?
For this review, four key factors are considered:

- Population growth (service sector demand)
- Population needs (e.g., ageing and related service sector demand)
- Circulating $ inside the region (multipliers- regional goods and services)
- Exports ($ from outside coming into the region)

Population
Between 1996 and 2006, census data shows that while the provincial population grew by 9.5%, the West Kootenay Boundary (WKB) lost 7.4% of its population. In 2006, approximately 25% of households have school aged children, and there are more single person households, and couple households without children than there are households with children. More recent BC Stats information indicates that since 2006 WKB has gained population, and will continue to grow, but projected gains are small – 2.5% total over the next 10 years. Most of that growth is projected to be in the Nelson Local Health Area (LHA – see Appendix A for a Map of Local Health Areas). All the net gain (1,967) will be in the 65+ age cohort which will grow by 6,134. Population less than 65 is projected to decrease by approximately 4,176. With the ageing population, growth in households (2,987) will exceed growth in population.

Incomes
Family income in 2005 in the WKB ranged from $53,845 in the Kootenay Lake LHA to $73,685 in the Castlegar LHA. Both are well below the provincial average family income of $80,511 (32.1% and 8.5% lower respectively). That difference in income is also apparent in both Husband/Wife and Female Single Parent households. Compared to the province, the region has a higher proportion of families in the $20,000 to $70,000 income range, and a lower proportion in the $80,000 or more income range. Castlegar, Trail and Revelstoke had a lower proportion of families earning less that $20,000 and a higher proportion of Income Share in the Bottom Half of Households. Castlegar, Trail and Revelstoke LHA's had a lower proportion of Low Income Families than the provincial average, and higher individual tax filer median income than the province.

Businesses
In 2008, there were a total of 3,594 businesses with employees in the WKB. Between 2001 and 2008 RDCK gained 35 businesses with employees, while RDKB lost 113, or a net loss of 78 (2%) for the WKB. The province gained 11.2% in the number of businesses with employees during that same period. Regional business gains were generally in Construction, Real Estate & Rental & Leasing, Finance & Insurance, Professional, Scientific and Technical Services. Losses in the number of businesses occurred

in Agriculture, Forestry, Fishing & Hunting, Manufacturing, Retail and Wholesale Trade, Accommodation and Food Services. The number of self employment businesses (approx. 7,400) was unchanged 2001-2006. Self employment represented 16.8% of all employment in 2006.

Employment

Total employment in 2006 was 44,350. Between 2001 and 2006, employment in the WRB region fell by 2.2% while provincial employment grew by 14.25%. Major employment sectors the WKB in 2006 were Retail Trade, Manufacturing, Health Care and Social Assistance, Construction, Agriculture, Forestry, Fishing and Hunting. Employment declines between 2001 and 2006 occurred in Accommodation and Food Services, Manufacturing, Public Administration, Education, and Agriculture, Forestry, Fishing & Hunting. Employment gains were in Construction, Retail Trade, Arts, entertainment and recreation, Administrative and support, waste management and remediation services, Professional, scientific and technical services. BC Stats projected job growth between 2008 and 2013 is 4.25% (based on provincial growth assumptions). That rate of employment growth is not consistent with the projected population growth of 1.25%, but could be achieved by increases in the participation rate.

Labour Force Education

With the exception of Trail and Nelson LHA's, the West Kootenay Boundary has a higher proportion of the population aged 15+ who have not completed high school than the provincial average. The Revelstoke, Creston, Arrow Lakes and Kettle Valley areas have over 20% of the work force in that category. The proportion of the population with high school completion is also higher than the provincial average in Revelstoke, Kootenay Lake, Castlegar, Grand Forks and Kettle Valley LHA's. All LHA's have higher proportion of apprenticeship or trades certificate or diploma completion and lower proportion of University certificate, diploma or degree completion than the province. The workforce in the region is generally less educated than the provincial average. Kettle Valley, Grand Forks, Creston, Arrow Lakes and Kootenay Lake LHA's have significantly lower work force education than other areas in the West Kootenay Boundary or the province overall.

Economic Dependency 2006 (Based on employment, other income sources)

Dependency, or the proportion of employment or other personal income that comes into the region from other areas, is significant in the Public Sector, Government Transfers, Non Employment Income. Combined dependency on those three sources ranges from 52% in the Castlegar area to 69% in the Creston area. Forestry is significant in Castlegar, Arrow Lakes, Kootenay Lake and the Boundary regions (23% to 30%). Mining and Minerals is significant in the Trail region (20%). Construction is relatively consistent across the regions (5% - 10%). Tourism varies from 3% (Castlegar, Grand Forks) to 9% (Kootenay Lake). Nelson region has the most high tech dependency (5%). The illegal economy could represent as much as 10% or more of the wage economy and up to 15% of regional economic dependency.

Economic Projections (short term)

Compared to employment loss in the 2001 to 2006 period, provincial employment projections for 2008 to 2013 for the Selkirk College region show an average employment growth of 0.9% per year, significantly less than the 1.4% per year projected for the province. Growth in the Goods Producing Industries is projected be 0.5% regionally compared to 0.6% provincially. Growth in the Services Producing Industries is also projected to be 1.0% compared to 1.6% provincially. The overall increase in employment is projected to be 1,760, or 4.25%.

In the Goods Producing Industries, growth of 2.5% is expected with gains in Forestry, Manufacturing Wood Products and Minerals. Employment in Construction is expected to decline. In the Services Producing Industries, growth of 5% is expected with gains in Health Care, Retail Trade and Accommodation and Food Services. The only services sector industry not expected to see some job growth is Government. These estimates appear to be relatively consistent with estimates of both regional population growth and regional employment growth since 2006. However the 4.25% total job growth for the total 2008 to 2013 period is higher than historic job growth, and much higher than the projected population growth of 1.1% for that same period. In addition, the number of people in labour force age 17 to 64 is expected to decline by 2,467. If projected employment numbers are to be reached, either participation rates will have to increase, population will have to grow more than projected, or some combination of both will have to happen.

Longer term Demographic Impacts

The ageing population will have several consequences over the longer term including:

- An ageing and shrinking workforce
- Increasing need for immigration, and addressing related impacts
- Continuing decline in primary/secondary educational services
- Increasing regional dependency on government transfers and non employment income
- Possible increase in health and social services employment (public sector)
- Possible negative impacts on tourism unless we adjust to age relevant experiences/opportunities
- Possible resiliency for construction (new households)

Longer Term Peak Oil Impacts

As oil supply relative to demand decreases, and prices increase, there will be few if any regional competitive advantages. Possible impacts may include:

- Operating costs in all employment sectors will increase
- Due to our lack of self reliance in most goods and food, costs will go up
- Possible opportunities in alternative energy production (small scale hydro, generation from waste and bio fuels from forestry/fibre)
- Relative higher costs could make this region relatively less affordable/desirable

Longer Term Climate Change Impacts

Regionally, we are likely to experience warmer summers, increased intensity in weather events, less snowpack and earlier runoff and perhaps increased precipitation. Possible impacts may include:

- Possible competitive advantages in forestry, tourism (summer)
- Possible opportunities in agriculture (summer water access may be an issue)
- Possible population growth as a result of climate change migrants
- Possible negative impacts on winter tourism
- Warming could offset some winter energy costs
- Additional public and private costs to address impacts of more extreme weather events

Strategic Options

One key to a healthy economic future may be our ability to become more self-reliant and resilient in the face of increasing uncertainty nationally and globally and create a healthy regional economy through strategies such as import replacement and increased regional "multipliers". (Figure 1)

A second key is the extent to which the external environment (i.e., provincial and federal government and related policies and programs and economies) will also adapt to change. If they do not adapt, we may have significant challenges in prevailing against the possible negative trends in the provincial and national economies.

Finally, given our ageing population and the limited projected growth in population and employment, we may need to rethink the strategy of population and employment growth as the main pathway to economic success.

Figure 1: Options for Adapting to Climate Change, Peak Oil, and Demographic Change

Increasing Self Reliance (Regional Goods and Services) ↑	-Some increase in regional food, energy, goods and services -Same or fewer exports - Static, or slow population growth	-More regional food, energy, goods and services - Increased exports - Increased population
	-Less regional food, energy, goods and services, - Fewer exports - Reduced population	**-** Same or less regional food, energy, goods and services, - Increased exports - Static, or slow population growth
	→ **Increasing Basic Economy (Exported Goods and Services)**	

Economic Overview, West Kootenay Boundary

1.0 Purpose of this Report

Many local and regional initiatives are engaged in creating strategies and actions for enhancing local economic activity. Understanding the place of these initiatives in the context of the broader regional and provincial economy is essential to effectively prioritize strategies and actions.

The purpose of this report is to provide background information on the past, present and future economy of the West Kootenay Boundary. In addition to historical data gathered from BC Stats, Stats Canada and other sources, available trend projection or forecast information is summarized. Available information on trends in the major employment sectors is also summarized. Finally, the possible future impacts of key changes in the social, economic and environmental contexts including climate change, peak oil on current key economic sectors will be considered.

2.0 Methodology

The geographic focus for this study is the West Kootenay Boundary. That area includes all the municipalities and Electoral Areas in the Regional District of Central Kootenay and the Regional District of Kootenay Boundary. Comparable data for the Revelstoke LHA data is included where it is available, but references to the West Kootenay Boundary (WKB) to not include Revelstoke data.

The data used in this report was assembled from available sources such as BC Stats and Stats Canada. Other reports and literature was drawn on to develop future trends and possibilities in key regional employment sectors. Sources used are referenced in footnotes throughout the report. Some of these links may only be assessable through access at public libraries or educational institutions.

There is no single measure of what drives the regional economy. The following are the key factors considered in this report:

1) Population – increasing or decreasing population numbers are relevant to economic change as personal and household consumption is related to the number of goods and services provided regionally. More population generally results in an increase in demand and an increase in employment in the services sector.
2) Other Demographic Factors – in addition to overall population numbers, the age profile of the population is relevant to the types of goods and services provided regionally. For example, fewer people under 24 years old will likely result in fewer jobs in the education services sector.
3) Spending on Regional Goods and Services – the more households in the region spend on goods and services provided in the region, the greater the "multiplier" effect in terms of regional employment and regional businesses.
4) Regional Exports and Economic Dependency – the premise behind the analysis of economic dependency is based on "economic base theory." This approach assumes that the "basic" economy is that portion of economic activity that sells goods and services outside the region, thus "importing" wealth. That imported wealth then drives the growth of economic activity in the "non-basic economy," or that portion of the economy that provides goods and services regionally and circulates wealth within the region. The challenge of this method is to identify and measure basic and non basic economic activity, as well as the secondary and tertiary activities associated with each. For example, goods production (e.g., forestry, agriculture and related manufacturing) is considered to be basic economic activity, and retail sales and personal services are considered to be non- basic economic activity.

There is limited data available that would allow for the analysis of regional multipliers. Household incomes will be used as a general indicator. The analysis of economic dependency is based on employment, not on gross economic activity, or regional GDP. Information on regional GDP is not available, and even if it was, due to the fact that a significant portion of our industrial base is owned by companies that do not have their main offices in the region, sales as a measure economic dependency or "driver" could be misleading as the profits from those sales do not remain within the region. For example, analysis of 2008 assessment rolls has shown that 68% of all properties assessed as "manufacturing", and 61% of the assessed value of all commercial, industrial and agricultural properties in R.D. Central Kootenay, and 70% of manufacturing titles and 46% of the assessed value of commercial, industrial and agricultural properties in R.D. Kootenay Boundary are owned by non residents.[1]

As a surrogate, sector employment and related income is used to estimate both the overall scale of economic activity, and to distinguish between basic (goods producing) and non-basic (services producing) activities. Employment income from goods producing activities is assumed to remain in the region with the employees who live here. Some regionally produced goods are also consumed regionally, and some regional services are provided to consumers outside of our region. However, for the purposes of understanding relative strength of economic sectors as drivers, this method of estimating the relative importance is useful. The approach and the background assumptions limit the specific accuracy dependency measurement, but do provide a general understanding what external income sources drive our economy.

Comparison is made to provincial data throughout the report. There are differences between the West Kootenay Boundary and Revelstoke LHA and other rural regions in BC. Those comparisons are not included, both to keep the scale of the report manageable, but also to keep a focus on the reality that we are not in competition with other rural areas of BC. Most of Central and Northern rural BC is facing the same economic challenges as the Kootenay Region. Our mutual challenge is developing a successful economy in the face of much more successful economic development in the metropolitan areas of BC, the rest of Canada and around the world.

The impact of First Nations land claims is not discussed. The West Kootenay is part of the Ktunaxa, Snixt and Okanagan Nations' traditional territory, and the future outcome of land claims is too unclear at this point to speculate on possible economic impacts. Approximately 3% of our population is aboriginal. That population is included in all aggregate data.

Finally, possible long term impacts of demographic change, peak oil and climate change are discussed. That discussion is not intended to be definitive, but rather to initiate a discussion about the longer term future of the economy of our region.

3.0 Economic Context – British Columbia

The regional economy is linked to, and interdependent with the provincial economy, which in turn is linked to national and global economies. For this paper, an overview of the provincial economy will be used as a context for the regional analysis. This approach assumes that the profile of and changes in the provincial economy reflect the broader national and international linkages.

3.1 BC Population

Population growth is related to economic growth in two critical ways. Economic growth measured as employment growth requires growth in the labour force, and that normally requires population growth. In

[1] http://www.selkirk.ca/research/ric/housing-resources

addition, growth in the services producing sector (non-export services) of the economy is directly related to population and growth in that sector normally requires population growth.

Table 1: BC Population 1991 - 2009[2]

Year	Population	Change
1991	3,373,787	
1996	3,874,317	500,530
2001	4,076,264	201,947
2006	4,243,580	167,316
2009 (to June 30)	4,455,207	211,627

The provincial population has increased by 1.08 million (32%) between 1991 and 2008. Over that time period, the rate of increase has varied significantly, driven largely by interprovincial migration related to the relative strength of the provincial economy compared to other provinces. Since 2001, the rate of increase has declined from over 2% per year in the 1990's to approximately 1% per year over the last 10 years. (Table 1)

With an ageing population, continuing population growth is increasingly dependent on both international immigration and migration from other parts of Canada.

Table 2: BC Components of Population Growth 1991- 2009[3]

Year	Net Population Gain	Net International	Net Interprovincial	"Natural" Growth
1991-1995	474,154	171,741	169,636	104,942
1996- 2000	228,490	168,225	-24,939	77,922
2001-2005	162,960	181,933	6,549	55,729
2006-2009 (June)	237,018	161,612	39,690	52,815

Of note is the fact that the net amount immigration has remained relatively stable throughout this period, but has increased as a proportion of net provincial growth from 36% in the 1991 to 1995 period to 68% from 2006 to the present as the amount of net population growth has declined. (Table 2) Natural population growth, that is the net gain as a result of more births than deaths in the resident population, has decreased by approximately 50% since the 1991-1995 period. Natural growth is expected to continue to decline, reach 0 in approximately 2022, and decline thereafter.[4] All net population growth after that period will all come from net migration from other provinces and net immigration, and growth will only occur only after natural population decline is offset.

In the second quarter of 2009, the largest sources of interprovincial migrants to BC were Alberta (53%) and Ontario (43%).[5] The largest sources of immigration were Asia (71%) and Europe (15%).[6]

The population of BC is projected to grow at an annual rate 1.4% (14.7% total) over the net ten years. (Table 3) However the rate of growth varies considerably between age cohorts. The youngest age cohort (0-24) will increase by only 21,855 (1.7%) while the oldest cohort (65+) will see a significant increase of 237,627 (43%). The "working age" cohort of 24 to 65 will increase at about the same rate as population overall, but will shrink slightly as a proportion of overall population from 56.4% to 56%.

[2] BC Stats (Dec. 3, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/pop/pop/BCPop.asp
[3] BC Stats (Dec. 3, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/pubs/mig/mg91092.pdf
[4] BC Stats (Dec. 7 2009) http://www.bcstats.gov.bc.ca/data/pop/pop/Project/P29BCIntro.pdf
[5] BC Stats (Dec. 3, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/pubs/mig/mf09_2.pdf
[6] BC Stats (Dec. 3, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/pubs/pop/immdata.pdf

Table 3: BC Population Forecast[7]

	Ages 0-24	Ages 25-64	Ages 65+	Total
2008	1,275,848	2,469,388	636,367	4,381,603
2018	1,297,733	2,816,323	909,994	5,024,050
Change 2008 - 2018	21,885	346,935	273,627	642,447
% Change 2008 - 2018	1.7%	14.0%	43.0%	14.7%

3.2 BC Businesses

The number of business in BC has grown by 45,144 (12.5%) between 2001 and 2008. (Table 4) Of the 360,882 businesses in BC in 2008, 185,879 (52%) had no employees. The "no employee" aggregation contains self employment as well as some anomalous data. It does not exactly represent the number of self employed in BC as many self employed are included in the 1 to 5 employees size class. Of the 175,003 businesses with employees, 154,924 (88.5%) have fewer than 20 employees. These two categories of business (no employees and 1 to 19 employees) account for 98.3% of all business growth in BC between 2001 and 2008. The number of self employed persons in BC in 2006 was 313,000, or 14% of the total labour force aged 15 or older.[8]
In the goods producing sector, which constituted 22.1% of all businesses in 2008, the number of businesses with employees in agriculture, forestry and fishing, and in manufacturing declined by 2,956 (16.6%) between 2001 and 2008. The number of businesses with employees in construction increased by 4,229 (25.1%), and 94.8% of those construction businesses had fewer than 20 employees. Although the overall number of businesses in the goods producing sector increased by 3,308, the number of businesses in the goods producing sector not including construction decreased by 3,808 overall and by 2,614 for businesses with employees.

In the services producing sector, the number of businesses increased by 41,836 (17.5%). Increases occurred in every sub sector except Wholesale Trade and Accommodation and Food Services. Both of these sub categories actually grew in the number of businesses with employees, but had a net loss in businesses due to significant reduction in businesses in the "no employees" category. In businesses with employees, in Wholesale trade, businesses in the fewer than 20 employee category grew, while all other scales of business declined. The Accommodation and Food Services category grew mainly in the 20 to 49 and 200 plus employees categories.

The most significant increases in business numbers in the services producing sector occurred in the Other Services, Finance and Insurance, Real Estate and Rental and Leasing and the Professional, Scientific and Technical Services categories. Of the net growth of 27,956 new businesses in those categories, 17,694 (63.3%) had no employees and, (36.9%) had fewer than 20 employees. There was a net loss of 69 businesses in those categories in all other scales of businesses with employees.

3.3 BC Employment

Provincial employment has also grown by 392,000 (20.4%) since 2001. The 30.4% growth in employment in the goods producing sector was proportionally higher than the overall 19.9% share of total employment in that sector in 2001. But, 92.4% of that increase was related to construction. The resource based categories (agriculture, forestry, fishing, mining, oil and gas) increased employment by 12,900 (19.5%) but the manufacturing category lost 7,500 employees (3.6%). (Table 5)

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[7] BC Stats (Dec. 7, 2009) http://www.bcstats.gov.bc.ca/data/sep/lha/lha_main.asp

[8] Stats Canada (Dec. 9, 2009) http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/rel/Rp-eng.cfm?TABID=1&LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GK=0&GRP=1&PID=94533&PRID=0&PTYPE=89103&S=0&SHOWALL=0&SUB=0&Temporal=2006&THEME=81&VID=0&VNAMEE=&VNAMEF=

Table 4: BC Business Inventory 2008 and Change 2001 - 2008[9]

	BC Business Inventory 2008							BC Business Change 2001-2008						
	No Emp-loyees	Less than 20	20 to 49	50 to 199	200 plus	Total with Emp	All Sizes	No Emp-loyees	Less than 20	20 to 49	50 to 199	200 plus	Total with Emp	All Sizes
Total, All Industries	185,879	154,924	13,108	5,816	1,155	175,003	360,882	27,562	16,805	955	-213	35	17,582	45,144
Total Goods Producing	***42,621***	***32,812***	***2,879***	***1340***	***239***	***37,270***	***79,891***	***1,693***	***1,579***	***209***	***-134***	***-39***	***1,615***	***3,308***
Agric., Forestry, Fishing & Hunt	8,619	6,352	450	189	18	7,009	15,628	- 285	- 1,994	-31	-6	-7	-2,038	-2,323
Mining & Oil & Gas Extract.	994	896	104	57	14	1,071	2,065	22	213	50	31	-1	293	315
Utilities	160	165	18	15	5	203	363	34	44	3	3	-1	49	83
Construction	28,364	19,366	1,244	454	44	21,108	49,472	2,887	4,008	205	14	2	4,229	7,116
Manufacturing (31-33)	4,484	6,033	1,063	625	158	7,879	12,363	- 965	- 692	-18	-176	-32	-918	-1,883
Total Services Producing	***143,258***	***121,912***	***10,229***	***4476***	***916***	***137,733***	***280,991***	***25,869***	***15,226***	***746***	***-79***	***74***	***15,967***	***41,836***
Wholesale Trade	7,462	9,122	896	319	22	10,359	17,821	-400	182	-21	-42	-13	106	-294
Retail Trade (44-45)	9,934	18,148	1,713	766	115	20,742	30,676	-1,316	2,617	300	24	- 7	2,934	1,618
Transp. & Warehousing (48-49)	10,842	6,890	550	226	68	7,734	18,576	2,771	282	138	- 5	0	415	3,186
Information & Cultural Indust.	3,265	2,026	230	119	37	2,412	5,677	910	- 13	-21	-40	2	-72	838
Finance & Insurance	13,111	5,431	863	235	35	6,564	19,675	3,867	930	324	19	-13	1,260	5,127
Real Estate & Rental & Leasing	28,883	7,396	300	125	14	7,835	36,718	7,484	1,072	-160	-85	-11	816	8,300
Profes'nl, Scientif. & Tech. Srv	28,096	18,250	702	287	39	19,278	47,374	5,945	1,791	- 144	-85	5	1,567	7,512
Mgmt. of Companies & Enter.	11,962	2,480	180	106	52	2,818	14,780	3,213	- 373	-86	-27	37	- 449	2,764
Admin. & Sup'rt, Waste Mgmt.	7,727	7,525	615	310	63	8,513	16,240	576	734	113	80	22	949	1,525
Educational Services	2,027	1,888	264	123	88	2,363	4,390	843	402	108	37	- 4	543	1,386
Health Care & Social Assistance	3,598	13,502	750	405	116	14,773	18,371	2,186	1,383	-125	- 39	-17	1,202	3,388
Arts, Entertainm't & Recreation	3,271	2,442	253	148	30	2,873	6,144	520	40	11	15	- 1	65	585
Accom. & Food Services	3,965	8,362	2,214	978	85	11,639	15,604	- 1,149	-111	194	-31	29	81	-1,068
Other Serv's (ex. Public Admin.)	9,088	18,362	542	155	36	19,095	28,183	398	6,538	62	13	6	6,619	7,017
Public Administration	27	88	157	174	116	735	762	21	-248	53	87	39	-69	- 48

[9] BC Stats (Dec. 4, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/lss/labour.asp#empind

Table 5: BC and Kootenay Development Region Total Employment by Sector ('000) 1996 - 2008[10]

British Columbia	1996	2001	2006	2008	Change 2001-2008
Total employed, all industries	**1,816.4**	**1,921.6**	**2,195.5**	**2,314.3**	**392.7**
Goods-producing sector	***408.2***	***382.3***	***463.9***	***501.5***	***119.2***
Agriculture	30.7	25.5	34.7	33.7	8.2
Forestry, fishing, mining, oil and gas	55.1	40.7	43.8	45.4	4.7
Utilities	10.3	10.5	8.6	14.2	3.7
Construction	119.3	110.7	179.3	220.8	110.1
Manufacturing	192.8	194.9	197.5	187.4	-7.5
Services-producing sector	***1,408.2***	***1,539.3***	***1,731.6***	***1,812.8***	***273.5***
Retail/Wholesale Trade	291.2	303.3	353.7	354.8	51.5
Transportation and warehousing	100.3	112.4	119.5	128	15.6
Finance, insurance, real estate and leasing	124	120.9	138	147.2	26.3
Professional, scientific and technical services	108.2	139.2	167.6	174	34.8
Business, building and other support services	60.1	71.2	98.8	101.2	30.0
Educational services	118.4	138.3	156	161.6	23.3
Health care and social assistance	183.3	196.8	232.2	245.6	48.8
Information, culture and recreation	84.5	105.6	113.2	118.1	12.5
Accommodation and food services	140.8	163.7	170.5	178.1	14.4
Other services	91.3	98.3	90.8	101.2	2.9
Public administration	106.1	89.5	91.3	102.9	13.4
Kootenay Development Region					
Total employed, all industries	**65.8**	**70.4**	**69.5**	**71.5**	1.1
Goods-producing sector	***19.2***	***15.2***	***19.4***	***22.1***	*6.9*
Agriculture	-	-	2.7	2.4	
Forestry, fishing, mining, oil and gas	5.1	2.8	3.3	6.9	4.1
Utilities	-	-	-	-	
Construction	6.1	5.1	4.9	8	2.9
Manufacturing	6.3	6.9	7.8	4.6	-2.3
Services-producing sector	***46.6***	***55.2***	***50.1***	***49.4***	*-5.8*
Trade	9.7	14	11.4	12.7	-1.3
Transportation and warehousing	2.9	4.5	2.7	3.4	-1.1
Finance, insurance, real estate and leasing	2.8	2.8	3.2	2.3	-0.5
Professional, scientific and technical services	2.6	3.6	3.9	3.5	-0.1
Business, building and other support services	2	-	4	1.6	
Educational services	3.5	4.5	3.2	5	0.5
Health care and social assistance	6.8	6.6	6.1	6.1	-0.5
Information, culture and recreation	2.1	3	2.9	3	0.0
Accommodation and food services	5.3	8.1	7.6	7.2	-0.9
Other services	5.5	4.3	3.6	2.8	-1.5
Public administration	3.3	2.7	1.6	1.8	-0.9

The Kootenay Development Region (East and West Kootenay – see Appendix B) has not experienced employment growth comparable to the Province. Employment grew by only 1.6% between 2001 and 2008. Compared to the province overall, employment increased significantly in the resource based categories (45.4%), but that increase was from a very low employment base in 2001 compared to historic levels. Construction sector employment increased by 2,900 (40.8%), well below the provincial increase of 99.5%. Unlike the province, the Kootenay region experienced net job loss in the services producing sector (10.5%)

[10] BC Stats (Dec. 4, 2009) http://www.bcstats.gov.bc.ca/data/lss/labour.asp#LFS

3.4 BC Imports and Exports

Much of the manufacturing base in the region is oriented to the export market. In 2008, the equivalent of approximately 40.2% of B.C.'s $199,214 M GDP was related to exports to other provinces and countries. The total value of exports in 2008 was approximately $80,000 M. Of that total, 64.5% were export goods with the remainder export services. Over the 2000 to 2008 period, the value of goods exports has increased by 11.1%, while the value of services exports has increased by 45.2%. But, since 2000 the provinces trade deficit has grown from $470 M to $13,099 M. The trade deficit with other provinces account for 84.5% of the overall trade deficit. Some of this increase in deficit is due to the softwood lumber issue, and related wood exports to the US, which declined by over 50% between 2000 and 2008, but that accounts for only approximately $2,500 M[11] of the trade deficit. The only area of positive net export from B.C. is in services internationally. (Table 6)

Table 6: BC International & Interprovincial Trade Flows (Millions of Dollars)[12]*

	Total	To Other Countries			To Other Provinces		
Year	**Exports**	**Goods**	**Services**	**Total**	**Goods**	**Services**	**Total**
2000	$65,598	$37,261	$8,767	$46,028	$9,017	$10,553	$19,570
2008	$79,729	$37,857	$11,304	$49,161	$13,552	$17,016	$30,568
	Imports						
2000	$66,068	$33,085	$5,155	$38,240	$14,353	$13,475	$27,828
2008	$92,828	$43,524	$7,547	$51,071	$21,198	$20,559	$41,757
	Balance						
2000	-$470	$4,176	$3,612	$7,788	-$5,336	-$2,922	-$8,258
2008	-$13,099	-$5,667	$3,757	-$1,910	-$7,646	-$3,543	-$11,189

*Based on Balance of Payments

Table 7: Values of Selected Commodity BC Exports 2000 - 2008 (Millions of Dollars)[13]

Commodity	**2000**	**2008**
Wood Products	$9,652	$5,408
Pulp and Paper Products	$6,939	$4,699
Agriculture and Food	$1,230	$1,585
Fish Products	$895	$899
Metallic Mineral Products	$1,836	$3,348
Fabricated Metal Products	$700	$1,231
Energy Products	$6,130	$9,671
Machinery and Equipment	$3,579	$3,377
Plastics and Plastic Products	$429	$402
Chemicals and Chemical Products	$495	$1,047
Apparel and Accessories	$299	$115
Textiles	$38	$52
Other	$1,416	$1,347
Total	$33639	$33,181

Between 2000 and 2008, the total export value of the three main export commodities that are produced in this region (wood products, pulp and paper products, metallic mineral products) declined by 27%. Only metallic metals, which constituted 25% of the total export value of those three commodities in 2008, increased in value (182%) between 2000 and 2008. (Table 7) There is insufficient information available on goods and services

[11] BC Stats (Dec. 7, 2009) http://www.bcstats.gov.bc.ca/data/bus_stat/busind/trade/SWLprov.asp
[12] BC Stats (Dec. 7, 2009) http://www.bcstats.gov.bc.ca/data/bus_stat/bcea/tradec.asp
[13] BC Stats (Dec. 7, 2009) http://www.bcstats.gov.bc.ca/pubs/exp/exp_ann.pdf

traded between provinces to understand the key areas of trade dependency and provincial or regional opportunities for business development to replace imports. There are some significant consumer and business goods such as automobiles, trucks and electronics that are imported from both international and interprovincial sources that are probably not replaceable regionally, but others, such as food could be produced regionally.

4.0 Economic Overview - West Kootenay Boundary (WKB)

4.1 WKB Population

The WKB regional population (Census count) has increased by 6,434 (7.6%) since 1991, substantially less than the provincial increase of 32%. Revelstoke LHA population net decline was 620. All of the WKB net increase has been in R.D. Central Kootenay. Over that time period, the rate of increase has varied significantly with rapid increases in the early 1990's followed by 10 years of net population loss, with a return to population growth over the last 3 years. (Table 8) Note that the Census count for 2006 is not adjusted for undercount, which is estimated at approximately 4% in 2001 and 3% in 2006.

Table 8: West Kootenay Boundary (Census Based Population 1991 - 2018[14])

Year	R.D. Kootenay Boundary	Change	R.D. Central Kootenay	Change	Revelstoke LHA	Change
1991	31,977		52,314		8,538	
1996	34,067	2,090	60,206	7,892	8,970	432
2001	32,094	-1,973	58,008	-2,198	8,210	-760
2006	30,826	-1,268	56,484	-1,524	7,897	-313
2008	31,921	1,095	58,824	2,340	7,918	21
2018	32,242	321	61,169	2,345	8,367	449

The pattern of change in population is relatively consistent throughout the region; with few exceptions, most of the net population growth has been in rural areas, and the most significant population losses have been in the smaller urban municipalities. The general pattern of population change appears to be favouring the larger centres and rural areas.

These smaller urban centres, especially in the Slocan Valley and Boundary areas, and Creston and the surrounding rural areas also have higher median age.   It appears that areas that have a stronger resourced based economy also have the highest median ages. Either younger people are moving out or younger migrants are not moving to those areas, or both are happening.   Revelstoke, Nelson and Rossland have the lowest median ages.

[14] BC Stats (Dec. 9, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/pop/pop/dynamic/PopulationStatistics/SelectRegionType.asp?category=Census

Table 9: West Kootenay Boundary (Census Based Population 2001 - 2006[15]

	2006	2001	Population Change (%) 2001-2006	Median Age 2006
British Columbia †	**4,113,487**	**3,907,738**	**5.27%**	40.8
RD Central Kootenay	**55,883**	**57,019**	**-1.99%**	45.3
Central Kootenay A	2,041	2,125	-3.95%	53.0
Central Kootenay B	4,575	4,742	-3.52%	46.2
Central Kootenay C	1,284	1,287	-0.23%	48.1
Central Kootenay D	1,525	1,500	1.67%	47.8
Central Kootenay E	3,716	3,521	5.54%	44.9
Central Kootenay F	3,730	3,907	-4.53%	44.5
Central Kootenay G	1,605	1,354	18.54%	42.8
Central Kootenay H	4,319	4,472	-3.42%	44.0
Central Kootenay I	2,415	2,436	-0.86%	42.7
Central Kootenay J	2,792	2,930	-4.71%	44.1
Central Kootenay K	1,800	1,979	-9.04%	50.9
Castlegar	7,259	7,585	-4.30%	44.4
Creston	4,826	4,795	0.65%	54.0
Kaslo	1,072	1,032	3.88%	45.2
Nakusp	1,524	1,698	-10.25%	45.8
Nelson	9,258	9,318	-0.64%	40.3
New Denver	512	538	-4.83%	53.0
Salmo	1,007	1,120	-10.09%	43.8
Silverton	185	222	-16.67%	54.8
Slocan	314	336	-6.55%	47.4
RD Kootenay Boundary	**30,742**	**31,843**	**-3.46%**	47.3
Kootenay Boundary A	1,989	1,984	0.25%	43.5
Kootenay Boundary B	1,418	1,583	-10.42%	47.3
Kootenay Boundary C	1,435	1,456	-1.44%	54.8
Kootenay Boundary D	3,176	3,241	-2.01%	49.0
Kootenay Boundary E	2,234	2,169	3.00%	48.2
Fruitvale	1,952	2,025	-3.60%	43.5
Montrose	1,012	1,067	-5.15%	46.9
Rossland	3,278	3,646	-10.09%	41.9
Trail	7,237	7,575	-4.46%	49.4
Warfield	1,729	1,739	-0.58%	43.9
Greenwood	625	666	-6.16%	54.5
Grand Forks	4,036	4,054	-0.44%	47.7
Midway	621	638	-2.66%	53.6
Columbia-Shuswap B	706	625	12.96%	43.9
Revelstoke	7,230	7,500	-3.60%	40.9

Note: Municipalities in red had boundary adjustments during the census interval

With an ageing population, regional population growth is very dependent on both international immigration, and migration from other parts of Canada and BC. Compared to the provincial pattern of reliance on immigration and interprovincial migration, mobility to the West Kootenay Boundary region is much more reliant on migration from other regions of BC and from other provinces. (Table 10)

[15] Stats Canada (Jan. 22, 2010) http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E

Table 10: West Kootenay Boundary Components of Population Growth 1991 - 2008[16]

	Year	Net International	Net Interprovincial	Net Intra provincial
R.D. Kootenay Boundary	1991-1995	87	769	1,940
	1996- 2000	23	-593	532
	2001-2005	-4	-500	-348
	2006-2008	23	460	276
R.D. Central Kootenay	1991-1995	300	3,544	2,607
	1996- 2000	108	-213	326
	2001-2005	184	-541	-1,219
	2006-2008	308	1,320	-451
Total 1991 - 2008		**1,029**	**4,246**	**3,663**

Of note is the fact that net immigration, although relatively small as a share of mobility into the region, has remained relatively stable in terms of aggregate numbers throughout this period compared to the significant swings in migration from other provinces and other regions of BC. (Table 10)

Between 2008 and 2018, BC Stats projects a small net increase in regional population of 1,967, or approximately 2% for the 10 year period. (Table 11) Revelstoke population increase is projected to be 403, or approximately 5% for the 10 year period. From a labour market perspective, in spite of a small amount of growth, the labour force age cohorts from 18 to 64 will decline by 2,367, or approximately 4.2% in WKB and increase by 222 in Revelstoke. Population in the primary and secondary school age range up to 17 years will decline by 1,800 or approximately 10.4% in WKB and by 149 or approximately 6.5% in Revelstoke LHA. Based on this projection, migration or immigration to the region above projected levels will have to occur to maintain the current labour force, and to support any job growth. Within the region, population losses are expected in the Trail and Arrow Lakes regions. The Nelson region is expected to attract the highest proportion of population growth. (Table 11)

Table 11: West Kootenay Boundary Population Projection and Cohorts, 2008 - 2018[17]

LHA Area	Year	0-17 Years	18-24 Years	24-64 Years	65+ Years	Total	Change
Revelstoke	2008	1,552	746	4,536	1,084	7,918	
	2018	1,515	634	4,758	1,414	8,321	
Revelstoke Change 2008-2018		**-37**	**-112**	222	330	403	**403**
Creston	2008	2,426	799	6,146	3,097	12,468	
	2018	2,343	896	5,423	3,819	12,481	**13**
Kootenay Lake	2008	648	221	2,046	727	3,642	
	2018	589	252	1,708	1,174	3,723	**81**
Nelson	2008	4,948	2,105	14,335	3,490	24,878	
	2018	4,747	1,903	14,768	5,310	26,728	**1,850**
Castlegar	2008	2,551	1,129	7,323	2,244	13,247	
	2018	2,113	982	7,303	2,935	13,333	**86**
Arrow Lakes	2008	869	240	2,631	1,001	4,741	
	2018	633	390	2,115	1,453	4,591	**-150**
Trail	2008	3,620	1,571	10,565	3,662	19,418	
	2018	3,047	1,377	10,185	4,548	19,157	**-261**
Grand Forks	2008	1,585	599	4,591	2,151	8,926	
	2018	1,459	589	4,331	2,835	9,214	**288**
Kettle Valley	2008	595	197	2,055	743	3,590	
	2018	511	250	1,714	1,175	3,650	**60**
Total	2008	17,242	6,861	49,692	17,115	90,910	
	2018	15,442	6,639	47,547	23,249	92,877	**1,967**
WKB Change 2008 - 2018		**-1,800**	**-222**	**-2,145**	**6,134**	**1,967**	

[16] BC Stats (Dec. 4, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/pop/mig/rdcomp08.pdf

[17] BC Stats (Dec. 4, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/pop/pop/dynamic/PopulationStatistics/SelectRegionType.asp?category=Health

The ageing of our population and the consequences for housing, and community services such as education are difficult to grasp. In 2006, only 25% of all households had both a head of household under the age of 55 and children. There are more couple households without children, and more single person households than there are households with children. In 2006 almost half of all households have primary household maintainer aged 55 or older and 28% were over 65.[18] Over the next 10 years the 55 to 64 age group will move into the 65+ category. That group represents 20% of all primary household maintainers. In ten years, approximately 45% of all primary household maintainers will be 65 years old or older. That will have a significant impact on local and regional political decisions regarding taxes, services and amenities. (Table 12)

Table 12: Age Groups of Primary Household Maintainers (2006)[19]

RD Central Kootenay									**RD Kootenay Boundary**							
Household type	**Total**	**Under 25 years**	**25 to 34 years**	**35 to 44 years**	**45 to 54 years**	**55 to 64 years**	**65 to 74 years**	**75 years +**	**Total**	**Under 25 years**	**25 to 34 years**	**35 to 44 years**	**45 to 54 years**	**55 to 64 years**	**65 to 74 years**	**75 years +**
Couple Family Without children	8,015	140	450	545	1,500	2,310	2,015	1,055	4,555	45	220	205	880	1,395	1,105	710
Couple Family With children	5,385	80	830	1,850	1,945	510	90	80	3,200	25	415	1,120	1,145	335	115	45
Lone-parent family	2,020	55	325	640	580	175	75	160	990	25	145	330	245	110	55	75
Other family households	875	35	190	165	155	205	95	35	320	30	45	40	110	45	35	10
One person households	7,605	135	605	845	1,495	1,675	1,165	1,680	4,210	75	300	415	695	775	770	1,185
Two or more person households	775	120	230	110	140	90	35	40	355	90	65	30	40	60	30	30
Total Households	24,675	565	2,630	4,155	5,815	4,965	3,475	3,050	13,630	290	1,190	2,140	3,115	2,720	2,110	2,055

[18] Person in the household identified as the one who pay the rent or the mortgage, or the taxes, or the electricity bill, and so on, for the dwelling.
[19] Stats Canada (Jan. 24, 2010) http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?TABID=1&LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GK=0&GRP=1&PID=89075&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=698&Temporal=2006&THEME=69&VID=0&VNAMEE=&VNAMEF=

Over the longer term, if we are successful at retirement replacement and in continuing to attract migrants to the region, BC Stats projects moderate population growth, and a long, slow turn around in numbers in the 0-17 age category after 2018 that will result in a return to 2008 levels by 2036 in the Selkirk College region. The 18 to 24 aged category is projected to continue to peak at around 2018, and decline for the next 10 years before it starts to rebuild. At the other end of the age spectrum the proportion of seniors in the population will continue to grow.[20]

The moderate increase in population along with an aging population and the significant increase in the age 65+ group will result in a need for new housing. Although the total population increase for the ten year period is projected to be approximately 2.2%, projected increase in households will be approximately 7.4% in WKB and 8.1% in Revelstoke. (Table 13) This increase in households is a direct result of an ageing population with fewer people per household. This increase will be a positive factor for the construction sector and related trades employment, but will require a refocusing of new housing types to meet the needs of single person, and two person households.

Table 13: West Kootenay Boundary Household Projection 2008 - 2018[21]

LHA Area	2008 Households	2018 Households	Change
Revelstoke	3,077	3,325	248
Creston	5,509	5,549	40
Kootenay Lake	1,709	1,869	160
Nelson	11,116	12,430	1,314
Castlegar	5,668	6,196	528
Arrow Lakes	2,208	2,334	126
Trail	8,663	8,890	227
Grand Forks	3,696	4,070	374
Kettle Valley	1,698	1,918	220
WKB Total	40,267	43,256	2,989

4.2 WKB Income Profile

The health of the Services Producing Sector is significantly related to the income residents have to spend on purchasing goods and services. The more they spend, and especially the more they spend in the region, the more opportunity there is for businesses in the services sector to grow and be economically viable.

Family income in 2005 in the WKB varied from $53,845 in the Kootenay Lake LHA to $73,685 in the Castlegar LHA. Both are well below the provincial average family income of $80,511 (32.1% and 8.5% lower respectively). That difference income is also apparent in both Husband/Wife and Female Single Parent households. (Table 14)

Income distribution in the region is different than that of the province. Castlegar, Revelstoke and Trail LHA areas have median tax filer income levels that are higher than the provincial median income level. The remaining areas are all significantly below the provincial median.

[20] (BC Stats Feb. 17, 2010) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/regions/CollegRegP34.
[21] BC Stats (Dec.9, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/pop/pop/dynamic/Households/Query.asp?type=RD

Table 14: WKB Average Family Income 2005 (2006 Census)

Local Health Area	Median Individual Income	Average Family Income	Average Husband/Wife Family Income	Average Female Lone Parent Family Income
Creston	$19,658	$56,056	$58,862	$36,852
Kootenay Lake	$20,402	$53,845	$56,181	$27,844
Nelson	$ 20,955	$60,950	$65,702	$33,815
Castlegar	$ 26,374	$73,685	$78,098	$38,732
Arrow Lakes	$ 20,418	$57,250	$61,424	$28,193
Trail	$27,043	$72,408	$77,226	$32,859
Grand Forks	$20,226	$58,206	$61,144	$34,758
Kettle Valley	$18,779	$55,230	$57,408	$35,206
Revelstoke	$25,033	$69,735	$74,563	$38,909
BC	$24,867	$80,511	$86,574	$43,491

Overall there is a higher proportion of families in the $20,000 to $70,000 income range, and a lower proportion in the $80,000 or more income range. (Table 15) However, all LHA's other than Castlegar, Trail and Revelstoke had a higher proportion of families earning less than $20,000 and a higher proportion of Income Share in the Bottom Half of Households. Castlegar, Trail and Revelstoke LHA's had a lower proportion of Low Income Families than the provincial average.

Table 15: WKB Income Distribution of Families

Local Health Area	<$20,000	$20,000-$79,999	$80,000+	Incidence of Low Income in Families	Income Share of Bottom Half of Households
Revelstoke	4.9%	59.6%	35.2%	6.7%	24.5%
Creston	12.1%	69.3%	18.9%	13.8%	23.0%
Kootenay Lake	11.5%	69.7%	18.3%	14.2%	20.9%
Nelson	10.4%	63.7%	25.7%	12.6%	21.7%
Castlegar	5.3%	58.0%	36.7%	6.7%	23.4%
Arrow Lakes	12.6%	66.7%	20.4%	14.7%	21.5%
Trail	5.5%	58.4%	36.1%	7.1%	23.6%
Grand Forks	9.1%	67.0%	23.6%	10.0%	23.7%
Kettle Valley	16.5%	60.4%	22.6%	15.2%	20.1%
BC	8.0%	53.8%	38.1%	13.3%	20.7%

There is no data available that would show how regional household or family income is spent, or how many of those expenditures are made in the region. The only observation that can be made from income data is that gross income that is available for buying goods and services regionally is less than the provincial average. The scale of the services producing sector that focuses on household consumption could therefore assumed to also be proportionally smaller than the provincial average.

4.3 WKB Businesses

Between 2001 and 2009, the Regional District of Central Kootenay gained 35 businesses with employees, and the Regional District Kootenay Boundary lost 113. The two regions respectively gained 279 and 174 businesses with no employees. In the Goods Producing Sector, both regions lost businesses in Manufacturing and in

Agriculture, Forestry and Fishing, and gained in Construction businesses, a pattern similar to the overall provincial pattern.

However, unlike the province, there was a net loss of 39 businesses in the Services Producing Sector in the two Regional Districts in spite of a small net growth in population during that period. (Tables 16, 17) The R.D. Central Kootenay lost businesses with employees in the Goods Producing Sector, particularly in the 1-19 employees category in Agriculture, Forestry Fishing and Hunting, but gained in business in that same business size category in Construction and in the Services Producing Sector. The R.D. Kootenay Boundary lost a significant number (106) of businesses in the Services Producing Sector, with most losses in the small business category. This loss of small business is in stark contrast to the gains in small business provincially.

Table 16: R.D Central Kootenay Business Inventory 2008 and Change 2001 - 2008[22]

	R.D. Central Kootenay Business Inventory 2008							R.D. Central Kootenay Business Change 2001-2008						
	No Emp-loyees	Less than 20	20 to 49	50 to 199	200 plus	Total with Emp	All Sizes	No Emp-loyees	Less than 20	20 to 49	50 to 199	200 plus	Total with Emp	All Sizes
Total, All Industries	2,189	2,293	134	63	12	2,502	4,691	279	25	4	5	1	35	314
Total Good Producing Sector	***678***	***631***	***25***	***17***	***4***	***677***	***1,355***	***26***	***-15***	***3***	***5***	***0***	***-15***	***11***
Agric., Forestry, Fishing & Hunt	232	202	6	4	-	212	444	39	- 70	- 8	-	-	- 78	-39
Mining & Oil & Gas Extract.	11	14	1	1	-	16	27	1	4	-	1	-	5	6
Utilities	7	10	0	1	-	11	18	3	5	-	1	-	6	9
Construction	356	305	10	4	1	320	676	-6	54	1	3	-1	57	51
Manufacturing	72	100	8	7	3	118	190	-11	-8	2	-	1	- 5	-16
Services Producing Sector	***1,511***	***1,662***	***109***	***46***	***8***	***1,825***	***3,336***	***253***	***17***	***-1***	***0***	***1***	***50***	***303***
Wholesale Trade	62	75	-	1	-	76	138	3	2	-4	1	-	- 1	2
Retail Trade	147	335	20	13	1	369	516	-49	12	9	2	1	24	- 25
Transp. & Warehousing	112	128	6	-	-	134	246	13	-11	5	-1	-	- 7	6
Information & Cultural Indust.	27	35	1	1	-	37	64	11	-	-	-1	-	- 1	10
Finance & Insurance	103	58	8	1	-	67	170	42	16	5	-	-	21	63
Real Estate & Rental & Leasing	319	85	2	1	-	88	407	115	15	-6	-	-	9	124
Profes'nl, Scientif. & Tech. Srv	241	190	4	1	-	195	436	46	7	1	-1	-	7	53
Mgmt. of Companies & Enter.	105	13	1	1	-	15	120	41	-13	-	-	-	- 13	28
Admin. & Sup'rt, Waste Mgmt.	87	77	4	2	-	83	170	12	- 1	2	2	-	3	15
Educational Services	21	18	3	2	3	26	47	9	- 4	3	-2	-	-3	6
Health Care & Social Assistance	37	165	14	12	3	194	231	23	-	- 2	-3	-1	-6	17
Arts, Entertainment & Recreation	34	77	6	3	-	86	120	0	10	2	2	-	14	14
Accom. & Food Services	75	174	36	2	-	212	287	-23	-4	-1	-1	-	- 6	-29
Other Serv's (ex. Public Admin.)	139	213	3	3	-	219	358	9	31	-4	2	-	29	38
Public Administration	2	19	1	3	1	24	26	1	-20	- 1	-	1	- 20	-19

[22] BC Stats (Dec. 4, 2009) http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/lss/labour.asp#empind

Table 17: R.D. Kootenay Boundary Business Inventory 2008 and Change 2001 - 2008

	R.D. Central Kootenay Business Inventory 2008								R.D. Central Kootenay Business Change 2001-2008						
	No Emp-loyees	Less than 20	20 to 49	50 to 199	200 plus	Total with Emp	All Sizes		No Emp-loyees	Less than 20	20 to 49	50 to 199	200 plus	Total with Emp	All Sizes
Total, All Industries	1,030	968	83	33	8	1,092	2,122		174	-130	20	-1	- 2	-113	61
Total Goods Producing Sector	***247***	***222***	***20***	***8***	***1***	***251***	***498***		***-36***	***-24***	***4***	***-1***	***-3***	***-24***	***-60***
Agric., Forestry, Fishing & Hunt.	69	53	5	2	-	60	129		-29	-31	1	-1	-	-31	-60
Mining & Oil & Gas Extract.	9	7	-	-	-	7	16		3	3	-	-	-	3	6
Utilities	2	6	1	1	-	8	10		1	3	-	1	-1	3	4
Construction	135	119	11	3	-	133	268		-2	13	6	-	- 1	18	16
Manufacturing	32	37	3	2	1	43	75		- 9	- 12	-3	- 1	-1	-17	-26
Total Services Producing Sector	***783***	***746***	***63***	***25***	***7***	***841***	***1,624***		***210***	***-106***	***16***	***0***	***1***	***-89***	***121***
Wholesale Trade	23	23	4	-	-	27	50		-16	-11	2	-1	-	-10	- 26
Retail Trade	89	136	15	4	2	157	246		- 28	- 14	-	-	2	- 12	-40
Transp. & Warehousing	36	43	2	-	-	45	81		1	-6	-	-	-	- 6	- 5
Information & Cultural Indust.	7	11	2	1	-	14	21		1	- 2	1	-	-	- 1	-
Finance & Insurance	39	28	6	2	-	36	75		13	8	4	1	-1	12	25
Real Estate & Rental & Leasing	213	47	-	-	-	47	260		109	4	-3	-	-1	-	109
Profes'nl, Scientif. & Tech. Srv	111	68	1	1	-	70	181		38	- 23	- 1	1	-	-23	15
Mgmt. of Companies & Enter.	46	8	1	-	-	9	55		20	1	1	-	-	2	22
Admin. & Sup'rt, Waste Mgmt.	36	37	1	2	-	40	76		6	-5	-1	2	-	-4	2
Educational Services	7	5	-	-	3	8	15		-	- 4	-	-	-	- 4	-4
Health Care & Social Assistance	14	102	4	9	1	116	130		6	-5	1	-	-	- 4	2
Arts, Entertainment & Recreation	14	29	5	1	-	35	49		2	-4	3	-	-	-1	1
Accom. & Food Services	83	92	13	3	1	109	192		53	- 22	3	-1	1	-19	34
Other Serv's (ex. Public Admin.)	64	109	7	-	-	116	180		4	-12	5	- 1	-	-8	- 4
Public Administration	1	8	2	2	-	12	13		1	-11	1	-1	-	- 11	-10

R.D. Kootenay Boundary gained businesses with employees only in the "20-40 employee" size category in both the Goods and Services Producing Sectors, and lost businesses in the "fewer than 20 employees" category particularly in Agriculture, Forestry, Fishing and Hunting and Manufacturing in the Goods Producing Sector and in Professional Scientific and Technical Services, Accommodation and Food Services and Retail Trade in the Services Producing Sector. On the other hand, there were two new businesses with 200+ employees in the Retail Trade sector in Kootenay Boundary, and one in Accommodation and Food Services. Some of the losses in small scale businesses appear to be offset by the "scaling up" in size of business.

In spite of those overall losses in the number of businesses, there was significant growth in business numbers in the Finance and Insurance, Real Estate and Rental and Leasing and Professional, Scientific and Technical Services business groups (389), with the majority (67.6%) of that growth attributed to businesses with "no employees". That business growth pattern follows the general provincial pattern.

Self employment is not well defined in the business inventory as many incorporated self employment businesses fall into the "businesses with employees" category. The census data shows approximately 7,450 self employed individuals in 2006 in the West Kootenay Boundary. (Table 18) That number was virtually unchanged from 2001. Approximately 73% of self employment businesses are not incorporated. That total represented 16.8% of the employed labour force in 2006. In addition 2,885 of these businesses had paid help in 2006, potentially representing another 6.6% of the employed labour force. Self employment is distributed across all industry categories, but the largest numbers are construction (15.3% of self employed), agriculture, forestry, fishing and hunting (13.6%) professional, scientific and technical services (11.0%) and other services (9.5%).

Table 18: WKB Self Employment 2001 - 2006[23,24]

	RDCK		RDKB	
	2001	2006	2001	2006
Self-employed (incorporated)	1,305	1,305	540	685
Without paid help	400	435	145	190
With paid help	895	870	390	495
Self-employed (unincorporated)	3,905	3,905	1,700	1,545
Without paid help	2,965	3,040	1,275	1,090
With paid help	945	860	425	460

4.4 WKB Labour Force and Employment

The overall labour force declined by 2.2% between the 2001 and 2006 census periods. The proportion of employment in the goods producing sector was 29.3% in R.D. Central Kootenay and 32.4% in R.D. Kootenay Boundary, both significantly higher than the provincial proportion of 21.1%. (Table 19)

In 2006, the employed labour force in the West Kootenay Boundary was approximately 44,000. Between 2001 and 2006, employment losses in the Goods Producing Sector in Manufacturing and in Agriculture, Forestry, Fishing and Hunting were largely offset by gains in Construction, and in Mining, Oil and Gas.

[23] Stats Canada (Dec. 9, 2009) http://www12.statcan.ca/english/census01/products/standard/profiles/RetrieveProfile.cfm?Temporal=2001&PID=56178&APATH=1&RL=6&IPS=95F0490XCB2001001

[24] Stats Canada (Dec. 9, 2009) http://www12.statcan.ca/english/census06/data/topics/RetrieveProductTable.cfm?TPL=RETR&ALEVEL=3&APATH=3&CATNO=&DETAIL=0&DIM=&DS=99&FL=0&FREE=0&GAL=0&GC=99&GK=NA&GRP=1&IPS=&METH=0&ORDER=1&PID=92119&PTYPE=88971,97154&RL=0&S=1&ShowAll=No&StartRow=1&SUB=744&Temporal=2006&Theme=74&VID=0&VNAMEE=&VNAMEF=

Table 19: WKB Labour Force Age 15+ 2001 – 2006 Census [25,26]

	RDCK		RDKB		Total Change 2001 - 2006
	2001	2006	2001	2006	
All industries	***28,570***	***27,965***	***15,780***	***15,405***	***-980***
Industry n/a	*680*	*365*	*340*	*265*	-390
Goods Producing Sector	***8,065***	***8,320***	***5,155***	***4,815***	***-85***
Agriculture, forestry, fishing and hunting	2,260	2,055	925	845	-285
Mining and oil and gas extraction	175	295	150	180	150
Utilities	270	345	240	225	60
Construction	2,440	2,755	955	1,175	535
Manufacturing	2,920	2,870	2,885	2,390	-545
Services Producing Sector	***19,835***	***19,275***	***10,290***	***10,200***	***-650***
Wholesale trade	475	435	325	230	-135
Retail trade	3,105	3,355	1,825	2,085	510
Transportation and warehousing	1,180	1,145	445	460	-20
Information and cultural industries	470	430	265	185	-120
Finance and insurance	550	650	430	385	55
Real estate and rental and leasing	375	360	210	200	-25
Professional, scientific and technical services	1,255	1,435	510	510	180
Management of companies and enterprises	15	10	0	10	5
Administrative and support, waste management and remediation services	925	1,000	440	575	210
Educational services	2,275	2,090	985	825	-345
Health care and social assistance	3,155	3,105	1,855	1,815	-90
Arts, entertainment and recreation	605	780	320	415	270
Accommodation and food services	2,630	2,105	1,310	1,195	-640
Other services (except public administration)	1,365	1,265	725	690	-135
Public administration	1,455	1,110	645	620	-370

In the services producing sector, there were significant employment losses in Accommodation and Food services, Education, Public Administration and significant gains in Retail Trade, Professional, Scientific and Technical Services, Administrative and Support, Waste Management and Remediation Services and in Arts, Entertainment and Recreation.

In addition to the overall decline in the labour force numbers between 2001 and 2006, there were declines in the unemployment rate, but also slight declines in participation rate (the proportion of the population over the age of 15 who are employed). Unemployment rates for the two regions were above the average provincial rate for that time period. The rate of participation of those aged 15+ in the labour force in both regions was also below the provincial average. (Table 20) The relatively low participation rate could mean that a strategy for offsetting an aging workforce might be to increase the participation rate.

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[25] Stats Canada (Dec. 9, 2009)
http://www12.statcan.ca/english/census01/products/standard/profiles/RetrieveProfile.cfm?Temporal=2001&PID=56178&METH=1&APATH=1&IPS=95F0490XCB2001001&PTYPE=0&THEME=0&FREE=0&AID=0&FOCUS=0&VID=0&GC=0&GK=0&SC=1&CPP=99&SR=1&RL=6&RPP=9999&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0&GID=430602

[26] Stats Canada (Dec. 9, 2009)
http://www12.statcan.ca/english/census06/data/topics/RetrieveProductTable.cfm?Temporal=2006&PID=92117&GID=776028&METH=1&APATH=3&PTYPE=88971%2C97154&THEME=74&AID=&FREE=0&FOCUS=&VID=0&GC=99&GK=NA&RL=0&TPL=RETR&SUB=742&d1=0&d2=2

Table 20: WKB Labour Force Participation 2001 - 2006

Region	In the labour force	Employed	Unemployed	Not in the labour force	Participation rate	Employment rate	Unemployment rate	BC Participation Rate	BC Unemployment Rate
RDCK 2001	28,570	25,270	3,300	17,605	**61.9%**	54.7%	11.6%	**65.2%**	8.5%
RDCK 2006	27,790	25,755	2,035	18,310	**60.3%**	55.9%	7.3%	**65.7%**	6%
RDKB 2001	15,780	14,250	1,525	10,225	**60.7%**	54.8%	9.7%	**65.2%**	8.5%
RDKB 2006	15,310	14,285	1,020	10,215	**60%**	56%	6.7%	**65.7%**	6%

The proportion of the labour force engaged in Intermediate & Lesser Skilled Occupations in 2006 was significantly higher than the provincial average with proportions ranging from 58% in Nelson LHA to 73.0% in the Kettle Valley LHA compared to the overall proportion of 46.0% in BC. (Table 21)

Table 21: WKB Proportion of Labour Force in Intermediate and Lesser Skilled Occupations (2006)[27] [28]

Revelstoke	Kootenay Lake	Nelson	Trail	Castlegar	Arrow Lakes	Creston	Grand Forks	Kettle Valley	BC
58.5%	60.3%	58.0%	61.7%	62.8%	61.5%	64.6%	66.6%	73.0%	46.0%

There is a general pattern of an older median age in the workforce associated with the goods producing sector compared to the services producing sector in both regions. (Table 22) Within the goods producing sector, construction, the only goods producing business category showing business growth, had the lowest median age of employees. In the services producing sector, median ages in the health care and social assistance, real estate, rental and leasing, and education services categories are above the median for employed labour force in both regions. The lowest median age is in the retail category, the employment category that had the most employment growth between 2001 and 2006.

[27] High Skilled Occupations in Primary Manufacturing and Protective Services could not be separated out so are included in Intermediate & Lesser Skilled Occupations.

[28] http://www.bcstats.gov.bc.ca.proxy.bclibraries.ca/data/sep/lha/lha_main.asp

Table 22: West Kootenay Boundary Employed Labour Force Age by Sector (2006)

	R.D. Central Kootenay (BC)[29]					R.D. Kootenay Boundary (BC)[30]				
		Age groups					Age groups			
Industry employment	**Employed Population 15 years +**	**15 to 24**	**25 to 54**	**55 and over**	**Median age**	**Employed Population 15 years +**	**15 to 24**	**25 to 54**	**55 and over**	**Median age**
Total - Industry (NAICS) (3)	**25,920**	**3,365**	**17,460**	**5,100**	**44.8**	**14,380**	**2,000**	**9,565**	**2,815**	**45.4**
Total - Industries - Goods	***7,585***	***825***	***5,275***	***1,490***	***44.9***	***4,665***	***450***	***3,220***	***995***	***47.3***
Agriculture, Forestry, Fishing and Hunting	1,815	250	1,085	485	47.2	860	90	480	290	49.3
Mining and Oil and Gas Extraction	210	10	145	55	44.4	155	0	125	35	48.8
Utilities	335	0	270	60	46.6	250	15	170	60	48.8
Construction	2,510	195	1,835	480	44.2	1,085	205	680	200	43
Manufacturing	2,715	375	1,935	405	44.2	2,315	140	1,765	415	48.2
Total - Industries - Services	***18,335***	***2,540***	***12,180***	***3,605***	***44.7***	***9,710***	***1,550***	***6,345***	***1,815***	***44.2***
Wholesale Trade	430	50	290	80	47	220	70	125	30	40.8
Retail Trade	3,180	835	1,855	495	38.2	1,950	520	1,180	245	39.1
Transportation and Warehousing	1,050	60	775	215	47.2	435	20	350	65	46.9
Information and Cultural Industries	420	40	270	105	42.9	170	25	100	40	44.1
Finance and Insurance	645	40	480	120	44.7	370	10	295	60	44.7
Real Estate and Rental and Leasing	350	10	240	100	53.2	175	20	100	50	48.5
Professional, Scientific and Technical Services	1,370	115	1,015	245	43.2	490	60	320	115	47.2
Management of Companies and Enterprises	10	0	0	0	0	10	0	10	0	0
Admin. and Support, Waste Management, Remediation Services	935	95	625	210	45.9	525	70	335	125	44.8
Educational Services	2,005	60	1,410	530	49.6	815	30	500	280	49.9
Health Care and Social Assistance	3,005	185	2,200	615	47.1	1,770	75	1,350	340	46.8
Arts, Entertainment and Recreation	685	85	415	185	47.1	400	130	215	50	36.1
Accommodation and Food Services	1,975	740	975	260	32.2	1,115	400	560	150	33.9
Other Services (except Public Administration)	1,195	145	780	270	45.7	670	80	475	115	44.9
Public Administration	1,075	60	840	170	47.6	590	35	410	140	47

[29] Stats Canada (Dec. 7, 2009) http://www.census2006.ca/census-recensement/2006/dp-pd/hlt/97-559/Table602S.cfm?Lang=E&T=602S&SC=1&GID=5903&GU=3

[30] Stats Canada (Dec. 7, 2009) http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97-559/Table602S.cfm?Lang=E&T=602S&SC=1&GID=5905&GU=3

4.5 Labour Force Education and Skills

Adaptation to changing economic condition required a skilled and resilient work force. Education and skills are important work force assets. With the exception of Trail and Nelson LHA's, the West Kootenay Boundary has a higher proportion of the population aged 15+ who have not completed high school than the provincial average. The Revelstoke, Creston, Arrow Lakes and Kettle Valley areas have over 20% of the work force in that category. (Table 23) The proportion of the population with high school completion as the highest level of education is also higher than the provincial average in several LHA's including Revelstoke, Kootenay Lake, Castlegar, Grand Forks and Kettle Valley. All LHA's have higher proportion of apprenticeship or trades certificate or diploma completion and lower proportion of University certificate, diploma or degree completion. The workforce in the region is generally less educated than the provincial average, and some areas such as the Kettle Valley, Grand Forks, Creston, Arrow Lakes and Kootenay Lake have significantly lower work force education than other areas in the West Kootenay Boundary or the province overall.

Table 23: WKB General Education Indicators Population Aged 15+ (2006)[31]

Location (LHA Area Estimate)	No certificate, diploma or degree	High school certificate or equivalent	Apprenticeship or trades certificate or diploma	College, non-university certificate or diploma	University certificate or diploma below the bachelor level	University certificate, diploma or degree
Revelstoke	20.7%	31.2%	15.4%	16.8%	4.5%	11.5%
Nelson	16.1%	27.8%	13.7%	17.7%	4.3%	19.4%
Kootenay Lake	19.6%	30.0%	12.8%	22.8%	1.2%	12.5%
Castlegar	17.2%	30.0%	17.2%	21.0%	3.5%	11.4%
Arrow Lakes	22.4%	27.7%	15.9%	16.4%	3.9%	13.6%
Creston	23.2%	26.7%	16.2%	20.3%	3.9%	9.4%
Trail	16.4%	28.4%	16.7%	20.0%	5.6%	13.0%
Grand Forks	19.4%	34.7%	15.7%	17.4%	3.6%	9.5%
Kettle Valley	22.1%	32.2%	14.8%	14.8%	3.8%	10.7%
RDCK	**19.3%**	**28.2%**	**15.3%**	**19.0%**	**3.8%**	**17.9%**
RDKB	**13.2%**	**30.3%**	**16.1%**	**18.5%**	**5.1%**	**11.9%**
BC	17.1%	28.8%	10.4%	18.4%	5.5%	20.8%

Another significant labour force challenge is that the youngest component of the labour forces ages 25 to 34 has a higher proportion with high school or less education, a lower proportion with apprenticeship and trades skills and a slightly lower proportion with college or university training in RD Central Kootenay and a slightly higher proportion in Kootenay Boundary compared to the rest of the workforce. (Table 24) That profile means that there may be a significant challenge in labour force replacement in trades, and does not fit well with the provincial projection that 75% of new job growth will require more than high school education.

Table 24: WKB General Education Indicators Population Aged 25 to 34 and 35 to 64[32]

	No Certificate or High School	Apprenticeship, Trades	College or University
RDCK			
Age 25-34	44.7%	13.3%	42.1%
Age 35-64	39.3%	18.2%	42.3%
RDBK			
Age 25-34	42.7%	12.7%	44.6%
Age 35-64	41.8%	19.3%	38.9%

[31] Stats Canada (Jan. 22, 2010) http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?TABID=1&LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GK=0&GRP=1&PID=97683&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=753&Temporal=2006&THEME=75&VID=0&VNAMEE=&VNAMEF=

[32] Stats Canada (Jan. 23, 2010) http://www12.statcan.ca/english/profil01/CP01/Index.cfm?Lang=E

5.0 West Kootenay Boundary Economic Dependency

As noted in the introduction, one assumption about what drives the regional economy is that the "basic" economy, that portion of economic activity that sells goods and services outside the region, thus "importing" wealth, plays a key role in the development and ongoing economic health of the region . The non-basic economy is that portion of the economy that provides goods and services regionally and circulates wealth within the region. It is that "imported" wealth that drives the economy and creates the demand in the regional services producing sector.

Goods production (e.g., forestry, agriculture and related manufacturing) as well as tourism related employment, and employment with government are considered to be the key "basic" economic activities that drive the basic economy. General retail sales and personal and other regional services are considered to be non- basic economic activity. Employment income is generally used to estimate both the scale of economic activity, and to distinguish between basic and non-basic activity. Employment income is assumed to remain in the region as compared to business profits that may leave the region.

In addition to employment income, government pensions such as CPP and OAS, as well as EI and Social Assistance bring money to the region. Private pension plans and investment income (non-employment income) are another important source of revenue into the region. Both of these sources of revenue to the region are also considered to be basic income.

Based on census data, BC Stats generates economic dependency ratios for Local Health Area sub-regions. These are reasonable geographic areas to use as they generally capture employees who live in rural areas and commute to urban centres for work, or vice versa. (See Appendix A) The BC Stats dependency calculations are based on 2006 census data. Although the census data was gathered in mid 2006, census income is reported for the previous year, in this case 2005. Thus, dependency ratios reflect the economy as it was operating in 2005, and do not capture more recent events such as the downturn in the forestry sector. Table 25 shows the proportion (%) of income dependency for various "basic" economic sectors by LHA sub-region. Following are key observations from Table 25:

- There is considerable variability in economic dependency between LHA's.
- Government Transfers and Other Non Employment Income combined are significant, ranging from 22.2% of total income in the Castlegar LHA to a high of 43.1% of total income in the Creston LHA.
- Based on that income, the economic dependency ratios range from 30% in the Castlegar LHA to If Public Sector employment is added to those totals, dependency on those 3 income sources ranges from 52% in the Castlegar LHA, to a high of 69% in the Creston LHA. In other words, the largest proportion of our regional economic dependency is not directly related to private sector and resource based businesses.
- Forestry sector dependency is highest in the Kootenay Lake, Castlegar, Arrow Lakes, and Boundary LHA's.
- Mining and Mineral dependency is high in the Trail/Rossland LHA.
- Highest tourism dependency is in the Arrow Lakes, Nelson and Upper Kootenay Lake LHA's.
- Agriculture dependency is highest in the Creston and Kettle Valley areas.
- Nelson appears to be the centre of High Tech employment.
- Dependency on construction is relatively consistent (5% to 10%) across all LHA's.

Table 26 summarizes the history of dependency ratios since 1991. Key observations from Table 26 are:

- Since 2001, dependency on forestry has been declining,

- Tourism dependency has not been increasing significantly overall, but appears to be increasing in the Nelson/Upper Kootenay Lake, and Castlegar/Arrow Lakes regions.
- Public Sector dependency has also declined since 2001 – a result of provincial government cutbacks and restructuring.
- Government transfers have been increasing in all regions since 1991, a result of an ageing population, and increased pension incomes.
- Dependency on other non-employment income has been steadily decreasing since 1991. Taken together, these two components of basic income have remained steady or slightly declined, except for the Boundary and Creston and regions where the dependency ratio for these two income sources combined has increased by 8% and 16% respectively.

Overall, in the business component of economy, dependency on the forestry sector is consistently the most significant across the sub areas of the region, except for Trail/Rossland, where it is in mining and minerals, based on Tech Cominco. Construction is also significant across all the sub regions. In all sub regions except Castlegar, and the Boundary regions, public sector employment is the largest source of basic income, and in the Castlegar area, it is almost equivalent to forestry, which was the most significant driver in 2005. In all regions, dependency on government transfers and non employment income combined are significantly larger than either forestry or public sector dependency.

Finally, we do have a significant illegal economy in our region based on marijuana production and trade. Income from that activity is not reported and in not reflected in either family or household income data, or in regional economic dependency analysis. It could be considered basic income as it brings revenue to the West Kootenay Boundary from other regions. The challenge in understanding the impact of this economic sector is generating a reliable estimate of its economic scale.

Various reports place the marijuana trade as B.C.'s unofficial third-largest industry by GDP. Forestry added $10 billion to B.C.'s GDP in 2005, the construction industry another $7.9 billion and according to police sources, the marijuana trade claims third spot, with annual sales of $7.5 billion. In 2004 the Fraser Institute put the BC estimate of production at 17,500 grow operations, with 519 (3%) of those in the West Kootenay Boundary region. They estimated total “street” value in 2000 at over $7 Billion with export revenues of $2 billion.[33] Other studies estimate the Kootenay region produces 7% to 20% of that total. If an estimate of 10% of production in the region is assumed, that production represents $700 to $800 million in “street” sales. If one third of that value is returned to the regional economy, it represents the equivalent of 10% of regional employment income. There is no method of income comparison, but a reference point is that in 2005, 8.6% of the employed labour force was engaged in construction, and construction represented 5 to 10% of basic employment income. Dependency on the marijuana trade could be in the order of 50% higher than that level, or approximately 8% to 15% of basic income, making it roughly equivalent to non-employment income in terms of regional economic dependency.

The impacts of that economy are not clear, but may include increased housing prices, increased wage rates, reduced labour supply in the formal economy, social and community impacts, expanded service and retail economy, additional law enforcement costs, increased construction and renovation costs, and a larger than normal underground or “cash” economy.

[33] (Dec. 10, 2009) http://www.fraserinstitute.org/commerce.web/product_files/MarijuanaGrowthinBC.pdf

Table 25: West Kootenay Boundary Income Dependency (LHA – 2005)

Composition of total income	CRESTON	KOOTENAY LAKE	NELSON	CASTLEGAR	ARROW LAKES	TRAIL/ ROSSLAND	GRAND FORKS	KETTLE VALLEY	Revelstoke
Employment	56.9%	62.7%	72.8%	77.8%	66.7%	74.8%	66.6%	68.4%	
Gov't Transfers	20.4%	15.7%	12.9%	10.7%	16.0%	11.2%	17.5%	19.3%	
Other Non Employment	22.7%	22.0%	14.4%	11.5%	17.3%	14.1%	15.8%	12.6%	
Income Dependency									
Forestry	8%	18%	8%	24%	23%	3%	22%	30%	18%
Mining and Minerals	4%	4%	1%	5%	1%	20%	1%	0%	2%
Agriculture and Food	8%	1%	1%	1%	1%	0%	3%	7%	0%
Tourism	4%	9%	6%	3%	6%	4%	3%	3%	9%
High Tech	0%	0%	5%	1%	1%	1%	0%	0%	1%
Construction	6%	9%	10%	9%	9%	6%	7%	5%	9%
Film	0%	1%	0%	0%	0%	0%	0%	0%	0%
Other	1%	1%	4%	4%	2%	6%	4%	0%	14%
Public Sector	20%	14%	30%	22%	20%	25%	18%	15%	22%
Government Transfers	26%	20%	18%	16%	21%	17%	24%	25%	14%
Non Employment Income	23%	24%	17%	14%	16%	18%	19%	15%	12%
Total, Public Sector, Gov't Transfers, and Non Employment Income	***69%***	***58%***	***65%***	***52%***	***57%***	***60%***	***61%***	***55%***	***48%***

Table 26: West Kootenay Boundary Change in Dependency Ratio 1991 – 2006

LHA Region																
Castlegar-Arrow Lakes									***Change in Dependency Between 5 year Periods***							
Year	*Forestry*	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	*Other*	*Gov't Transfers*	*Other Non Employment*	*Forestry*	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	*Other*	*Gov't Transfers*	*Other Non Employment*
2006	*23*	*4*	*1*	*5*	*22*	*14*	*17*	*14*	-2	-2	1	2	-1	2	-1	1
2001	*25*	*6*	*0*	*3*	*23*	*12*	*18*	*13*	-5	3	-1	-1	2	1	0	3
1996	*30*	*3*	*1*	*4*	*21*	*11*	*18*	*10*	5	-4	0	1	3	1	5	-12
1991	*25*	*7*	*1*	*3*	*18*	*10*	*13*	*22*								
Nelson – Upper Kootenay Lake																
Year	*Forestry*	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	*Other*	*Gov't Transfers*	*Other Non Employment*	*Forestry*	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	*Other*	*Gov't Transfers*	*Other Non Employment*
2006	*9*	*2*	*1*	*7*	*28*	*18*	*18*	*17*	-4	0	0	0	-2	5	-1	2
2001	*13*	*2*	*1*	*7*	*30*	*13*	*19*	*15*	0	0	0	1	-1	-1	-1	2
1996	*13*	*2*	*1*	*6*	*31*	*14*	*20*	*13*	2	-3	0	2	7	-4	5	-9
1991	*11*	*5*	*1*	*4*	*24*	*18*	*15*	*22*								

Creston

Year	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***
2006	*8*	*5*	*7*	*4*	*19*	*7*	*26*	*24*	-2	3	0	-1	-4	0	-3	8
2001	*10*	*2*	*7*	*5*	*23*	*7*	*29*	*16*	-1	1	1	0	1	-4	3	-2
1996	*11*	*1*	*6*	*5*	*22*	*11*	*26*	*18*	0	-2	0	2	2	-2	12	-12
1991	*11*	*3*	*6*	*3*	*20*	*13*	*14*	*30*								

Grand Forks-Kettle Valley

Year	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***
2006	*23*	*2*	*4*	*3*	*17*	*10*	*24*	*18*	-2	1	0	-3	-3	3	1	5
2001	*25*	*1*	*4*	*6*	*20*	*7*	*23*	*13*	0	-2	0	-1	3	-3	-2	3
1996	*25*	*3*	*4*	*7*	*17*	*10*	*25*	*10*	2	-3	1	4	-1	-2	14	-13
1991	*23*	*6*	*3*	*3*	*18*	*12*	*11*	*23*								

Trail-Rossland

Year	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***
2006	*4*	*19*	*0*	*4*	*24*	*13*	*17*	*18*	0	-10	0	1	1	5	-1	3
2001	*4*	*29*	*0*	*3*	*23*	*8*	*18*	*15*	-2	1	0	-1	0	-1	0	3
1996	*6*	*28*	*0*	*4*	*23*	*9*	*18*	*12*	3	-1	-1	1	3	-1	8	-13
1991	*3*	*29*	*1*	*3*	*20*	*10*	*10*	*25*								

Revelstoke

Year	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***	***Forestry***	**Mining, Minerals**	**Agriculture Food**	**Tourism**	**Public Sector**	***Other***	***Gov't Transfers***	***Other Non Employment***
2006	*18*	*2*	*1*	*9*	*22*	*23*	*14*	*12*	*-3*	*2*	*1*	*-7*	*5*	*3*	*-1*	*1*
2001	*21*	*0*	*0*	*16*	*17*	*20*	*15*	*11*	*-1*	*-4*	*0*	*6*	*-3*	*0*	*1*	*2*
1996	*22*	*4*	*0*	*10*	*20*	*20*	*14*	*9*	*5*	*1*	*0*	*-4*	*4*	*-9*	*3*	*-8*
1991	*16*	*3*	*0*	*6*	*16*	*29*	*11*	*17*								

6.0 Economic Forecasts

The future economy is uncertain as what drives it is continually in transition. As noted in the introduction, population growth can be an economic driver, but population in the West Kootenay Boundary is not projected to grow significantly. It is expected to age, and that may drive the need for both goods and services related to seniors, but that dynamic will also result in a reduced demand for educational and other services for the 0 to 24 age cohort. Employment projections (Table 27) reflect some those impacts.

Our largest employment sectors are Agriculture, Forestry, Construction, Manufacturing, in the Goods Producing Sector and Retail Trade, Health Care and Social Assistance, and Educational Services in the Services Producing Sector. But employment growth has not happened in all of those sectors. Employment growth has been in Construction, Retail Trade, Arts, entertainment and recreation Administrative and support, waste management and remediation services and Professional, scientific and technical services. How the regional economy evolves in the future will also depend significantly on the growth of and changes in the provincial economy.

6.1 BC Trends and Forecasts

BC Stats has developed a "Ten-Year Employment Outlook for British Columbia titled COPC BC Unique Scenario 2007 - 2017.[34] (Table 27) Consideration of demographics in BC and global economic projections are included in this the assumptions for this report, but it was prepared prior to the start of current recession in 2008. It is not clear if the recession alters the basic assumptions the forecast is based on, or if it may only affect the timing of outcomes. These forecasts do not assume restrictions in employment growth resulting from labour market supply issues. In this short term forecast, impacts of peak oil and climate change are also not considered.

Table 27: Projected Employment Demand Growth by Sector and Major Industry Group, BC, 2007 - 2017

Major Industry Group	New Jobs	Average Annual Growth Rate
Agriculture	-280	-0.1 %
Forestry, Mining, Oil and Gas	8,480	1.8 %
Fishing, Hunting and Trapping	-680	-2.6 %
Utilities and Manufacturing	18,590	0.8 %
Construction	3,440	0.2 %
Total Goods-Producing Sector	***29,540***	***0.6 %***
Wholesale and Retail Trade	39,690	1.0 %
Transportation and Warehousing	23,010	1.7 %
Finance, Insurance, Real Estate and Leasing	19,890	1.3 %
Professional, Scientific and Technical Services	48,020	2.6 %
Management, Administrative and Other Support	13,170	1.3 %
Educational Services	17,290	1.1 %
Health Care and Social Assistance	69,010	2.6 %
Information, Culture and Recreation	14,320	1.2 %
Accommodation, Food Services and Other Services	46,340	1.6 %
Public Administration	9,610	1.0 %
Total Service Sector	***300,350***	***1.6 %***
All Industry Groups	**329,890**	**1.4 %**

Note: Numbers have been rounded and will not add to totals

[34] BC Stats (Dec. 9, 2009) http://www.aved.gov.bc.ca/labourmarketinfo/reports/COPS_BC_Unique_Scenario_2007-2017%20.pdf

Highlights of that BC forecast are:

- 329,900 new and 546,500 replacement jobs by 2017,
- Overall annual job growth of 1.4%, roughly parallel to the overall population growth projection (Table 3),
- Annual job growth rates in the goods sector will be 0.6%, and job growth in the services sector will be 1.6%,
- Fastest rates of growth are forecast in the Health Care and Social Assistance, Professional, Scientific and Technical Services, and forestry, Mining, Gas and Oil sectors, Scientific and Technical Services
- The greatest amount of growth is forecast in the Health Care and Social Assistance, and Accommodation, Food and Other services,
- Growth health occupations, natural and applied sciences, and art, culture, recreation and sport will account for 1/3 of all projected job growth,
- Occupations in management, primary industry, and processing, manufacturing and utilities are expected to be most affected by an aging labour force,
- Employment in agriculture is expected to shrink, and growth in construction will be limited,
- Sectors that will have high rates of job replacement due to attrition include management, occupations unique to primary industry, occupations unique to processing, manufacturing and utilities, natural and applied sciences and art, culture, recreation and sport.
- 75% of projected job openings will require some post secondary or university education.

There have been few attempts to forecast the medium term sector or overall economic outlook for BC since 2008. The BC Business Council has that underway, but at this point in time the work has not been completed.[35]

6.2 West Kootenay Boundary Employment Forecast

BC Stats has prepared estimates of regional employment growth based on the Regional Employment Projection Model (REPM). The area base used is the Selkirk College service region, which is similar to the study area used in this report, but does <u>not</u> include the Revelstoke and the Creston areas. This projection should therefore be used to indicate WRB regional trends rather than regional employment numbers. (See Appendix C)

Those estimates for the 2008 – 2013 period show an average 0.9% per year employment growth, significantly less than the 1.4% annual increase projected for the province for 2007 – 2017 period. (Table 28) Growth in the Goods Producing Industries is projected be slightly less that the provincial rate, 0.5% regionally compared to 0.6% provincially. Growth in the Services Producing Industries is also projected to be less than the provincial rate - 1.0% compared to 1.6% provincially. The overall increase in employment from 2008 to 2013 is projected to be 1,760, or 4.25%.

In the Goods Producing Industries, growth of 2.5% is expected with gains in Forestry, Manufacturing Wood Products and Minerals. Employment in Construction is expected to decline. In the Services Producing Industries, growth of 5% is expected with gains in Health Care, Retail Trade and Accommodation and Food Services. The only services sector industry not expected to see some job growth is Government.

This projected employment increase represents a significant change from the loss of employment and labour force in the 2001 to 2006 period, but appears to be relatively consistent with estimates of both regional population growth and regional employment growth since 2006. BC Stats data shows that between 2006 and 2008 the population of the Central Kootenay and Kootenay Boundary Regional Districts has grown by 3,453 (1.96% per year), and that the labour force in the Kootenay Development Region (East and West Kootenay) grew by 1,100 (0.74% per year).

[35] http://www.bcbc.com/Events_Descriptions/2020.asp

Table 28: Projected Annual Growth in Employment Demand, Selkirk College Region 2008 - 2013[36]

	Estimated Employment		Total Change	Avg. Annual Change (%)
	2008	**2013**		**2008 to 2013**
All Industries	**41,410**	**43,170**	**1,760**	**0.9**
Total Goods Producing	***12,300***	***12,610***	***310***	***0.5***
Agriculture	600	620	20	0.6
Forestry	910	1,070	160	3.5
Fishing, Hunting, & Trapping	0	0	0	0.1
Oil & Gas	40	40	0	1.5
Mining (non Oil & Gas)	330	300	-30	-1.6
Services to Mining	150	150	0	0.6
Utilities	750	750	0	-0.1
Construction	4,730	4,410	-320	-1.3
Mfg--Food & Beverages	280	290	10	1.1
Mfg--Wood Products	1,420	1,620	200	2.8
Mfg--Paper Products	470	480	10	0.6
Mfg--Printing	40	30	-10	-5.0
Mfg--Rubber, Plas. Chem	260	290	30	2.7
Mfg--Mineral Products	1,450	1,590	140	2.0
Mfg--Metal Fab & Machinery	230	260	30	2.5
Mfg--Comp, Electronic, Elect	360	390	30	1.8
Mfg--Transportation Eq.	20	20	0	1.7
Mfg--Other	270	280	10	1.1
Total Service Producing	***29,110***	***30,560***	***1,450***	***1.0***
Trade--Wholesale	710	750	40	1.1
Trade--Retail	5,600	5,820	220	0.8
Transportation	1,810	1,930	120	1.4
Finance, Insurance, R.E.	1,620	1,700	80	0.9
Prof--Bus Services	1,260	1,330	70	1.1
Prof--Computer Systems	270	310	40	3.0
Prof--Other Services	530	580	50	1.8
Management/Admin/Other Supp	1,540	1,590	50	0.7
Education	2,780	2,800	20	0.1
Health & Social Assist.	4,820	5,240	420	1.8
Information, Culture, Rec	1,890	1,980	90	1.0
Accom & Food Services	3,090	3,290	200	1.3
Services--other	1,690	1,730	40	0.4
Government	1,510	1,510	0	0.0
Prepared by BC Stats, Jul-09				

What is not consistent is the relationship between projected population growth 2008 to 2018, and projected job growth 2008 - 2013. Projected population growth for the 2008 to 2018 period is only 2.2% total for a 10 year period 2008 to 2018, or if evenly distributed over that time period, 1.1% for the five year period 2008 to

[36] BC Stats (Dec. 9, 2009) http://www.bcstats.gov.bc.ca/data/lss/repm.asp

2013. That growth rate is significantly less than the projected 4.25% total job growth for the total 2008 to 2013 period, and less that the growth experience between 2006 and 2008, but it is reflective of overall growth trends between 2001 to 2008. In addition, the number people in labour force age (15+ to 64) is expected to decline (Table 11). If projected employment numbers are to be reached, either participation rates will have to increase significantly, or population will have to grow more than projected, or some combination of both.

Experience over the last 5 years has shown that the labour force in the Kootenay Development Region (East and West Kootenay) does have the capacity to increase participation rates. They have ranges between 60.3% (2004) to 66.8% (2006). In 2009 participation rate was 62.5%, which is well below the provincial average of 66%, or the rates in other rural regions such as the Cariboo of 67.3%. A potential increase of 4% would be equivalent to the 2006 Kootenay ED region rate, and would more than account for the difference between employment projection and population projection. But, there may be a challenge in terms of labour force skills. The provincial projection notes that 75% of all employment growth will require post secondary education. Our labour force has 47.5% (RDCK) and 43.5% (RDKB) with only high school education or less. (Table 22)

The projected increase in manufacturing employment is from a 2008 employment base that had already been under pressure from the impacts of the softwood lumber issue and the strong Canadian dollar. A strong recovery in the home construction sector in Canada and especially in the US, combined with new inroads into the markets for lumber in China could make these estimates very achievable.

Projected employment growth in the health care sector in certainly desirable given the ageing population, but given current and medium term pressures of provincial and federal finances, there will be challenges in funding the public sector component of that growth.

Projected employment growth in the retail sector is also consistent with past patterns. Although projected population growth is small, the increase in households may be more relevant to the growth in retail employment. As the population ages, an increasing proportion that population will have income. Growth in retail employment may be limited by the increasing utilization of technology and scale in retail such a “big box” outlets and self check out for example.

The projected employment growth in Hotel, Food and Accommodation is consistent with provincial projections, but is a significant change from employment loss in that sector in the West Kootenay Boundary between 2001 and 2006. Some of this growth may be driven by the same dynamic of increase in regional demand that will drive retail employment growth as described above. Another component will be driven by the health of regional businesses and business activity. The other major demand for these services comes from tourism. The impacts of a global recession, demographics, travel security and other restrictions make understanding the future prospects of that sector uncertain. Combined, room revenues across BC were down 10% to 15% in the various regions of the province in 2009. Justification for regional employment growth in the short to medium term in that sector is difficult to find.

7.0 The Changing Context and Regional Vulnerabilities

In the preceding analysis, information from BC Stats on population and employment projections is provided. These projections are based on various assumptions and scenarios that attempt to include foreseeable shifts in demography and in global economic conditions. However, those are relatively short term projections and the longer term possible impacts of peak oil or climate change are included in those assumptions and scenarios.

In the following section, we will explore possible impacts of demographics, climate change and peak oil on our economic future in the West Kootenay Boundary. These impacts cannot be tested or proven scientifically, but represent some "best guesses" in the opinion of the author, about possible futures. There is no attempt here to quantify or make arguments about the possibility of peak oil or climate change, or the reliability of the science related to those two topics, or on related government positions and policies. Rather, for this discussion, we will assume those two changes will occur in the future and may significantly impact the region. The challenge is then to consider the consequences of those influences for our region in economic terms.

7.1 Demographics

In terms of the above three factors that could significantly impact our economic future, demographics is the most predictable. The information from BC Stats on future population is based on reasonably reliable information on births and deaths and past patterns of mobility. What is less reliable over the longer term (for the purpose of this discussion, the assumption is a 15 to 20 year time horizon) is the predictability of migration both to and from our region from other parts of BC and Canada, and of immigration from other countries.

The retiring "boomer" generation is a new phenomenon in terms of scale, expectations, wealth and values. It is likely that many of our regional retirees will remain in the region for several reasons including proximity to family, quality of life and the relative affordability of housing in the region, but there may be more options for them to consider than past generations of seniors. Moving to another area may be one of those options both for our resident retirees, but more importantly, for retirees from other regions. We may be the net recipient of new retiree migrants from other parts of BC and Canada drawn here in larger numbers than we have experienced in the past by those same quality of life and housing affordability drivers that may keep our resident seniors in the region. Both increased regional retirement and the potential for retiree migrants will increase our dependency on retirement income (government transfers and non employment income). The Boundary and Creston regions are already well down that path.

The key observation from the population projection information is that the 65+ population is projected to grow from 17,115 in 2008, to 23,249 in 2018, an increase of 35.8% over that 10 year period. Almost all seniors are eligible for some form of pension (C.P.P., O.A.S, guaranteed income supplement) and most, (some estimates are as high as 85%) have some other form of pension income. Although there is a general perception that seniors do not contribute significantly to the regional economy, the 2006 Census (2005 income data) indicates that almost all seniors have some income, and the income profile of the population 65+ was only slightly lower (less than 15% after tax) than the income profile of the total population 15 and over (see Table 29).

An ageing population may also affect our tourism sector. The current emphasis on the "great outdoors" and backcountry may have to shift to "softer" outdoor experiences (e.g., bird/wildlife viewing), arts, culture and history. That shift could also be of benefit in helping to attract both senior and labour markets aged populations as permanent residents and could be a growth area in our economy, as is indicated in BC Stats employment projections.

Table 29: Income Profile 2005[37]

Presence of income and Earnings (2005)	Central Kootenay		Kootenay Boundary	
	All Earners	**65+**	**All Earners**	**65+**
With income	44,310	9,385	24,685	5,835
Without Income	2,060	35	1,000	10
Median total income	$21,613	$20,202	$23,895	$20,669
Median after-tax income	$20,306	$19,590	$21,994	$19,950
Average total income	$28,823	$25,798	$30,485	$25,729
Average after-tax income	$24,937	$23,264	$26,217	$23,143

But the net migration of seniors to our region is not guaranteed. Increasing energy prices, our relatively poor public and regional transportation systems, and the increasing potential that with government budget deficits, current quality of health care services may be at risk, we may not be as attractive to seniors as other regions. In addition to the opportunities and challenges related to the 65+ population, there is a growing demographic challenge related labour market and employment. Over the next 10 years, our population is projected to grow, but we will lose labour force aged population as a result of population ageing. That will limit our ability to keep current levels of economic activity, and definitely will limit our ability to continue grow our economy beyond the 10 year time frame. We have two recent regional labour market studies and labour demand forecasts that make that picture very clear. (CBT Trades Workforce Renewal, Kootenay Rockies Tourism Labour Market Analysis[38]) The challenge will be to attract new migrants and immigrants to work at jobs vacated by retirees, as well as to any new jobs related to a growing economy. We do have challenges in doing that. We have the major appeal of rural and small community living environments, relatively affordable housing and the great outdoors. However, much of non-metropolitan BC can offer those same amenities. Two recent regional studies of employers (Invest Kootenay – Investment Climate Research, KAST Manufacturing and Technology Business Survey[39]) indicate other challenges we face in attracting people and investment. Some of the challenges identified include:

- Housing affordability
- Inconsistent air travel
- Resistance to growth in some communities
- Lack of 100 mbps linkage
- Small labour market (limited options)
- Geographically dispersed communities
- Relative regional isolation
- Relatively lower regional wage rates
- Lack of a full range of commercial and other services

It is quite possible, unless there is significant effort and collaboration between businesses, economic development initiatives, chambers of commerce and service organizations to attract new labour force that we may fall short of meeting our labour market requirements. If we are not successful, our region will be less appealing as a place to live as both private and public services and amenities will suffer. That could impact our ability to attract and retain retirees, and further limit our ability to attract labour market aged migrants. Immigration from other countries is our major source of population and labour market growth in BC and

[37] (Dec. 14, 2009) http://www12.statcan.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?TABID=1&LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GK=0&GRP=1&PID=94190&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=812&Temporal=2006&THEME=81&VID=0&VNAMEE=&VNAMEF=

[38] (Dec. 10, 2009) http://www.go2hr.ca/Portals/0/reports/KootenayRockiesLMR.pdf

[39] (Dec. 11, 2009) http://www.selkirk.ca/media/innovation/regionalinnovationchair/ricresearchactivitiesandpresentation/SK61119_West_Kootenay_Boundary_manufacturing_and_Technology_Industry_Survey.pdf

temporary foreign workers are becoming commonplace in the tourism, service and agricultural sectors. If we are to be successful, we will have to attract immigrants. Although we have attracted immigrants in the past, current rates of immigration mobility to the WKB are far below retiree replacement levels, and all other regions of Canada will be facing the same challenge. We will have to address the reality that the appeal of our rural, small urban centre "outdoor" lifestyle has not been a significant attractor for immigrants, especially those from Asia, Africa and the Middle East. Those areas account 75% of all immigration to BC. We also have the challenge that 52% of immigrants in 2008 have a post secondary degree, while our current labour force has approximately 16% with post secondary degrees. The component of immigration that is compatible with our labour force needs, and our Kootenay rural lifestyle is small. Will have to find new ways of attracting those immigrants, and of adjusting to newcomers from other ethnic and cultural backgrounds living in our communities.

Another possibility related to climate change is that we will see new "climate change migrants" from other regions of Canada and the US, especially from the great central plains region, as that area becomes dryer and begins to revert to a more desert like ecosystem, and as water in current surface water systems reduces in volume.

There will be a direct impact on businesses as well. Most of our regional businesses are small, and in addition, 7,440 were self employed in 2006. The owners of these businesses are part of the overall demographic reality of the region and many will be retire and either sell or close their businesses. In a recent survey in the Nelson area for example, found that "*55% of businesses will be exiting their business in the next 10 years, while almost a third of businesses will be exiting within five years (these numbers are consistent with a national survey that found more than 70% of business owners will be exiting within 10 years*".[40] Business with equity in buildings, facilities and inventory may be able to find new investors. The personal service and self employment group however may not be as successful in transferring businesses that are they based more on personal skills, interests and abilities, and have little "asset" value to transfer. Failure to find replacement owners for those businesses could not only have a significant economic impact, but could also affect the quality of life in terms of accessibility to good and services in the region. That could then have the secondary impact of reducing the desirability of the region as a place to live and work.

Another longer term consideration is that as the provinces natural population growth falls to zero and starts to decline in approximately 10 years, and pressures build to maintain and expand the labour force though increased immigration and migration, there is concern that there will be a dampening effect on the provincial economy. This will occur at about the same time as health care demands by the boomer generation (then 75+ years old) will be increasing dramatically. That potential demand is reflected in projected employment growth in Health Care and Social Services the region. But, the current recession and the prospect of an economy that is dampened by labour market issues mean that our ability to continue to support a publically financed health care and seniors' support system at current service levels is at risk. If the result is additional costs to seniors, the ability of seniors to contribute financially to the regional economy, other than through health care and related support services, and to economic growth overall.[41]

7.2 Peak Oil

Peak oil is the point in time when the maximum rate of global petroleum extraction is reached, after which the rate of production enters terminal decline. There is considerable debate about when that will occur, ranging from "it has already happened" to some uncertain time into the future as new resources are found and come on stream. New resource discoveries are also being offset by the rapidly increasing energy demands in expanding economies such as China and India. Even the most optimistic predictions do not push the idea of a

[40] (Jan. 26, 2010) http://www.futures.bc.ca/documents/businesssuccessionreportnovember2008.pdf
[41] (Dec. 16, 2009) http://www.urbanfutures.com/UFI%20Reports/Report%2066%20-%20A%20Perfect%20Storm.pdf

production plateau or peak oil past 2020. What seems clear is that the easily extracted petroleum resources have been found and are largely in decline in terms of production, and that new sources such as the oil sands have substantially higher development and extraction costs. The chief consequence of peak oil is higher petro chemical product costs including gas, oil, plastics and a host of other petroleum based products.[42] We are already seeing that increase. It is likely that energy prices from other sources (coal, hydro, natural gas, nuclear) will increase as well. Estimates of future pricing generally see $200 US per barrel within the time frame we are discussing.

There are also many views on the possible impacts ranging from little – we will make a relatively seamless transition to other energy sources and products based on new technology, to disastrous – economic, social and political collapse, food shortages etc. If the latter happens, it will be extremely difficult to anticipate and to plan for, and the former appears unlikely given the rapidly increasing demand for energy in growing economies in Asia. Between those two options lies the probability that peak oil will result in significantly high energy costs, but we will adapt sufficiently to avoid social, economic and political collapse, but not without significant adjustment. There would be significant impacts on our economy. Some possibilities include:

- Increased transportation/mobility costs will affect forestry, and any other export based manufacturing. Switching transportation modes from road to rail may help reduce costs, but may also reduce our competitiveness in terms of timely delivery.
- Inter regional travel will be more expensive, but it is unclear if that will have a significant effect on development rates or patterns (i.e., the significant component of the current labour force and related housing development is located outside the urban centres). More interest in living closer to work and/or public transit may shift development focus to the urban settlements, or potentially to regions that are more accessible and have better public transit services than the West Kootenay Boundary.
- We are largely dependent on external sources for food. Increased costs of transportation could create new positive margins for expanded regional production. However that is not a given. We will still need energy to produce food regionally, and would still need to be very efficient in development of a farm to table food system to offset the reality of labour shortages and higher labour costs we face relative to our current source regions. Water access could be another key limitation to enhanced food production.
- Our climate is not particularly well adapted to high energy costs. Cold winters and hot summers could add heating and cooling costs to the cost of living with increased energy prices.
- As energy prices increase, the viability of smaller scale energy from waste and hydro electric generation projects may also improve. However, the environmental impact of those technologies have been of concern to the public in the region.
- We do have bio fuel possibilities based on our timber stocks. That technology (still very much in the development stage) could create jobs, but will not reduce regional retail energy costs. The forestry sector is currently promoting that future.[43]
- Increasing labour market competition from oil sands development may make our labour supply issues more severe.

One additional consideration is that the whole province, indeed the global economy will be impacted, in other words we may not be at a significant disadvantage as all of BC/Canada will be similarly affected. But, it's hard to find a regional competitive advantage as a result of increasing energy prices, either in terms of immigration/migration, or in terms of our key economic.

[42] (Dec. 16, 2009) http://www.energybulletin.net/primer.php
[43] (Jan. 24, 2010) http://www.fpac.ca/index.php/publications/publication-viewer/392/

7.3 Climate Change

Climate change appears to be well underway regardless of the arguments around the question of human inducement or a natural process. Regionally, we are likely to experience warmer summers, increased intensity in weather events, less snowpack and earlier runoff and perhaps increased precipitation overall[44]. In general none of these impacts appear to be as significant to our region as may be the case in other regions - the flooding of coastal areas or desertification of the great central plain for example. There are also many associated uncertainties in terms of ecological succession, and new human, plant and animal risks associated with invasive plant and animal species, disease and insects.[45]

In terms of possible impact on our key drivers;

- Our relatively diversified forestry base may give us more resiliency that other regions such as the central interior that has been dramatically affected by pine beetle.
- Warmer longer summers may make the region a more desirable place to live, which could positively counteract reality of an ageing population and labour force loss through increased migration and immigration. Increased population and related housing demand could also help the construction industry.
- The extended warm season could be beneficial to the retiree based tourism industry, but could negatively impact our winter sports tourism such as skiing and snowmobiling.
- Agriculture could benefit from a longer growing season and possibly increased winter precipitation, but would have the challenge of lower natural surface water supplies during the later summer for irrigation, and could be faced with new invasive plants, insects and diseases.
- Warmer winters may reduce our winter heating costs, but could increase our summer cooling costs.
- Municipal costs and homeowner costs to address the impacts of increasingly severe weather events such as surface water management and wind damage could increase.

7.4 Implications for Economic Dependency

The main challenge in creating workable scenarios for possible futures considering all three factors is that they are interrelated. An ageing population, climate change and peak oil are all happening at once, and all could have a significant and interconnected affect on our economic future as a region, as a province and as a country.

In broader terms, the challenge is how do we adapt to all three? There are again possibilities ranging from "we don't and suffer the consequences" to "we do, and create a very vibrant, appealing place to live, work, and do business." (See Figure 1).

In contrast to the income or employment dependency that brings money into the region is the significant "leakage" of that income through imports and expenditures in other countries and regions. Improving our self reliance in goods and services would create many business opportunities in the region, but that strategy would also need some trigger, such as increase in energy and related long distance transportation costs to make those import replacement businesses, such as agriculture, profitable. One key to a healthy economic future may be our ability to become more self reliant and resilient in the face of increasing uncertainty nationally and globally. If we are able to achieve that, we are likely to be able to also create a healthy regional economy through strategies such as import replacement and increased regional "multipliers".

A second key is the extent to which the external environment (i.e., provincial and federal government and related policies and programs and economies) will also adapt to change. Creating a successful vibrant economy

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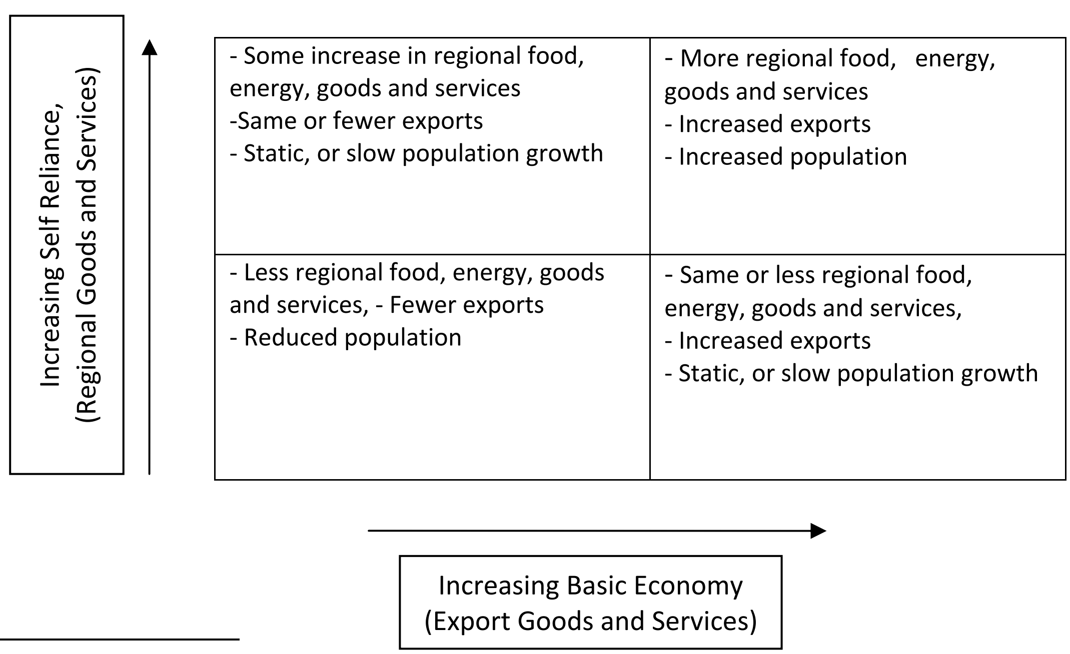
[44] (Dec. 12, 2009) http://www.cbt.org/uploads/pdf/Climate_Change_in_the_Canadian_Columbia_Basin_-_Starting_the_Dialogue.pdf
[45] (Dec. 12, 2009)http://www.forrex.org/publications/FORREXSeries/fs23.pdf

regionally may depend significantly on the province and the federal government also direct their efforts to that end. If they do not, we may have significant challenges in prevailing against the possible negative trends in the provincial and national economies. To date, there is little evidence that significant adaptation is being planned. Most policies and expenditures are targeted to “mitigation” of greenhouse gases, and although there is some overlap, there appears to be little concerted effort toward adaption to new climate and energy price regimes.

Finally, we may need to rethink growth as the main pathway to success. Although economic growth is assumed to be necessary to achieve development and related quality of life, the reality is that since 2001, we have had only marginal gains employment in the Kootenay Economic Region, and according to the Census, lost jobs in the West Kootenay between 2001 and 2006. In spite of that, our regional quality of life does not appear to have suffered significantly. Slow or stagnant population growth is not an uncommon phenomenon. For example, the EU27 population is projected to increase from 495 million on 1 January 2008 to 521 million in 2035, and thereafter gradually decline to 506 million in 2060, but some member countries such as Germany are already declining in population, and Japan’s “productive” population peaked in 1995 and total population peaked in 2004.[46],[47] Approximately 20 countries are currently declining in population. Canada’s population is also projected to grow until about 2060 and decline thereafter.[48]

Regional “productive” population (aged 17 to 64 years) appears to have also peaked and is in decline over the next 10 years, even though population growth is anticipated. The consequences regionally and over the longer term provincially and nationally are significant. Increasingly the work force will be asked to help carry the economic burden of services and infrastructure, and support a growing number of seniors. There is little to see on the policy horizon at any level of government that is proactively planning for that future. Avoiding that demographic reality is not a realistic option. Ignoring it and planning for continuing “growth” will certainly not address the issue and may lead to worse consequences than we might anticipate if we anticipate no growth or even economic contraction. In the short term, continuing to engage the 65+ age group in economic activity and increasing labour productivity can bridge the gaps, but those solutions may not be a strong bridge to the future.

Figure 1: Options for Adapting to Climate Change, Peak Oil, and Demographic Change



[46] (Jan. 26, 2010) http://www.aaliance.eu/public/news/eurostat-new-european-population-projections-2008-2060
[47] (Jan. 26, 2010) http://www.stat.go.jp/english/data/handbook/c02cont.htm
[48] (Jan. 26, 2010)http://www.urbanfutures.com/reports/Report%2066.pdf

8.0 Summary

Overall economic growth as measured by either business numbers or employment in the West Kootenay has bee well below the rates enjoyed by the province overall. Projections for population and economic change do suggest significant variation from that pattern.

Although we generally consider ourselves be a resource based economy, our most significant economic dependencies are related to employment with public agencies, and provincial transfers and non employment income, for the most part associated with retirees. General projections for economic and employment growth do not suggest significant shifts in dependency on our resource sectors. Population projections do suggest a significant increase in our dependency on retirees and related government transfers and non employment income. There may be spinoff benefits in terms of additional employment in health care and related services, and in arts culture and recreation.

Population projections also identify significant labour market and business retention challenges we will have to address if we want to retain our current level of economic activity.

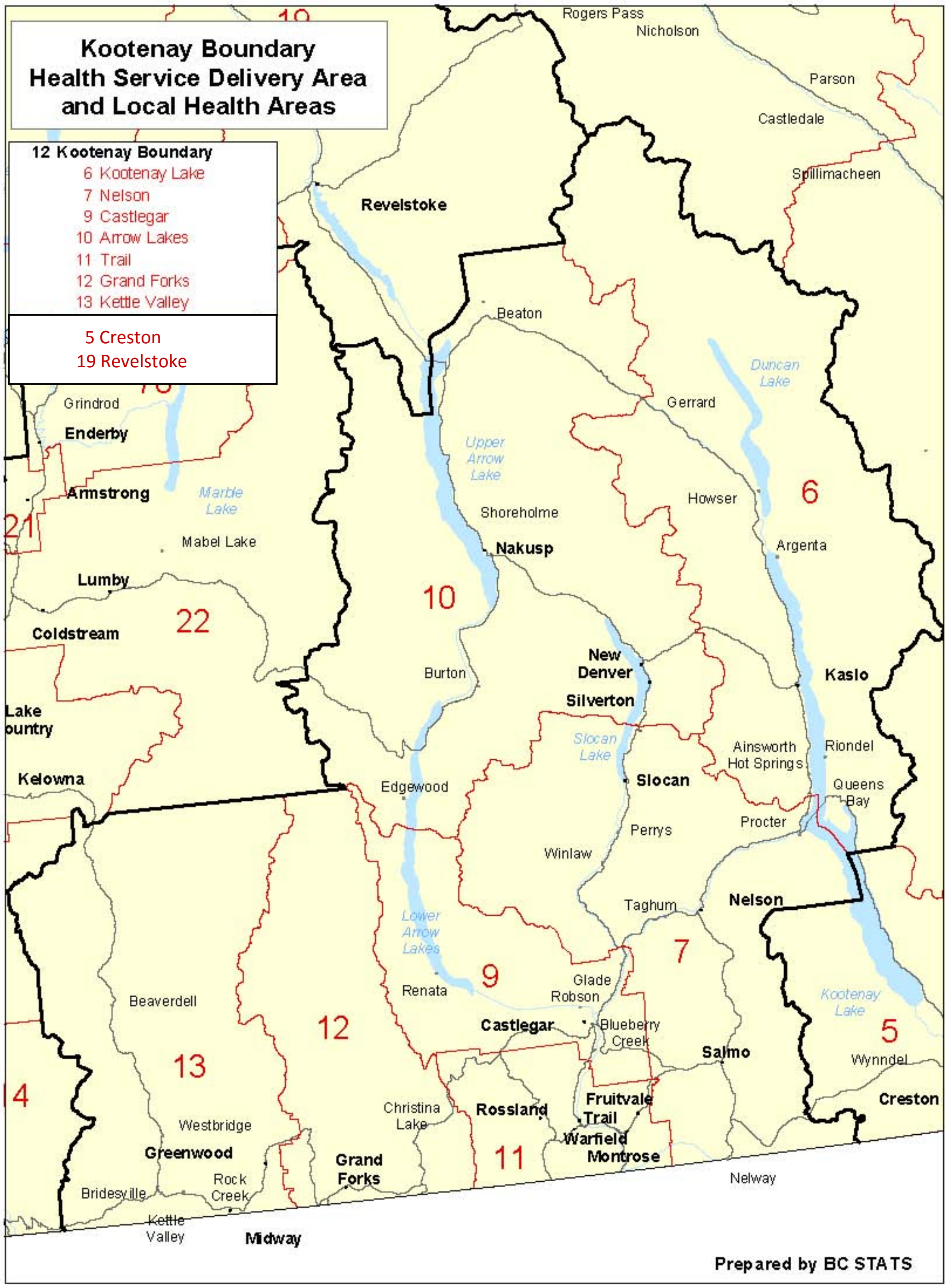
Impacts of demographic change, peak oil and climate change vary. Demographic change is most predictable, and most certain. It is already underway. Although there may be economic benefits, the labour market challenge is a serious threat to our longer term economic well being. The possibility of attracting new retired migrants to out region does exist, and there are associated business and job benefits, but labour market issues may dampen that possibility.

There is no clear comparative advantage to the possibility of peak oil and increasing energy costs. Our four seasons, relative isolation and small scale place us at a distinct economic disadvantage in terms of our current economy. New economic opportunities may be created in new energy development.

On the other hand, we may have some comparative advantage in terms of climate change. There will be impacts, but they are likely to be less significant that in other regions, and in fact there may be regional benefits to migration to the region, agriculture production, summer season tourism and reduced energy demand as a result of a warmer climate.

Adapting to the combination of these three major influences on our economy will not be easy, and success may depend significantly on the extent to which senior level governments are able to adjust and adapt as well.

Appendix A: West Kootenay Boundary LHA Map



Appendix B: Kootenay Development Region Map

Appendix C: Selkirk College Area Map