# Regional Tourism and Hospitality Industry Labour Demand and Supply Projections

#### Final Report

#### Cariboo-Chilcotin-Coast Region

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#### Commissioned by:



The views expressed in this paper are those of the author. The author is responsible for all errors and omissions.

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#### 1. Introduction

British Columbia's tourism and hospitality sector has experienced momentous growth over the past 25 years, since Expo '86 shot BC onto the global tourism destination marketplace. BC offers a highly unique combination of tourism products and visitor experiences in stunning locations. Six individual tourism regions comprise the BC offering, highlights of which include: mountains, parks and hot springs of the *Kootenay Rockies;* fruit-laden orchards and vineyards in the *Thompson Okanagan*; the proximity of urban life to all types of nearby nature in *Vancouver, Coast and Mountains*; coastal lifestyles on *Vancouver Island and the Gulf Islands;* the ranch lands of the *Cariboo Chilcotin Coast;* and; the wildlife of *Northern BC*.

New tourism opportunities and growth are vital economic and employment generators for communities throughout BC. Therefore, given the realities of continuing change in global and local economic conditions the BC tourism and hospitality sector must be able to plan ahead and make adjustments when, where and however needed. For the past several years, go2 - BC's tourism human resource association, has recognized the challenges associated with a changing labour market and workforce in the province, due in large part to overall demographics like an aging workforce with increased numbers of baby boomers entering retirement and proportionately fewer young people in the workforce. Labour market trends for the tourism and hospitality industry also include other industry specific challenges such as the need for accessible and affordable training options in remote and rural areas of the province; skilled workers being lured to other provinces with lower living costs; the increased need to look to immigration and alternative labour pools; and perceptions about tourism and hospitality as an industry for the young and perhaps not a viable option for a long-term career.

go2 continues to lead the way in understanding and addressing human resource needs and concerns for the BC tourism and hospitality sector. Most recently, in 2012, go2 prepared the <u>Tourism Labour Market Strategy</u> (TLMS) to serve as a roadmap for go2 and its industry stakeholders and partners to implement strategies and activities necessary to address the labour market challenges being faced in BC today and into the future. The document takes into account shifts in the socio-political, economic, and tourism and hospitality industry environments.

In 2012/13 go2 worked with Roslyn Kunin and Associates (RKA) to fine-tune projections for tourism related industries and occupations for each of the six (6)

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tourism regions of British Columbia out to the year 2020. This has involved determining labour market demand, supply, and imbalances for all 47 tourism-related occupations and seven (7) industry groups within the provincial tourism regions. The proceeding Methodology section explains the modeling process in detail.

In addition to an overview of tourism sector activities in the region, the report provides further understanding of the region's employment projections in the following sub-sections:

- Labour Demand Projections by Industry and Occupation
- Labour Supply Projections by Industry and Occupation
- Supply and Demand Imbalances
- Summary of Findings

#### 2. Methodology

In this Section, we will provide explanations of how the tourism sector can be defined, our approaches in developing a model to estimate labour demand, labour force supply and demand-supply imbalances, and data sources we relied upon for the purposes of establishing the model.

#### 2.1. Defining Total Tourism and Hospitality Related Employment

A tourist, for the purposes of this analysis, is defined as someone "who travels to and stays in a place outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated within the place visited". Tourism activities involve those of visitors who are temporarily away from their permanent residence for a number of different reasons, such as:

- travelling for leisure;
- Visiting family and friends;
- Visiting a vacation home;
- Travelling to obtain healthcare;
- · Travelling on business;
- Temporarily away from home for other reasons.

As described in the 2009 BC Stats study "Measuring the Size of British Columbia's Tourism Sector", there are two ways of measuring the size of tourism sector – one approach of measuring tourism activities is through a commodity-based approach as represented by the Tourism Satellite Account, produced by Statistics Canada, and another approach is through an industry-based approach, which has been developed by BC Stats.

In the first approach, the measurement of tourism activities is through the products consumed by tourists. This approach relies on information from input-output tables, which describe in detail the goods and services consumed by individuals, businesses and government as either inputs into production or as final demand (consumer, business, government and non-resident purchases of goods and services). The Tourism Satellite Account, which is derived from input-output tables, comprises a set of statistical tables that describe the characteristics of the tourism sector at a given point in time. It includes estimates of visitor expenditures on tourism-specific products – i.e., goods and services which, in the absence of tourism, would probably cease to exist in meaningful quantities or for which the level of consumption would be significantly reduced.

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World Tourism Organization.

The Tourism Satellite Account encompasses a number of tables showing visitor final consumption expenditure by product and type of tourism (same-day and overnight visitors, domestic and international tourists), production accounts (outputs of tourism-specific and other products) of tourism industries, the domestic supply and consumption of tourism products, tourism employment, investment, and other tourism indicators. The Tourism Satellite Account also defines tourism proportions.

The BC Stats' approach to tourism estimation is based on supply-side indicators that are adjusted to exclude non-tourism-related activities. Adjustment factors – i.e., tourism proportions – are derived from time-series data for industries included in the tourism sector. These adjustment factors attribute a percentage of the activities of industries that produce services used by tourists to the tourism sector. This approach relies on information from standard data available on an annual basis from Statistics Canada.

A recent study analyzing Canada's tourism labour market conditions and potential human resources requirement (Canadian Tourism Research Institute, the Conference Board of Canada 2010) (hereafter referred to as the CTHRC/CBoC study) for tourism sector employment has been based on data published in Statistics Canada's Human Resource Module (HRM) of the Tourism Satellite Account. The Module includes data on the number of jobs in the tourism sector related to both tourism and non-tourism activities. Therefore, their projections involve all industries with a tourism related component, regardless of whether demand arises from tourism or non-tourism activities, and the resulting employment is the sum of tourism and non-tourism employment. For example, think of a restaurant serving tourists as well as locals.<sup>23</sup>

Employment numbers derived using BC Stats' approach measure only those related to tourism activities, and, as such, measure direct tourism employment. For example, accommodation services essentially derive their revenue from tourists, but in a retail business the share that is attributed to tourists can be much smaller.

In our current study, we define tourism labour market in line with the approach adopted in the CTHRC/CBoC study.

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Note that in the CTHRC/CBoC study, there are employment data from the Human Resource Module for five industry groupings: transportation, accommodation, food and beverage services, recreation and entertainment, and travel services. In fact, the data is for 29 industries that for presentation purposes have been grouped into five categories. These detailed industries are shown in Appendix I.

Also note that in the CTHRC/CBoC study, data from the Human Resources Module are only available at the national level. As such, all provincial and other regional level data have been imputed.

#### 2.2. Quantitative Approach

We explain below in detail the steps required to complete our projection of labour demand for, supply of - and imbalances of both - workers in the tourism and hospitality related industries and occupations for six tourism regions in BC.

Before we proceed, we note that because of data availability, the projections for each of the six tourism regions will be based on projections for Development Regions in the province. We note that although the geographic boundaries of the two categories of regions are not exactly the same, projections for development regions will serve as good proxies of projections in tourism regions.

Here is the concordance table showing the geographic areas of the two categories of regions.

<u>Tourism Regions</u> <u>Development Regions</u>

Kootenay Rockies Kootenay

Thompson-Okanagan Thompson-Okanagan Vancouver, Coast and Mainland/Southwest

Mountains

Vancouver Island Vancouver Island/Coast

Cariboo Chilcotin Coast Cariboo

Northern BC Region North Coast, Nechako, Northeast

### 2.2.1. <u>Defining Labour Demand, Labour Supply, and Potential</u> <u>Imbalances</u>

Consistent with the recent study by Canadian Tourism Human Resources Council and the Conference Board of Canada (hereafter referred to as "CTHRC/CBoC") *The Future of Canada's Tourism Sector - 2012 Update*, labour demand is defined as the number of full-year jobs required to provide or fulfill the demand for tourism goods and services. The CTHRC/CBoC study states that in its current update, these employment totals at the provincial level have come from Statistics Canada's Human Resource Module of the Tourism Satellite Account, and benchmarked to 2010. The study research team has further broken down the employment totals to arrive at demand in full-year jobs by industry, by occupation.

Also consistent with the CTHRC/CBoC study, labour supply refers to the number of full-year jobs taken up by individuals to fulfill the labour demand. Labour supply is determined by population growth and labour force participation, as well as the likelihood of a particular person working in the tourism sector. In the current CTHRC/CBoC study, labour supply is benchmarked to 2010 based on data derived from Statistics Canada's Human Resource Module and the forecast is done based on CBoC's projections of demography and labour force in future years.

Potential labour imbalances are the differences between labour demand and labour supply in a given industry, or occupation, in the tourism sector. Next we further identify the steps necessary to apportion labour demand and labour supply by industry and by occupation in the CTHRC/CBoC study in the province into regional projections.

### 2.2.2.<u>Labour Demand Projections by Industry and by</u> <u>Occupation</u>

For each region, we will first estimate labour demand in the tourism sector by sub-industry (transportation including air transportation, rail transportation and other transportation, food and beverage services, accommodation services, recreation and entertainment, and travel services) in base year and up to year 2020 based on the BC regional labour market scenario model, in a similar fashion to our work on provincial estimates for industries, which RKA completed for go2 in 2011.

- 1. From the BC LMSM, employment by broad industry grouping has been projected from 2011 to 2020 for:
  - Transportation and Warehousing
  - Finance, Insurance, Real Estate and Leasing
  - Professional, Scientific & Managerial Services
  - Other Services
  - Accommodation and Food Services
- 2. Project employment in industries within these broader groupings that are tourism and hospitality related (for example, air transportation, rail transportation, other transportation, etc.).
- For each sub-industry (for example, air transportation), examine its share of employment within the broader group and how these shares change over time
- 4. Fit a trend-line of these observed shares in the past, and calculate, based on the trend-line, what these shares may be in the projection period.
- 5. Multiply projected shares in each year with BC LMSM's broader industry total in a given year to arrive at projected employment demand in a sub-industry.
- 6. Repeat procedures 3 to 5 for each 3-digit sub-industry within the broader industry grouping to ensure sum of each sub-industry employment is the same or less than the broader grouping totals. (Less in the case to account for certain sub-industries whose annual employment is lower than 1500.)

Once these industry estimates are arrived, occupations within each sub-industry in 2010 will be arrived at by applying occupational shares from the CTHRC/CBoC data, and are assumed to grow at the same rate as the sub-industry throughout

the projection period. (This is the same assumption made in the CTHRC/CBoC study.) We will apply the growth rates derived as well as the regional employment shares to the CTHRC/CBoC's provincial labour demand projections in each year up to 2020 to arrive at regional labour demand by industry, by occupation. The sum of all regional labour demand values will be constrained by provincial total labour demand values in the current CTHRC/CBoC study.

#### 2.2.3. <u>Labour Supply Projections by Industry and by Occupation</u>

We will follow a similar procedure as outlined in the CTHRC/CBoC study on deriving labour supply by industry and by occupation at the province and city level based on Statistics Canada's Human Resource Module and CBoC's demographic and labour force projections, except that in this case we are deriving regional level labour supply by industry and by occupation.

Following the steps above, details are described below:

- 7. For each of the region, first calculate regional employment shares relative to BC total employment.
- 8. To do that, we note that labour force projections for all industries from 2011 to 2020 are available from the BC LMSM, for each development region. Also available from the BC LMSM are projected unemployment rates for all industries in each of the years from 2011 to 2020.
- Hence, employment for all industries in each of the development regions can be calculated, which is the projected labour supply available in each region. Also regional employment shares are calculated.
- 10. From the labour supply projections for BC (in full-year jobs) from the CTHRC/CBoC study, we can calculate the shares of the total labour supply that are available for industries and occupations within.
- 11. The shares derived in the previous step serve as proxies to penetration rates indicating the likelihood of someone working in a tourism related industry or occupation.
- 12. These shares are further applied to the total labour supply in each region (calculated in step 10) to arrive at labour supply by industry and by occupation in each region.
- 13. Once regional labour supply values in each sub-industry have been derived we need to ensure that they sum to the total labour supply in the CTHRC/CBoC study.

Once labour demand by industry and by occupation has been derived, and labour supply by industry and by occupation derived, we can compare the difference in supply and demand to be able to analyze if there are any gaps between the two (gap analysis).

We will further calculate labour demand in industry and occupation due to the need to replace those who have left the labour force (for retirement or because of death). Attrition rates by occupation are available from the BC Regional Labour Market Scenario Model. These rates are more detailed than the ones in the CTHRC/CBoC study.

#### 2.2.4. Update to 2011 BC Labour Market Outlook

In light of recent employment growth changes in the region and in the province, and along with current economic conditions and outlook, we have updated potential employment growth rates for all industries in the region, the province, as well as employment growth rates in the five tourism and hospitality related industries:

- Transportation and Warehousing
- Finance, Insurance, Real Estate and Leasing
- Professional, Scientific & Managerial Services
- Other Services
- Accommodation and Food Services

In order to derive potential employment growth rates in the province from 2013 to 2020, we have referred to the 2013 Budget document for forecasted employment growth rates in 2013 through 2017.<sup>4</sup> Growth rates from 2018 to 2020 are assumed to remain the same as those in the *BC Labour Market Outlook: 2010-2020*, published in 2011.

Update to projected labour force growth rates in the province for all industries, and projected unemployment rates from 2013 to 2017 has been derived based on the 2013 Budget document. For 2018, 2019, and 2020, we have assumed that labour force growth will remain the same as those in the *BC Labour Market Outlook: 2010-2020*, published in 2011.

To summarize, actual rates in 2010 through 2012 and projected rates from 2013 onwards for key provincial labour market indicators are presented here:

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<sup>4</sup> Refer to <a href="http://www.bcbudget.gov.bc.ca/2013/bfp/2013">http://www.bcbudget.gov.bc.ca/2013/bfp/2013</a> Budget Fiscal Plan.pdf

|                     | Actual  |         | F       | Projected |         |         |         |         |         |         |         |
|---------------------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|---------|
|                     | 2010    | 2011    | 2012    | 2013      | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    |
| Labour Force ('000) | 2,442.7 | 2,458.0 | 2,478.9 | 2,514.8   | 2,547.9 | 2,583.6 | 2,623.0 | 2,663.0 | 2,681.6 | 2,697.7 | 2,713.9 |
| % Change            | 1.7%    | 0.6%    | 0.9%    | 1.4%      | 1.3%    | 1.4%    | 1.5%    | 1.5%    | 0.7%    | 0.6%    | 0.6%    |
| Employment ('000)   | 2,256.5 | 2,274.7 | 2,312.5 | 2,338.6   | 2,369.4 | 2,405.6 | 2,442.6 | 2,479.0 | 2,499.9 | 2,515.1 | 2,533.9 |
| % Change            | 7.6%    | 0.8%    | 1.7%    | 1.1%      | 1.3%    | 1.5%    | 1.5%    | 1.5%    | 0.8%    | 0.6%    | 0.7%    |
| Unemployment Rates  | 7.6%    | 7.5%    | 6.7%    | 7.0%      | 7.0%    | 6.9%    | 6.9%    | 6.9%    | 6.8%    | 6.8%    | 6.6%    |

#### 2.3. Qualitative Approach

This project reviewed secondary research documents that included more than 100 Tourism Plans, Tourism Assessments, Situation Analyses and Workshop reports prepared for individual communities throughout all six BC tourism regions as part of the Tourism British Columbia Community Tourism Foundations program. The Community Foundations program assists communities to develop a comprehensive multi-year tourism plan for their area.

In addition, a total of 10 structured and open-ended interviews were conducted by telephone with a selection of stakeholders including representatives from the following organizations:

- Six regional tourism associations; and
- Four tourism sector associations (food and beverage, hotel, ski, and wilderness tourism)

A complete list of interview respondents can be found in Appendix IV.

The purpose of these stakeholder interviews was to gain first-hand insight into each region's specific labour market supply and demand issues and trends, such as challenges, pressures, shortages, growth factors etc. for priority industries and related occupations. Highlights of the qualitative analysis are summarized for each region in the sub-sections "Regional Tourism Priorities".

The References section of this report provides a detailed listing of the materials used in preparing this report.

#### 3. Cariboo Chilcotin Coast

In this Section we will first describe general background information of the tourism region, what we have learned from industry stakeholders on how best to develop tourism related activities. Then we will review what employment growth in the tourism and hospitality sector has been, and present our projections of labour demand, supply and implications of the supply-demand gap.

#### 3.1. Regional Tourism Priorities

Also known as "the land without limits", the Cariboo Chilcotin Coast tourism region stretches from the Pacific coast to the rolling Cariboo Mountains. This region actually encompasses three regions within its vast area. The *Cariboo* follows the routes of pioneers and goldpanners known as the Cariboo Wagon Road from Lillooet to Barkerville. The *Chilcotin* contains forests, lakes, rivers, mountains, ice fields and the flat plains/grasslands of the Chilcotin Plateau. It also includes Tweedsmuir Provincial Park, BC's largest. BC's central *Coast* is the western border of the region, covering 15,000km of private coves and inlets, pristine beaches and rocky shores. This part of the region offers some of the best saltwater fishing and wildlife viewing of sea birds, whales and porpoises in the world, as well as kayaking and boating in pristine waterways.

The Cariboo Chilcotin Coast has always had a wild-west and cowboy adventure spirit in its tourism theme. There are many guest ranches, lodges and guide outfitters based in this region. Barkerville is one of BC's most famous and popular historic sites. The Bowron Lake Canoe Circuit is well known internationally. The region also offers winter activities: nordic skiing, dog sledding, snowmobiling, as well as some downhill skiing and snowboarding (including heli). A possible sternwheeler operation in Williams Lake is the only major (potential) new tourism product anticipated for the region.

The tourism sector in the Cariboo Chilcotin Coast is primarily tied to the region's diverse natural features and the rural, historical setting of the region. Peak season is summer, with lower tourism volumes during the winter and very limited shoulder seasons. Operators in the Cariboo Chilcotin Coast are mostly smaller family-run operations and concentrated in hospitality services, including accommodation, food and beverage, and guiding. There are generally few retail stores. The profitability of these small businesses is highly sensitive to changes in economic and market conditions, dollar exchanges, use of the natural environment, seasonality, taxes, and operating costs. Although offering an abundance of quality fishing, horseback riding and other recreational opportunities, as many as 19 resorts/lodges actually closed within the last 10 years along Highway 24 - "The Fishing Highway". In addition, due to the

importance of the land base to the sustainability of the region's tourism sector, the regional DMO has taken on an additional advocacy role around some of the issues of land use, tenure and rural resort taxation.

Visitation to the Cariboo Chilcotin Coast has declined since the 2008 economic recession and is just starting to show signs of some recovery. Many businesses have been forced to focus their main efforts on staying profitable and have reduced staff levels as a result. On the other hand, operators often cannot find and retain sufficient qualified staff when they need them. The region lacks access to a major population centre and anchor community for drawing employees. This is in addition to the issues of high seasonality and the remoteness of many operations. Also, few young people are pursuing tourism and hospitality careers in the region, due in part to limited tourism and hospitality training in the region. In addition, skills training and the economic focus in the region have been more oriented towards mining, logging and mechanics.

A number of tourism operators in the Cariboo Chilcotin Coast originate from Europe and cater specifically to the European tourist. They often draw some of their staff from overseas, as they are well-equipped and trained with the necessary skills and attitudes for their customer base. The abundance of significant local First Nations populations also offers good prospects for long term labour market development in this region.

## 3.2. Labour Demand Projections by Industry and by Occupation

#### 3.2.1. Regional Employment Growth in the Recent Past

There are five industry groupings that have been selected to represent the tourism and hospitality sector: transportation (including air transportation, rail transportation, and other transportation providing services to tourists), accommodation, food and beverage services, recreation and entertainment services, and travel services. The exact composition of standardized industry classifications (using the North American Industry Classification System, or NAICS) that defines each of these five industries can be found in Appendix I. These groupings are consistent with those presented in the CTHRC/CBoC study.

Due to the lack of data at the regional level, we use employment data available from the Labour Force Survey conducted by Statistics Canada to describe tourism and hospitality related employment change in the following five broader industry groupings:

- Transportation and Warehousing
- Finance, Insurance, Real Estate and Leasing
- Business, Building and Other Support Services
- Information, Culture and Recreation
- Accommodation and Food Services

Within BC between the years of 2010 and 2012, overall employment in the economy grew at an average growth rate of 1.2% per year. Of employment growth in the tourism and hospitality related industries, the one that has experienced strongest growth was transportation and warehousing, at an annual growth rate of 4.3%. Next were business, building and other support services industry and information, culture and recreation industry, at an annual growth rate of 3.6%. Accommodation and food services industry also experienced growth stronger than the provincial average, at 2.8% per year. The only industry that experienced slower than average employment growth was finance, insurance, real estate and leasing, with little change of employment between 2010 and 2012.

By comparison, overall employment growth in the Cariboo development region has been more positive than the provincial average. The information, culture and recreation industry and the accommodation and food services industry in the development region experienced much stronger employment growth than the provincial average in the same industries (4.4% compared with 3.6%, and 6.0% compared with 2.8% respectively). Employment in the transportation and warehousing industry, finance, insurance, real estate and leasing industry, business, building and other support services industry, has experienced decline between 2010 and 2012.

Figure 1: Employment in Tourism and Hospitality Related Industries, Cariboo Development Region and BC

| Employment ('000s)                              | <u>BC</u> |         |         | Annual Growth | Cariboo |      |      | Annual Growth |
|---|-----------|---------|---------|---------------|---------|------|------|---------------|
|   | 2010      | 2011    | 2012    | Rate 2010-12  | 2010    | 2011 | 2012 | Rate 2010-12  |
| All Industries                                  | 2,256.5   | 2,274.7 | 2,312.5 | 1.2%          | 80.3    | 81.2 | 85.2 | 3.0%          |
| Goods-Producing Sector                          | 442.7     | 447.4   | 459.1   | 1.8%          | 22.3    | 21.1 | 27.4 | 10.8%         |
| Agriculture                                     | 31.8      | 26.1    | 26.0    | -9.6%         | 2.0     | х    | х    |               |
| Forestry, Fishing, Mining, Oil and Gas          | 40.6      | 40.1    | 46.1    | 6.6%          | 5.2     | 4.2  | 7.4  | 19.3%         |
| Utilities                                       | 14.0      | 12.8    | 14.9    | 3.2%          | х       | х    | х    |               |
| Construction                                    | 190.5     | 204.6   | 192.9   | 0.6%          | 6.1     | 6.6  | 7.0  | 7.1%          |
| Manufacturing                                   | 165.8     | 163.9   | 179.2   | 4.0%          | 8.4     | 8.8  | 11.3 | 16.0%         |
| Services-Producing Sector                       | 1,813.8   | 1,827.2 | 1,853.4 | 1.1%          | 57.9    | 60.1 | 57.7 | -0.2%         |
| Trade   | 370.1     | 355.0   | 356.6   | -1.8%         | 13.8    | 12.5 | 13.4 | -1.5%         |
| Transportation and Warehousing                  | 118.6     | 124.1   | 128.9   | 4.3%          | 5.6     | 6.5  | 5.4  | -1.8%         |
| Finance, Insurance, Real Estate and Leasing     | 141.8     | 139.4   | 141.8   | 0.0%          | 3.0     | 3.4  | 2.5  | -8.7%         |
| Professional, Scientific and Technical Services | 174.3     | 182.1   | 173.0   | -0.4%         | 3.1     | 4.1  | 3.5  | 6.3%          |
| Business, Building and Other Support Services   | 91.0      | 94.2    | 97.6    | 3.6%          | 2.3     | 2.4  | 2.1  | -4.4%         |
| Educational Services                            | 167.3     | 167.1   | 177.3   | 2.9%          | 5.8     | 5.9  | 6.1  | 2.6%          |
| Health Care and Social Assistance               | 264.2     | 261.3   | 274.5   | 1.9%          | 9.0     | 10.3 | 10.7 | 9.0%          |
| Information, culture and recreation             | 108.1     | 109.4   | 116.0   | 3.6%          | 2.2     | 2.6  | 2.4  | 4.4%          |
| Accommodation and food services                 | 162.3     | 181.8   | 171.6   | 2.8%          | 5.2     | 5.9  | 5.8  | 5.6%          |
| Other services                                  | 104.7     | 103.9   | 113.9   | 4.3%          | 4.4     | 3.1  | 3.2  | -14.7%        |
| Public administration                           | 111.4     | 108.9   | 102.4   | -4.1%         | 3.4     | 3.5  | 2.6  | -12.6%        |

Source: Statistics Canada, Labour Force Survey

#### 3.2.2. Regional Employment Projections

In light of recent employment growth changes in the region and in the province, and along with current economic conditions and outlook, we have updated potential employment growth rates for all industries in the region, the province, as well as employment growth rates in the five tourism and hospitality related industries (these are the broader industry groupings in the BC Labour Market Scenario Model from which tourism and hospitality sector sub-industries employment can be estimated):

- Transportation and Warehousing
- Finance, Insurance, Real Estate and Leasing
- Professional, Scientific & Managerial Services
- Other Services
- Accommodation and Food Services

In order to derive potential employment growth rates in the province from 2013 to 2020, we have referred to the 2013 Budget document for forecasted employment growth rates in 2013 through 2017. Growth rates from 2018 to 2020 are assumed to remain the same as those in the *BC Labour Market Outlook: 2010-2020*, published in 2011.

For the Cariboo development region, employment for all industries is projected to grow at an average rate of 0.5% per year between 2010 and 2020, compared with the projected provincial average of 1.2% per year. Of the five broad tourism and hospitality related industry groups, accommodation and food services industry is projected to grow the fastest, and it will also grow slightly faster than the provincial average for that industry. The other four industry groups are projected to grow at rates slower than the provincial averages in the same industries. This has been summarized in Figure 2.

Figure 2: Projected Employment Growth Rates in Tourism and Hospitality Related Industries, Cariboo Development Region and BC

| P                                     | rojected Annual G | Frowth         |
|---------------------------------------|-------------------|----------------|
| R                                     | ate 2010-2020     |                |
|                                       | <u>BC</u>         | <u>Cariboo</u> |
| All Industries Total                  | 1.2%              | 0.5%           |
| Transportation & Warehousing          | 1.4%              | 0.7%           |
| Finance, Insurance & Real Estate      | 0.8%              | -0.1%          |
| Professional, Scientific & Managerial | 1.8%              | 1.2%           |
| Other Services                        | 1.6%              | 0.0%           |
| Accommodation & Food Services         | 1.7%              | 2.0%           |

Source: BC Labour Market Scenario Model; Updated by RKA

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Within each industry, certain occupations have been selected for analysis as they represent the ones that will have a long term impact on the success of the industries.

As described in the Methodology Section, the underlying occupational shares within each industry have been derived based on the CTHRC/CBoC study.

In Figure 3 we present employment demand projections by industry and by occupation for the tourism and hospitality sector.

Figure 1: Estimated (2010-2012) and Projected (2013-2020) Labour Demand (in Full-Year Jobs) by Industry and by Occupation in Tourism and Hospitality Related Industries, Cariboo

| Industry/Occupation  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Air transportation   | 557   | 635   | 518   | 579   | 584   | 588   | 597   | 596   | 599   | 604   | 625   |
| Air Pilots, Flight Engineers and Flying Instructors (C171)/(NOC2271)         | 123   | 140   | 114   | 127   | 129   | 129   | 131   | 131   | 132   | 133   | 138   |
| Pursers and Flight Attendants (G712)/(NOC6432)                               | 94    | 107   | 87    | 98    | 98    | 99    | 101   | 100   | 101   | 102   | 105   |
| Airline Sales and Service Agents (G713)/(NOC6433)                            | 116   | 133   | 108   | 121   | 122   | 123   | 125   | 125   | 125   | 126   | 131   |
| Aircraft Mechanics & Aircraft Inspectors (H415)/(NOC7315)                    | 38    | 44    | 36    | 40    | 40    | 41    | 41    | 41    | 41    | 42    | 43    |
| Air Transport Ramp Attendants (H737)/(NOC7437)                               | 32    | 37    | 30    | 33    | 34    | 34    | 34    | 34    | 34    | 35    | 36    |
| All other Air Transportation Occupations                                     | 154   | 175   | 143   | 160   | 161   | 162   | 165   | 164   | 165   | 167   | 172   |
| Rail transportation  | 29    | 33    | 27    | 30    | 30    | 30    | 30    | 29    | 29    | 29    | 29    |
| Railway and Yard Locomotive Engineers (H721)/(NOC7361)                       | 13    | 15    | 12    | 13    | 13    | 14    | 14    | 13    | 13    | 13    | 13    |
| Railway Conductors and Brakemen/women (H722)/(NOC7362)                       | 16    | 18    | 15    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16    |
| Other Transportation   | 1,084 | 1,208 | 986   | 1,108 | 1,118 | 1,128 | 1,146 | 1,145 | 1,150 | 1,156 | 1,183 |
| Transportation Managers (A373)/(NOC0713)                                     | 21    | 23    | 19    | 22    | 22    | 22    | 22    | 22    | 22    | 22    | 23    |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                        | 20    | 22    | 18    | 20    | 20    | 20    | 21    | 21    | 21    | 21    | 21    |
| Motor Vehicle Mechanics, Technicians & Mechanical Repairers (H421)/(NOC7321) | 47    | 52    | 42    | 48    | 48    | 48    | 49    | 49    | 49    | 50    | 51    |
| Bus Drivers and Subway and Other Transit Operators (H712)/(NOC7412)          | 330   | 368   | 300   | 338   | 341   | 344   | 349   | 349   | 350   | 353   | 361   |
| Taxi and Limousine Drivers and Chauffeurs (H713)/(NOC7413)                   | 138   | 154   | 126   | 141   | 143   | 144   | 146   | 146   | 147   | 148   | 151   |
| All other Transportation Occupations (excl. air)                             | 528   | 588   | 480   | 539   | 544   | 549   | 558   | 557   | 560   | 563   | 576   |
| Accommodation  | 1,547 | 1,571 | 1,652 | 1,732 | 1,734 | 1,745 | 1,737 | 1,763 | 1,768 | 1,781 | 1,791 |
| Accommodation Service Managers (A222)/(NOC0632)                              | 111   | 113   | 119   | 124   | 124   | 125   | 125   | 127   | 127   | 128   | 129   |
| Program Leaders and Instructors in Rec'n, Sport and Fitness (F154)/(NOC5254) | 76    | 77    | 81    | 85    | 85    | 85    | 85    | 86    | 87    | 87    | 88    |
| Chefs (G411)/(NOC6241)   | 29    | 30    | 31    | 33    | 33    | 33    | 33    | 33    | 33    | 34    | 34    |
| Cooks (G412)/(NOC6242)   | 46    | 46    | 49    | 51    | 51    | 52    | 51    | 52    | 52    | 53    | 53    |
| Bartenders (G512)/(NOC6452)  | 18    | 19    | 20    | 20    | 21    | 21    | 21    | 21    | 21    | 21    | 21    |
| Food and Beverage Servers (G513)/(NOC6453)                                   | 168   | 170   | 179   | 188   | 188   | 189   | 188   | 191   | 192   | 193   | 194   |
| Hotel Front Desk Clerks (G715)/(NOC6435)                                     | 181   | 184   | 194   | 203   | 203   | 204   | 204   | 206   | 207   | 209   | 210   |
| Light Duty Cleaners (G931)/(NOC6661)   | 296   | 300   | 316   | 331   | 332   | 334   | 332   | 337   | 338   | 341   | 343   |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)           | 66    | 67    | 70    | 74    | 74    | 74    | 74    | 75    | 75    | 76    | 76    |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                 | 63    | 64    | 67    | 70    | 71    | 71    | 71    | 72    | 72    | 72    | 73    |
| All other occupations in accommodation                                       | 494   | 502   | 527   | 553   | 553   | 557   | 554   | 562   | 564   | 568   | 571   |

| Industry/Occupation   | 2010  | 2011  | 2012  | 2013  | 2014  | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|---|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Food & Beverage Services  | 4,296 | 4,397 | 4,659 | 4,910 | 4,924 | 4,987  | 5,003  | 5,116  | 5,171  | 5,243  | 5,293  |
| Restaurant & food service manager (A221)/(NOC0631)                          | 334   | 342   | 362   | 381   | 382   | 387    | 388    | 397    | 401    | 407    | 411    |
| Food Service Supervisors (G012)/(NOC6212)                                   | 116   | 119   | 126   | 133   | 133   | 135    | 135    | 138    | 140    | 142    | 143    |
| Cashiers (G311)/(NOC6611)   | 269   | 275   | 292   | 308   | 308   | 312    | 313    | 320    | 324    | 328    | 332    |
| Chefs (G411)/(NOC6241)  | 187   | 192   | 203   | 214   | 215   | 217    | 218    | 223    | 226    | 229    | 231    |
| Cooks (G412)/(NOC6242)  | 598   | 612   | 649   | 684   | 686   | 695    | 697    | 713    | 721    | 731    | 738    |
| Maîtres d'hôtel and Hosts/Hostesses (G511)/(NOC6451)                        | 137   | 141   | 149   | 157   | 157   | 159    | 160    | 164    | 165    | 168    | 169    |
| Bartenders (G512)/(NOC6452)   | 138   | 141   | 150   | 158   | 158   | 160    | 160    | 164    | 166    | 168    | 170    |
| Food and Beverage Servers (G513)/(NOC6453)                                  | 934   | 956   | 1,013 | 1,068 | 1,071 | 1,084  | 1,088  | 1,112  | 1,124  | 1,140  | 1,151  |
| Bakers (G942)/(NOC6252)   | 44    | 45    | 48    | 51    | 51    | 51     | 52     | 53     | 53     | 54     | 55     |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 1,201 | 1,230 | 1,303 | 1,373 | 1,377 | 1,394  | 1,399  | 1,430  | 1,446  | 1,466  | 1,480  |
| Delivery drivers (H714)/(NOC7414)   | 38    | 38    | 41    | 43    | 43    | 44     | 44     | 45     | 45     | 46     | 46     |
| All other Food and Beverage occupations                                     | 299   | 306   | 324   | 342   | 343   | 347    | 348    | 356    | 360    | 365    | 368    |
| Recreation and Entertainment  | 1,422 | 1,199 | 1,104 | 1,351 | 1,368 | 1,362  | 1,344  | 1,346  | 1,353  | 1,371  | 1,385  |
| Recreation and Sport Program and Service Directors (A343)/(NOC0513)         | 38    | 32    | 30    | 36    | 37    | 36     | 36     | 36     | 36     | 37     | 37     |
| Technical Occupations Related to Museums and Art Galleries (F112)/(NOC5212) | 18    | 15    | 14    | 17    | 17    | 17     | 17     | 17     | 17     | 17     | 17     |
| Program Leaders and Instructors in Recreation and Sport (F154)/(NOC5254)    | 165   | 139   | 128   | 157   | 158   | 158    | 156    | 156    | 157    | 159    | 160    |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                       | 84    | 71    | 66    | 80    | 81    | 81     | 80     | 80     | 80     | 81     | 82     |
| Cashiers (G311)/(NOC6611)   | 46    | 39    | 36    | 44    | 45    | 44     | 44     | 44     | 44     | 45     | 45     |
| Security Guards and Related Occupations (G631)/(NOC6651)                    | 22    | 19    | 17    | 21    | 21    | 21     | 21     | 21     | 21     | 21     | 22     |
| Casino Occupations (G723)/(NOC6443)   | 88    | 74    | 68    | 84    | 85    | 84     | 83     | 83     | 84     | 85     | 86     |
| Attendants in Amusement, Recreation and Sport (G731)/(NOC6671)              | 87    | 73    | 68    | 83    | 84    | 83     | 82     | 82     | 83     | 84     | 85     |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)          | 25    | 21    | 19    | 23    | 24    | 24     | 23     | 23     | 23     | 24     | 24     |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 43    | 37    | 34    | 41    | 42    | 41     | 41     | 41     | 41     | 42     | 42     |
| Landscaping and Grounds Maintenance Labourers (I212)/(NOC8612)              | 70    | 59    | 54    | 66    | 67    | 67     | 66     | 66     | 66     | 67     | 68     |
| All other Recreation and Entertainment occupations                          | 736   | 621   | 571   | 699   | 708   | 705    | 696    | 696    | 701    | 710    | 717    |
| Travel Services   | 208   | 245   | 219   | 226   | 224   | 223    | 219    | 220    | 218    | 217    | 219    |
| Retail Trade Managers (A211)/(NOC0621)                                      | 14    | 16    | 15    | 15    | 15    | 15     | 15     | 15     | 15     | 15     | 15     |
| Travel Counsellors (G711)/(NOC6431)   | 78    | 92    | 82    | 85    | 84    | 83     | 82     | 82     | 81     | 81     | 82     |
| All other Travel Services Occupations                                       | 116   | 137   | 123   | 127   | 126   | 125    | 123    | 123    | 122    | 121    | 123    |
| Total Tourism and Related Industries  | 9,142 | 9,289 | 9,164 | 9,936 | 9,981 | 10,063 | 10,077 | 10,214 | 10,289 | 10,402 | 10,525 |

Source: RKA based on BC Labour Market Scenario Model and Conference Board of Canada 2011 Update

The model assumes that all occupations within each industry grow at the same pace as the industry itself. Therefore, occupations in the food and beverage services industry, and accommodation industry are projected to grow the fastest. Similarly, because of the large sizes of accommodation and food and beverage services industries, occupations in these industries are projected to generate the largest number of new openings due to increase in economic activities.

When occupations are combined from different industries represented here, the 10 occupations expected to generate the largest number of new openings (i.e., full-year job openings due to increase in economic activities) are:

- Food counter attendants and kitchen helpers (287);
- Food and beverage servers (243);
- Cooks (147);
- Restaurant and food service managers (77);
- Cashiers (61);
- Chefs (48);
- Light duty cleaners (47);
- Bartenders (35);
- Bus drivers (31); and
- Hotel Front Desk Clerks (29).

#### 3.2.3. Replacement Needs

We note that employment projections by industry and by occupation shown above indicate the level of employment required according to changes in real economic growth in the economy. From these levels of employment in different years we can calculate new openings due to economic expansion. However, we note that even in the absence of any new jobs, there are and will be jobs available because of the need to replace those workers who have left the labour force due to retirement or death. This is referred to as openings due to attrition.

In Figure 4, we have shown total number of new jobs as well as replacement jobs from 2011 and 2020, by industry and by occupation.

Figure 4: Total Job Openings (Expressed in Full-Year Jobs) in Tourism and Hospitality Related Industries, Cariboo, 2011 to 2020

| Industry/Occupation  | Growth | Replacement | Total Job |
|--|--------|-------------|-----------|
|  | Demand | Demand      | Openings  |
| Air transportation   | 68     | 176         | 244       |
| Air Pilots, Flight Engineers and Flying Instructors (C171)/(NOC2271)         | 15     | 42          | 57        |
| Pursers and Flight Attendants (G712)/(NOC6432)                               | 11     | 28          | 40        |
| Airline Sales and Service Agents (G713)/(NOC6433)                            | 14     | 35          | 49        |
| Aircraft Mechanics & Aircraft Inspectors (H415)/(NOC7315)                    | 5      | 13          | 18        |
| Air Transport Ramp Attendants (H737)/(NOC7437)                               | 4      | 9           | 13        |
| All other Air Transportation Occupations                                     | 19     | 48          | 67        |
| Rail transportation  | 0      | 10          | 10        |
| Railway and Yard Locomotive Engineers (H721)/(NOC7361)                       | 0      | 5           | 5         |
| Railway Conductors and Brakemen/women (H722)/(NOC7362)                       | 0      | 6           | 5         |
| Other Transportation   | 99     | 350         | 450       |
| Transportation Managers (A373)/(NOC0713)                                     | 2      | 9           | 11        |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                        | 2      | 4           | 6         |
| Motor Vehicle Mechanics, Technicians & Mechanical Repairers (H421)/(NOC7321) | 4      | 12          | 16        |
| Bus Drivers and Subway and Other Transit Operators (H712)/(NOC7412)          | 31     | 113         | 143       |
| Taxi and Limousine Drivers and Chauffeurs (H713)/(NOC7413)                   | 13     | 47          | 60        |
| All other Transportation Occupations (excl. air)                             | 48     | 166         | 214       |
| Accommodation  | 244    | 377         | 621       |
| Accommodation Service Managers (A222)/(NOC0632)                              | 17     | 41          | 59        |
| Program Leaders and Instructors in Rec'n, Sport and Fitness (F154)/(NOC5254) | 12     | 14          | 26        |
| Chefs (G411)/(NOC6241)   | 5      | 5           | 10        |
| Cooks (G412)/(NOC6242)   | 7      | 8           | 15        |
| Bartenders (G512)/(NOC6452)  | 3      | 2           | 5         |
| Food and Beverage Servers (G513)/(NOC6453)                                   | 26     | 17          | 43        |
| Hotel Front Desk Clerks (G715)/(NOC6435)                                     | 29     | 57          | 86        |
| Light Duty Cleaners (G931)/(NOC6661)   | 47     | 98          | 144       |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)           | 10     | 22          | 32        |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                 | 10     | 5           | 15        |
| All other occupations in accommodation                                       | 78     | 108         | 186       |

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| Industry/Occupation   | Growth | Replacement | Total Job |
|---|--------|-------------|-----------|
|   | Demand | Demand      | Openings  |
| Food & Beverage Services  | 996    | 684         | 1,680     |
| Restaurant & food service manager (A221)/(NOC0631)                          | 77     | 128         | 205       |
| Food Service Supervisors (G012)/(NOC6212)                                   | 27     | 30          | 57        |
| Cashiers (G311)/(NOC6611)   | 62     | 59          | 121       |
| Chefs (G411)/(NOC6241)  | 44     | 35          | 79        |
| Cooks (G412)/(NOC6242)  | 140    | 112         | 252       |
| Maîtres d'hôtel and Hosts/Hostesses (G511)/(NOC6451)                        | 32     | 14          | 46        |
| Bartenders (G512)/(NOC6452)   | 32     | 14          | 46        |
| Food and Beverage Servers (G513)/(NOC6453)                                  | 217    | 97          | 313       |
| Bakers (G942)/(NOC6252)   | 10     | 11          | 21        |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 278    | 108         | 386       |
| Delivery drivers (H714)/(NOC7414)   | 9      | 14          | 23        |
| All other Food and Beverage occupations                                     | 69     | 61          | 131       |
| Recreation and Entertainment  | -36    | 300         | 264       |
| Recreation and Sport Program and Service Directors (A343)/(NOC0513)         | -1     | 12          | 11        |
| Technical Occupations Related to Museums and Art Galleries (F112)/(NOC5212) | 0      | 6           | 6         |
| Program Leaders and Instructors in Recreation and Sport (F154)/(NOC5254)    | -4     | 26          | 22        |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                       | -2     | 16          | 13        |
| Cashiers (G311)/(NOC6611)   | -1     | 8           | 7         |
| Security Guards and Related Occupations (G631)/(NOC6651)                    | -1     | 7           | 6         |
| Casino Occupations (G723)/(NOC6443)   | -2     | 25          | 23        |
| Attendants in Amusement, Recreation and Sport (G731)/(NOC6671)              | -2     | 16          | 14        |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)          | -1     | 7           | 6         |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | -1     | 3           | 2         |
| Landscaping and Grounds Maintenance Labourers (I212)/(NOC8612)              | -2     | 10          | 8         |
| All other Recreation and Entertainment occupations                          | -19    | 164         | 146       |
| Travel Services   | 12     | 72          | 83        |
| Retail Trade Managers (A211)/(NOC0621)                                      | 1      | 6           | 7         |
| Travel Counsellors (G711)/(NOC6431)   | 4      | 24          | 28        |
| All other Travel Services Occupations                                       | 6      | 42          | 49        |
| Total Tourism and Related Industries  | 1,383  | 1,969       | 3,352     |

Source: RKA based on BC Labour Market Scenario Model and Conference Board of Canada 2011 Update

As can be seen in Figure 4, openings due to replacement needs are greater than new job openings. It should also be noted that replacement jobs presented here do not include those due to workforce turnover, and therefore actual number of openings due to replacement needs including turnover can potentially be much higher.

When occupations are combined from different industries represented, the 10 occupations expected to generate the largest number of replacement openings are:

- Food counter attendants and kitchen helpers (116);
- Food and beverage servers (113);
- Restaurant and food service managers (128);
- Cooks (120);
- Bus drivers (113);
- Light duty cleaners (98);
- Cashiers (67);
- Hotel front desk clerks (57);
- Taxi and Limousine Drivers and Chauffeurs (47); and
- Accommodation Service Managers (41).

## 3.3. Labour Supply Projections by Industry and by Occupation

Our research, based on the BC Regional Labour Market Scenario Model (in 2011) along with information from Statistics Canada's Labour Force Survey and the BC Government's 2013 Budget, has shown that overall, the labour force in the province is projected to grow from 2,442,700 in 2010 to approximately 2,713,900 by 2020, representing an average compound growth rate of 1.1% per year during this period. By comparison, employment growth is projected at 1.2% per year over the same period.

For the Cariboo development region, labour force growth is projected to be at an average rate of 0.5% per year between 2010 and 2020, similar to the projected employment growth rate of 0.5% per year in the region during the same period.

Adopting the approaches as described in the Methodology Section, we have projected labour supply by industry and by occupation, using the same industry and occupation classifications as the ones in the labour demand projections.

Figure 5: Estimated (2010-2012) and Projected (2013-2020) Labour Supply (in Full-Year Jobs) by Industry and by Occupation in Tourism and Hospitality Related Industries, Cariboo

| Industry/Occupation  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Air transportation   | 561   | 631   | 513   | 572   | 571   | 571   | 578   | 576   | 576   | 577   | 589   |
| Air Pilots, Flight Engineers and Flying Instructors (C171)/(NOC2271)         | 123   | 138   | 112   | 125   | 125   | 125   | 126   | 126   | 125   | 126   | 128   |
| Pursers and Flight Attendants (G712)/(NOC6432)                               | 95    | 107   | 87    | 97    | 97    | 97    | 99    | 99    | 99    | 99    | 102   |
| Airline Sales and Service Agents (G713)/(NOC6433)                            | 117   | 132   | 107   | 118   | 118   | 118   | 119   | 118   | 118   | 118   | 120   |
| Aircraft Mechanics & Aircraft Inspectors (H415)/(NOC7315)                    | 38    | 43    | 35    | 39    | 39    | 40    | 40    | 40    | 40    | 40    | 41    |
| Air Transport Ramp Attendants (H737)/(NOC7437)                               | 32    | 37    | 30    | 33    | 34    | 34    | 34    | 34    | 34    | 34    | 35    |
| All other Air Transportation Occupations                                     | 155   | 175   | 142   | 158   | 158   | 158   | 160   | 159   | 159   | 160   | 163   |
| Rail transportation  | 28    | 32    | 26    | 29    | 29    | 29    | 29    | 29    | 28    | 28    | 29    |
| Railway and Yard Locomotive Engineers (H721)/(NOC7361)                       | 13    | 15    | 12    | 13    | 13    | 13    | 13    | 13    | 13    | 13    | 13    |
| Railway Conductors and Brakemen/women (H722)/(NOC7362)                       | 15    | 17    | 14    | 16    | 16    | 16    | 16    | 16    | 16    | 15    | 16    |
| Other Transportation   | 1,080 | 1,215 | 988   | 1,100 | 1,099 | 1,099 | 1,113 | 1,109 | 1,109 | 1,112 | 1,135 |
| Transportation Managers (A373)/(NOC0713)                                     | 21    | 24    | 19    | 21    | 21    | 21    | 22    | 22    | 22    | 22    | 22    |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                        | 19    | 22    | 18    | 20    | 20    | 20    | 20    | 20    | 20    | 20    | 21    |
| Motor Vehicle Mechanics, Technicians & Mechanical Repairers (H421)/(NOC7321) | 46    | 52    | 43    | 47    | 47    | 48    | 48    | 48    | 48    | 48    | 50    |
| Bus Drivers and Subway and Other Transit Operators (H712)/(NOC7412)          | 329   | 370   | 300   | 334   | 332   | 332   | 335   | 333   | 332   | 332   | 338   |
| Taxi and Limousine Drivers and Chauffeurs (H713)/(NOC7413)                   | 138   | 157   | 129   | 146   | 147   | 149   | 153   | 154   | 156   | 158   | 163   |
| All other Transportation Occupations (excl. air)                             | 526   | 590   | 479   | 532   | 530   | 529   | 535   | 532   | 531   | 531   | 541   |
| Accommodation  | 1,556 | 1,586 | 1,667 | 1,736 | 1,716 | 1,705 | 1,688 | 1,704 | 1,702 | 1,708 | 1,711 |
| Accommodation Service Managers (A222)/(NOC0632)                              | 112   | 114   | 121   | 126   | 125   | 124   | 123   | 125   | 125   | 125   | 126   |
| Program Leaders and Instructors in Rec'n, Sport and Fitness (F154)/(NOC5254) | 76    | 78    | 82    | 85    | 84    | 83    | 82    | 83    | 83    | 83    | 83    |
| Chefs (G411)/(NOC6241)   | 29    | 30    | 31    | 32    | 32    | 32    | 31    | 32    | 32    | 32    | 32    |
| Cooks (G412)/(NOC6242)   | 46    | 47    | 49    | 51    | 50    | 50    | 49    | 50    | 50    | 50    | 50    |
| Bartenders (G512)/(NOC6452)  | 19    | 19    | 20    | 20    | 20    | 20    | 19    | 19    | 19    | 19    | 19    |
| Food and Beverage Servers (G513)/(NOC6453)                                   | 169   | 172   | 180   | 187   | 184   | 183   | 181   | 182   | 182   | 182   | 182   |
| Hotel Front Desk Clerks (G715)/(NOC6435)                                     | 183   | 186   | 195   | 202   | 199   | 198   | 195   | 197   | 196   | 196   | 196   |
| Light Duty Cleaners (G931)/(NOC6661)   | 295   | 303   | 320   | 335   | 333   | 332   | 331   | 336   | 337   | 340   | 342   |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)           | 66    | 68    | 71    | 74    | 73    | 72    | 71    | 71    | 71    | 71    | 71    |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                 | 63    | 64    | 68    | 70    | 69    | 69    | 68    | 68    | 68    | 68    | 68    |
| All other occupations in accommodation                                       | 498   | 507   | 532   | 554   | 547   | 543   | 537   | 542   | 541   | 542   | 543   |

| Industry/Occupation   | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020   |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Food & Beverage Services  | 4,326 | 4,441 | 4,695 | 4,917 | 4,886 | 4,878 | 4,863 | 4,942 | 4,968 | 5,015 | 5,054  |
| Restaurant & food service manager (A221)/(NOC0631)                          | 337   | 347   | 367   | 385   | 383   | 383   | 382   | 387   | 389   | 392   | 395    |
| Food Service Supervisors (G012)/(NOC6212)                                   | 117   | 120   | 127   | 132   | 131   | 131   | 130   | 132   | 133   | 134   | 135    |
| Cashiers (G311)/(NOC6611)   | 271   | 280   | 296   | 311   | 310   | 311   | 312   | 319   | 323   | 328   | 333    |
| Chefs (G411)/(NOC6241)  | 187   | 193   | 204   | 214   | 213   | 214   | 213   | 216   | 217   | 219   | 221    |
| Cooks (G412)/(NOC6242)  | 599   | 616   | 653   | 685   | 682   | 683   | 680   | 691   | 695   | 701   | 707    |
| Maîtres d'hôtel and Hosts/Hostesses (G511)/(NOC6451)                        | 138   | 141   | 149   | 156   | 155   | 154   | 154   | 157   | 158   | 160   | 161    |
| Bartenders (G512)/(NOC6452)   | 139   | 142   | 149   | 155   | 153   | 152   | 150   | 152   | 151   | 152   | 152    |
| Food and Beverage Servers (G513)/(NOC6453)                                  | 941   | 963   | 1,015 | 1,060 | 1,050 | 1,045 | 1,039 | 1,054 | 1,057 | 1,065 | 1,071  |
| Bakers (G942)/(NOC6252)   | 45    | 46    | 49    | 51    | 51    | 51    | 51    | 52    | 52    | 53    | 54     |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 1,211 | 1,240 | 1,307 | 1,365 | 1,353 | 1,347 | 1,340 | 1,360 | 1,365 | 1,376 | 1,385  |
| Delivery drivers (H714)/(NOC7414)   | 38    | 39    | 41    | 43    | 42    | 42    | 42    | 43    | 43    | 43    | 43     |
| All other Food and Beverage occupations                                     | 302   | 315   | 338   | 359   | 362   | 366   | 369   | 379   | 384   | 392   | 399    |
| Recreation and Entertainment  | 1,422 | 1,237 | 1,137 | 1,370 | 1,362 | 1,339 | 1,312 | 1,301 | 1,296 | 1,299 | 1,302  |
| Recreation and Sport Program and Service Directors (A343)/(NOC0531)         | 38    | 33    | 31    | 37    | 37    | 37    | 36    | 36    | 36    | 36    | 36     |
| Technical Occupations Related to Museums and Art Galleries (F112)/(NOC5212) | 18    | 15    | 14    | 17    | 17    | 17    | 16    | 16    | 16    | 16    | 16     |
| Program Leaders and Instructors in Recreation and Sport (F154)/(NOC5254)    | 165   | 143   | 131   | 158   | 156   | 153   | 150   | 149   | 148   | 148   | 148    |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                       | 85    | 74    | 68    | 82    | 82    | 81    | 79    | 79    | 79    | 79    | 79     |
| Cashiers (G311)/(NOC6611)   | 46    | 40    | 37    | 45    | 45    | 44    | 43    | 43    | 43    | 44    | 44     |
| Security Guards and Related Occupations (G631)/(NOC6651)                    | 22    | 19    | 18    | 21    | 21    | 21    | 20    | 20    | 20    | 20    | 20     |
| Casino Occupations (G723)/(NOC6443)   | 88    | 77    | 70    | 85    | 84    | 83    | 81    | 81    | 81    | 81    | 81     |
| Attendants in Amusement, Recreation and Sport (G731)/(NOC6671)              | 86    | 75    | 69    | 83    | 83    | 81    | 79    | 79    | 79    | 79    | 79     |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)          | 25    | 21    | 20    | 24    | 24    | 23    | 23    | 23    | 23    | 23    | 23     |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 43    | 38    | 35    | 42    | 42    | 41    | 40    | 40    | 40    | 40    | 40     |
| Landscaping and Grounds Maintenance Labourers (I212)/(NOC8612)              | 70    | 60    | 55    | 66    | 65    | 64    | 62    | 61    | 60    | 59    | 59     |
| All other Recreation and Entertainment occupations                          | 736   | 640   | 589   | 710   | 706   | 695   | 681   | 676   | 673   | 675   | 677    |
| Travel Services   | 209   | 246   | 221   | 229   | 228   | 227   | 225   | 228   | 227   | 228   | 233    |
| Retail Trade Managers (A211)/(NOC0621)                                      | 14    | 17    | 15    | 16    | 16    | 16    | 16    | 16    | 16    | 16    | 16     |
| Travel Counsellors (G711)/(NOC6431)   | 78    | 92    | 82    | 85    | 85    | 85    | 84    | 85    | 85    | 85    | 86     |
| All other Travel Services Occupations                                       | 117   | 138   | 123   | 128   | 128   | 127   | 126   | 127   | 127   | 127   | 130    |
| Total Tourism and Related Industries  | 9,182 | 9,389 | 9,247 | 9,953 | 9,890 | 9,848 | 9,808 | 9,888 | 9,908 | 9,967 | 10,052 |

Source: RKA based on BC Labour Market Scenario Model and Conference Board of Canada 2011 Update

A slower labour force supply growth rate implies that employers will increasingly face pressure to draw those who otherwise would have been unemployed into the labour pool. Alternatively, employers can use less staff, increase productivity, retain better their existing staff, etc.

Within industries, occupational labour supply shows average annual growth rates different from the industry they fall into. This is in line with the underlying assumptions regarding potential labour supply growth patterns from the CTHRC/CBoC study.

It is also noted that labour supply growth rates in the occupations of restaurant and food services managers and chefs have been adjusted downwards in line with local labour market intelligence.

#### 3.4. Supply and Demand Imbalances

When labour demand in an industry or an occupation outpaces labour supply, labour shortage arises. In the table that follows, we show the results of combining labour supply and labour demand by industry and by occupation as described in the previous two sub-sections. It is noted that a positive sign represents labour shortage in that industry or occupation in a given year, while a negative sign represents labour surplus.

Figure 6: Estimated (2010-2012) and Projected (2013-2020) Labour Shortage (in Full-Year Jobs) by Industry and by Occupation in Tourism and Hospitality Related Industries, Cariboo

| Industry/Occupation  | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|------|------|------|------|------|------|------|
| Air transportation   | -4   | 4    | 4    | 8    | 13   | 17   | 19   | 20   | 23   | 27   | 36   |
| Air Pilots, Flight Engineers and Flying Instructors (C171)/(NOC2271)         | 0    | 2    | 2    | 2    | 4    | 4    | 5    | 6    | 6    | 8    | 10   |
| Pursers and Flight Attendants (G712)/(NOC6432)                               | -1   | 0    | 0    | 0    | 1    | 2    | 2    | 2    | 2    | 2    | 3    |
| Airline Sales and Service Agents (G713)/(NOC6433)                            | -1   | 1    | 2    | 3    | 4    | 5    | 6    | 6    | 7    | 8    | 10   |
| Aircraft Mechanics & Aircraft Inspectors (H415)/(NOC7315)                    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    |
| Air Transport Ramp Attendants (H737)/(NOC7437)                               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    |
| All other Air Transportation Occupations                                     | -2   | 0    | 1    | 2    | 3    | 4    | 5    | 5    | 6    | 7    | 9    |
| Rail transportation  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 0    | 0    |
| Railway and Yard Locomotive Engineers (H721)/(NOC7361)                       | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Railway Conductors and Brakemen/women (H722)/(NOC7362)                       | 1    | 1    | 0    | 1    | 1    | 1    | 1    | 1    | 0    | 0    | 0    |
| Other Transportation   | 4    | -7   | -2   | 7    | 19   | 29   | 32   | 36   | 40   | 45   | 48   |
| Transportation Managers (A373)/(NOC0713)                                     | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    |
| Motor Vehicle Mechanics, Technicians & Mechanical Repairers (H421)/(NOC7321) | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| Bus Drivers and Subway and Other Transit Operators (H712)/(NOC7412)          | 1    | -2   | 0    | 4    | 8    | 12   | 14   | 16   | 18   | 21   | 23   |
| Taxi and Limousine Drivers and Chauffeurs (H713)/(NOC7413)                   | 0    | -3   | -3   | -4   | -5   | -5   | -7   | -8   | -9   | -10  | -12  |
| All other Transportation Occupations (excl. air)                             | 2    | -2   | 1    | 8    | 14   | 20   | 23   | 26   | 29   | 32   | 35   |
| Accommodation  | -9   | -15  | -15  | -4   | 18   | 41   | 50   | 58   | 66   | 73   | 80   |
| Accommodation Service Managers (A222)/(NOC0632)                              | -1   | -2   | -2   | -2   | 0    | 1    | 1    | 2    | 2    | 3    | 3    |
| Program Leaders and Instructors in Rec'n, Sport and Fitness (F154)/(NOC5254) | -1   | -1   | -1   | 0    | 1    | 2    | 3    | 3    | 4    | 4    | 5    |
| Chefs (G411)/(NOC6241)   | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 2    | 2    | 2    | 2    |
| Cooks (G412)/(NOC6242)   | 0    | 0    | 0    | 0    | 1    | 2    | 2    | 2    | 3    | 3    | 3    |
| Bartenders (G512)/(NOC6452)  | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 2    | 2    | 2    | 2    |
| Food and Beverage Servers (G513)/(NOC6453)                                   | -1   | -1   | -1   | 1    | 3    | 6    | 7    | 9    | 10   | 11   | 12   |
| Hotel Front Desk Clerks (G715)/(NOC6435)                                     | -1   | -2   | -1   | 1    | 4    | 7    | 8    | 10   | 11   | 12   | 13   |
| Light Duty Cleaners (G931)/(NOC6661)   | 0    | -2   | -4   | -4   | -1   | 1    | 1    | 1    | 1    | 1    | 0    |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)           | -1   | -1   | -1   | 0    | 1    | 2    | 3    | 4    | 4    | 5    | 6    |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                 | -1   | -1   | 0    | 0    | 1    | 2    | 3    | 3    | 4    | 4    | 5    |
| All other occupations in accommodation                                       | -4   | -5   | -5   | -1   | 7    | 14   | 18   | 21   | 24   | 26   | 29   |

| Industry/Occupation   | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Food & Beverage Services  | -30  | -44  | -35  | -7   | 38   | 109  | 140  | 174  | 204  | 228  | 239  |
| Restaurant & food service manager (A221)/(NOC0631)                          | -3   | -5   | -5   | -4   | -1   | 4    | 7    | 10   | 12   | 15   | 16   |
| Food Service Supervisors (G012)/(NOC6212)                                   | -1   | -1   | -1   | 0    | 2    | 4    | 5    | 6    | 7    | 8    | 8    |
| Cashiers (G311)/(NOC6611)   | -2   | -4   | -5   | -4   | -2   | 2    | 1    | 1    | 1    | 0    | -2   |
| Chefs (G411)/(NOC6241)  | 0    | -1   | -1   | 0    | 1    | 4    | 5    | 7    | 8    | 9    | 10   |
| Cooks (G412)/(NOC6242)  | 0    | -4   | -4   | -1   | 4    | 12   | 17   | 22   | 26   | 30   | 31   |
| Maîtres d'hôtel and Hosts/Hostesses (G511)/(NOC6451)                        | -1   | -1   | 0    | 1    | 3    | 5    | 6    | 7    | 8    | 8    | 8    |
| Bartenders (G512)/(NOC6452)   | -1   | -1   | 0    | 2    | 5    | 8    | 10   | 12   | 14   | 17   | 18   |
| Food and Beverage Servers (G513)/(NOC6453)                                  | -7   | -7   | -2   | 8    | 21   | 40   | 49   | 59   | 67   | 75   | 80   |
| Bakers (G942)/(NOC6252)   | 0    | -1   | -1   | -1   | 0    | 0    | 1    | 1    | 1    | 1    | 1    |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | -10  | -10  | -4   | 8    | 24   | 48   | 59   | 70   | 81   | 90   | 95   |
| Delivery drivers (H714)/(NOC7414)   | 0    | 0    | 0    | 0    | 1    | 1    | 2    | 2    | 2    | 3    | 3    |
| All other Food and Beverage occupations                                     | -3   | -9   | -13  | -17  | -19  | -19  | -21  | -23  | -25  | -27  | -31  |
| Recreation and Entertainment  | -1   | -37  | -34  | -19  | 6    | 23   | 32   | 44   | 57   | 72   | 84   |
| Recreation and Sport Program and Service Directors (A343)/(NOC0531)         | 0    | -1   | -1   | -1   | 0    | 0    | 0    | 0    | 1    | 1    | 1    |
| Technical Occupations Related to Museums and Art Galleries (F112)/(NOC5212) | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    |
| Program Leaders and Instructors in Recreation and Sport (F154)/(NOC5254)    | -1   | -4   | -3   | -1   | 2    | 5    | 6    | 7    | 9    | 11   | 12   |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                       | 0    | -3   | -3   | -2   | -1   | 0    | 0    | 1    | 2    | 2    | 3    |
| Cashiers (G311)/(NOC6611)   | 0    | -1   | -1   | -1   | 0    | 0    | 0    | 1    | 1    | 1    | 1    |
| Security Guards and Related Occupations (G631)/(NOC6651)                    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 2    | 2    |
| Casino Occupations (G723)/(NOC6443)   | 0    | -2   | -2   | -1   | 0    | 1    | 2    | 2    | 3    | 4    | 5    |
| Attendants in Amusement, Recreation and Sport (G731)/(NOC6671)              | 1    | -2   | -1   | 0    | 1    | 2    | 3    | 3    | 4    | 5    | 6    |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)          | 0    | -1   | -1   | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 0    | -1   | -1   | -1   | 0    | 1    | 1    | 1    | 2    | 2    | 2    |
| Landscaping and Grounds Maintenance Labourers (I212)/(NOC8612)              | 0    | -2   | -1   | 0    | 2    | 3    | 4    | 5    | 6    | 8    | 9    |
| All other Recreation and Entertainment occupations                          | 0    | -20  | -18  | -11  | 2    | 10   | 15   | 21   | 27   | 35   | 41   |
| Travel Services   | -1   | -1   | -2   | -3   | -4   | -4   | -6   | -8   | -10  | -11  | -13  |
| Retail Trade Managers (A211)/(NOC0621)                                      | 0    | 0    | 0    | 0    | -1   | -1   | -1   | -1   | -1   | -1   | -1   |
| Travel Counsellors (G711)/(NOC6431)   | 0    | 0    | 0    | -1   | -1   | -1   | -2   | -2   | -3   | -4   | -5   |
| All other Travel Services Occupations                                       | 0    | 0    | -1   | -2   | -2   | -2   | -3   | -4   | -5   | -6   | -7   |
| Total Tourism and Related Industries  | -40  | -99  | -82  | -16  | 91   | 215  | 268  | 326  | 381  | 435  | 473  |

Source: RKA based on BC Labour Market Scenario Model and Conference Board of Canada 2011 Update

#### 3.5. Summary of Findings

In this Section, we have provided a general overview of the tourism market and products in the Cariboo Chilcotin Coast region, along with industry stakeholders' expectation on the regional strength and development priorities in the near future. We then examined recent employment growth patterns for industries within the tourism and hospitality sector. Then we presented our projections of potential labour demand, labour supply, and supply-demand gaps for five tourism and hospitality industries (transportation including air, rail and other transportation; accommodation; food and beverage services; recreation and entertainment; and travel services), as well as occupations within each industry.

Overall, labour demand in the tourism and hospitality sector in the Cariboo Chilcotin Coast region is projected to grow at an average compound rate of 1.4% per year between 2010 and 2020, which is slightly more slowly than the labour demand growth in the tourism and hospitality sector in BC over the same period (1.6% per year).

Within the sector in the region, employment in the food and beverage services industry is expected to grow faster than the average rate of the entire sector, while employment in rail transportation and in the recreation and entertainment industry is expected to experience little growth at all. In total, about 1,380 new full-year jobs are expected to be generated in the region as a result of increased tourism activities between 2010 and 2020.

In addition, we have shown that a total of 2,000 full-year jobs may become available in the region as employers seek replacement for those who will leave the workforce due to retirement or death. Replacement jobs in the tourism and hospitality sector in the region account for 59% of all potential job openings. By comparison, replacement jobs in the tourism and hospitality sector across all regions account for 57% of all potential job openings. This implies that the average age of workers in the Cariboo Chilcotin Coast region tourism and hospitality sector is the higher than their provincial counterparts, and therefore the pressure for employers to look for replacement workers adds to the tightness of the labour market.

Figure 7: Summary of Potential Labour Demand (in Full-Year Jobs), both due to Growth and Replacement Needs, by Industry and by Occupation in Tourism and Hospitality Related Industries, Cariboo Chilcotin Coast and the Province

|  | Cariboo |         |          | BC     |         |          |
|--|---------|---------|----------|--------|---------|----------|
| Industry/Occupation  | Growth  | Rplcmnt | Annual   | Growth | Rplcmnt | Annual   |
|  | Demand  | Demand  | Grwth Rt | Demand | Demand  | Grwth Rt |
| Air transportation   | 70      | 180     | 1.2%     | 2,360  | 4,100   | 1.8%     |
| Air Pilots, Flight Engineers and Flying Instructors (C171)/(NOC2271)         | 20      | 40      |          | 520    | 960     |          |
| Pursers and Flight Attendants (G712)/(NOC6432)                               | 10      | 30      |          | 400    | 670     |          |
| Airline Sales and Service Agents (G713)/(NOC6433)                            | 10      | 40      |          | 490    | 830     |          |
| Aircraft Mechanics & Aircraft Inspectors (H415)/(NOC7315)                    | 0       | 10      |          | 150    | 290     |          |
| Air Transport Ramp Attendants (H737)/(NOC7437)                               | 0       | 10      |          | 130    | 220     |          |
| All other Air Transportation Occupations                                     | 20      | 50      |          | 660    | 1,130   |          |
| Rail transportation  | 0       | 10      | -0.1%    | 30     | 230     | 0.6%     |
| Railway and Yard Locomotive Engineers (H721)/(NOC7361)                       | 0       | 0       |          | 10     | 100     |          |
| Railway Conductors and Brakemen/women (H722)/(NOC7362)                       | 0       | 10      |          | 20     | 130     |          |
| Other Transportation   | 100     | 350     | 0.9%     | 3,850  | 7,260   | 1.6%     |
| Transportation Managers (A373)/(NOC0713)                                     | 0       | 10      |          | 80     | 200     |          |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                        | 0       | 0       |          | 70     | 80      |          |
| Motor Vehicle Mechanics, Technicians & Mechanical Repairers (H421)/(NOC7321) | 0       | 10      |          | 150    | 270     |          |
| Bus Drivers and Subway and Other Transit Operators (H712)/(NOC7412)          | 30      | 110     |          | 1,180  | 2,290   |          |
| Taxi and Limousine Drivers and Chauffeurs (H713)/(NOC7413)                   | 10      | 50      |          | 510    | 990     |          |
| All other Transportation Occupations (excl. air)                             | 50      | 170     |          | 1,840  | 3,430   |          |
| Accommodation  | 240     | 390     | 1.5%     | 7,560  | 11,030  | 1.7%     |
| Accommodation Service Managers (A222)/(NOC0632)                              | 20      | 40      |          | 520    | 1,090   |          |
| Program Leaders and Instructors in Rec'n, Sport and Fitness (F154)/(NOC5254) | 10      | 10      |          | 340    | 360     |          |
| Chefs (G411)/(NOC6241)   | 0       | 10      |          | 170    | 190     |          |
| Cooks (G412)/(NOC6242)   | 10      | 10      |          | 220    | 260     |          |
| Bartenders (G512)/(NOC6452)  | 0       | 0       |          | 80     | 50      |          |
| Food and Beverage Servers (G513)/(NOC6453)                                   | 30      | 20      |          | 780    | 560     |          |
| Hotel Front Desk Clerks (G715)/(NOC6435)                                     | 30      | 60      |          | 840    | 1,650   |          |
| Light Duty Cleaners (G931)/(NOC6661)   | 50      | 100     |          | 1,720  | 2,840   |          |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)           | 10      | 20      |          | 310    | 630     |          |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                 | 10      | 10      |          | 290    | 240     |          |
| All other occupations in accommodation                                       | 80      | 110     |          | 2,300  | 3,160   |          |

|   | Cariboo |         |          | BC     |         |          |
|---|---------|---------|----------|--------|---------|----------|
| Industry/Occupation   | Growth  | Rplcmnt | Annual   | Growth | Rplcmnt | Annual   |
|   | Demand  | Demand  | Grwth Rt | Demand | Demand  | Grwth Rt |
| Food & Beverage Services  | 1,000   | 680     | 2.1%     | 25,250 | 24,720  | 1.7%     |
| Restaurant & food service manager (A221)/(NOC0631)                          | 80      | 130     |          | 1,980  | 3,780   |          |
| Food Service Supervisors (G012)/(NOC6212)                                   | 30      | 30      |          | 680    | 890     |          |
| Cashiers (G311)/(NOC6611)   | 60      | 60      |          | 1,580  | 1,520   |          |
| Chefs (G411)/(NOC6241)  | 40      | 40      |          | 1,350  | 1,340   |          |
| Cooks (G412)/(NOC6242)  | 140     | 110     |          | 3,530  | 4,070   |          |
| Maîtres d'hôtel and Hosts/Hostesses (G511)/(NOC6451)                        | 30      | 10      |          | 790    | 550     |          |
| Bartenders (G512)/(NOC6452)   | 30      | 10      |          | 770    | 540     |          |
| Food and Beverage Servers (G513)/(NOC6453)                                  | 220     | 100     |          | 5,390  | 3,690   |          |
| Bakers (G942)/(NOC6252)   | 10      | 10      |          | 270    | 370     |          |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 280     | 110     |          | 6,960  | 5,570   |          |
| Delivery drivers (H714)/(NOC7414)   | 10      | 10      |          | 220    | 390     |          |
| All other Food and Beverage occupations                                     | 70      | 60      |          | 1,740  | 2,010   |          |
| Recreation and Entertainment  | -40     | 320     | -0.3%    | 6,420  | 10,990  | 1.3%     |
| Recreation and Sport Program and Service Directors (A343)/(NOC0513)         | 0       | 10      |          | 170    | 440     |          |
| Technical Occupations Related to Museums and Art Galleries (F112)/(NOC5212) | 0       | 10      |          | 70     | 180     |          |
| Program Leaders and Instructors in Recreation and Sport (F154)/(NOC5254)    | 0       | 30      |          | 740    | 850     |          |
| Retail Salespersons and Sales Clerks (G211)/(NOC6421)                       | 0       | 20      |          | 430    | 610     |          |
| Cashiers (G311)/(NOC6611)   | 0       | 10      |          | 210    | 250     |          |
| Security Guards and Related Occupations (G631)/(NOC6651)                    | 0       | 10      |          | 80     | 240     |          |
| Casino Occupations (G723)/(NOC6443)   | 0       | 30      |          | 520    | 1,040   |          |
| Attendants in Amusement, Recreation and Sport (G731)/(NOC6671)              | 0       | 20      |          | 390    | 580     |          |
| Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)          | 0       | 10      |          | 100    | 280     |          |
| Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)                | 0       | 0       |          | 200    | 200     |          |
| Landscaping and Grounds Maintenance Labourers (I212)/(NOC8612)              | 0       | 10      |          | 300    | 540     |          |
| All other Recreation and Entertainment occupations                          | -20     | 160     |          | 3,220  | 5,780   |          |
| Travel Services   | 10      | 70      | 0.5%     | 1,240  | 3,450   | 1.2%     |
| Retail Trade Managers (A211)/(NOC0621)                                      | 0       | 10      |          | 80     | 250     |          |
| Travel Counsellors (G711)/(NOC6431)   | 0       | 20      |          | 450    | 1,240   |          |
| All other Travel Services Occupations                                       | 10      | 40      |          | 700    | 1,960   |          |
| Total Tourism and Related Industries  | 1,380   | 2,000   | 1.4%     | 46,700 | 61,800  | 1.6%     |

Source: RKA based on BC Labour Market Scenario Model and Conference Board of Canada 2012 Update

Overall, labour surpluses existed in 2010, 2011, and 2012, and are expected in 2013. The shortages are expected to resume starting 2014 and will last through the end of the projection period. Such a pattern is in line with occupational labour supply and demand gaps in the CTHRC/CBoC study.

In absolute terms, because of the size of the sub-industries, the accommodation industry, the food and beverage services industry and the recreation and entertainment industry are expected to generate the largest share of the projected labour shortages. For example, by 2020, expected labour shortage in the accommodation industry will account for 17% of all shortages in that year in the tourism and hospitality sector, while shortage in the food and beverage services industry accounts for 51% of all shortages in that year in the sector. Expected shortage in the recreation and entertainment industry will account for 18% of the total shortages in the sector in that year.

When expressed as a percentage of potential labour supply, the overall labour shortages are projected to be about 1% of labour supply in 2014 (or equivalent to 90 full-year jobs), gradually increasing to almost 5% of labour supply by 2020 (or equivalent to 470 full-year jobs).<sup>5</sup> Again such a pattern is in line with the occupational labour imbalance patterns in the CTHRC/CBoC study.

In relative terms, the air transportation industry and the recreation and entertainment industry are expected to experience shortages more intensely than the sector average, with shortages reaching 6% of labour supply by 2020. On the other hand, the travel services industry is not expected to experience any labour shortages at all. Occupation wise, bartenders; security guards; landscaping and ground maintenance labourers; janitors, caretakers and building superintendents; and airline sales and service agents are expected to experience most severe shortages.

We emphasize that these results are based upon a continuation of the historical and current patterns of occupational and industry distribution within the work force. That is the assumption that approximately the same percentage of workers will choose to work in the tourism and hospitality sector and occupations as in the past, and is in line with those adopted in the CTHRC/CBoC study. We have no data on which to base a change of this assumption. If, for any reason such as the availability of higher paying jobs in other sectors, a smaller percentage of workers choose to enter tourism and hospitality, shortages would be much greater.

It is important to remember that even in the absence of labour shortage in a given year, the tourism and hospitality sector generates a significant number of full-year jobs for employers to fill. As we showed in Figure 4, over the 10 year period

The reason to express shortages (or surpluses) as a percentage of labour supply is to normalize the shortage (or surplus) values so that comparisons across industries and/or occupations are made easy.

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there are expected to be a total of 2,000 full-year job openings for replacement needs, or about 200 openings to fill per year. This is in addition to a total of 1,400 full-year jobs (or about 140 full-year jobs per year) expected as a result of labour demand due to increased economic activities.

Also, because this analysis does not account for normal turnover in the workforce (employee quits and firings), these potential labour shortage estimates are very conservative, as turnover in tourism is a significant factor.

Recent analysis by the CTHRC demonstrates that for B.C., turnover-related employment demand will be responsible for approximately 85% of total labour shortages in the projection period.<sup>6</sup> Turnover-related employment demand will thus have a significant impact on the ability of employers to attract and recruit quality staff to fill vacancies during the projection period.

See The Future of Canada's Tourism Sector: Shortages to Resurface as Labour Market Tightens, p. 21. March 2012.

<a href="http://cthrc.ca/en/research\_publications/~/media/Files/CTHRC/Home/research\_publications/labour\_marker-left-short-left-sh

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More than 100 Tourism Plans, Assessments, Situation Analyses and Workshop reports prepared for individual communities throughout all six BC tourism regions as part of the Tourism British Columbia Community Tourism Foundations program. The Community Foundations program assists communities to develop a comprehensive multi-year tourism plan for their area.

# Appendix I List of Industry Included in Total Tourism and Hospitality Employment Conforming to HRM

Detailed list of tourism industries by North American Industry Classification System (NAICS) 2002

#### **Transportation**

- Air transportation
- 4811 Scheduled air transport
- 4812 Non-scheduled air transport
- All other transportation industries
- 4821 Rail transportation

#### of which:

- o Tourism sub-industries
- 482114 Passenger rail transportation
- Non-tourism sub-industries
- o 482112 Short-haul freight rail transportation
- 482113 Mainline freight rail transportation
- 4831 Deep sea, coastal and great lakes water transportation
- 4832 Inland water transportation
- 4851 Urban transit systems
- 4852 Interurban and rural bus transportation
- 4853 Taxi and limousine service
- 4854 School and employee bus transportation
- 4855 Charter bus industry
- 4859 Other transit and ground passenger transportation
- 4871 Scenic and sightseeing transportation, land
- 4872 Scenic and sightseeing transportation, water
- 4879 Scenic and sightseeing transportation, other
- 5A0510 Automotive equipment rental and leasing

#### of which:

- o Tourism sub-industries
- o 532111 Passenger car rental
- 532120 Truck, utility trailer and RV (recreational vehicle) rental and leasing
- Non-tourism sub-industries
- 532112 Passenger car leasing

#### **Accommodation**

- 7211 Traveller accommodation
- 721A RV (recreational vehicle) parks and recreational camps
  - of which:
  - Tourism sub-industries

- o 721211 RV (recreational vehicle) parks and campgrounds
- o 721212 Hunting and fishing camps
- 721213 Recreational (except hunting and fishing) and vacation camps
- o Non-tourism sub-industries
- o 721310 Rooming and boarding houses

#### Food and beverage services

- 7220 Food services and drinking places
  - of which:
  - o Tourism sub-industries
  - 72211 Full-service restaurants
  - 72221 Limited-service eating places
  - o 72241 Drinking places (alcoholic beverages)
  - o Non-tourism sub-industries
  - 72231 Food service contractors
  - o 72232 Caterers
  - 72233 Mobile food services

#### Recreation and entertainment

- 51213 Motion picture and video exhibition
  - 7110 Performing arts, spectator sports and related industries
    - of which:
    - o Tourism sub-industries
    - o 7111 Performing arts companies
    - o 7112 Spectator sports
    - o 7115 Independent artists, writers and performers
    - Non-tourism sub-industries
    - o 7113 Promoters (presenters) of performing arts, sports and similar events
    - 7114 Agents and managers for artists, athletes, entertainers and other public figures
- 7121 Heritage institutions
- 713A Amusement and recreation industries
- 7131 Amusement parks and arcades
- 7132 Gambling industries
- 7139 Other amusement and recreation industries
  - of which:
  - o Tourism sub-industries
  - 71391 Golf courses and country clubs
  - o 71392 Skiing facilities
  - o 71393 Marinas
  - o 71395 Bowling centres
  - 71399 All other amusement and recreation industries
  - Non-tourism sub-industries
  - 71394 Fitness and recreational sports centres

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#### **Travel services**

5615 Travel arrangement and reservation services

# Appendix II List of Occupations within Each Tourism and Hospitality Industry Conforming to HRM

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#### Air transportation

Air Pilots, Flight Engineers and Flying Instructors (C171)/(NOC2271)

Pursers and Flight Attendants (G712)/(NOC6432)

Airline Sales and Service Agents (G713)/(NOC6433)

Aircraft Mechanics & Aircraft Inspectors (H415)/(NOC7315)

Air Transport Ramp Attendants (H737)/(NOC7437)

All other Air Transportation Occupations

#### Rail transportation

Railway and Yard Locomotive Engineers (H721)/(NOC7361)

Railway Conductors and Brakemen/women (H722)/(NOC7362)

#### Other Transportation

Transportation Managers (A373)/(NOC0713)

Retail Salespersons and Sales Clerks (G211)/(NOC6421)

Motor Vehicle Mechanics, Technicians & Mechanical Repairers (H421)/(NOC7321)

Bus Drivers and Subway and Other Transit Operators (H712)/(NOC7412)

Taxi and Limousine Drivers and Chauffeurs (H713)/(NOC7413)

All other Transportation Occupations (excl. air)

#### Accommodation

Accommodation Service Managers (A222)/(NOC0632)

Program Leaders and Instructors in Rec'n, Sport and Fitness (F154)/(NOC5254)

Chefs (G411)/(NOC6241)

Cooks (G412)/(NOC6242)

Bartenders (G512)/(NOC6452)

Food and Beverage Servers (G513)/(NOC6453)

Hotel Front Desk Clerks (G715)/(NOC6435)

Light Duty Cleaners (G931)/(NOC6661)

Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)

Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)

All other occupations in accommodation

#### Food & Beverage Services

Restaurant & food service manager (A221)/(NOC0631)

Food Service Supervisors (G012)/(NOC6212)

Cashiers (G311)/(NOC6611)

Chefs (G411)/(NOC6241)

Cooks (G412)/(NOC6242)

Maîtres d'hôtel and Hosts/Hostesses (G511)/(NOC6451)

Bartenders (G512)/(NOC6452)

Food and Beverage Servers (G513)/(NOC6453)

Bakers (G942)/(NOC6252)

Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)

Delivery drivers (H714)/(NOC7414)

All other Food and Beverage occupations

#### Recreation and Entertainment

Recreation and Sport Program and Service Directors (A343)/(NOC0531)

Technical Occupations Related to Museums and Art Galleries (F112)/(NOC5212)

Program Leaders and Instructors in Recreation and Sport (F154)/(NOC5254)

Retail Salespersons and Sales Clerks (G211)/(NOC6421)

Cashiers (G311)/(NOC6611)

Security Guards and Related Occupations (G631)/(NOC6651)

Casino Occupations (G723)/(NOC6443)

Attendants in Amusement, Recreation and Sport (G731)/(NOC6671)

Janitors, Caretakers and Building Superintendents (G933)/(NOC6663)

Food Counter Attendants and Kitchen Helpers (G961)/(NOC6641)

Landscaping and Grounds Maintenance Labourers (I212)/(NOC8612)

All other Recreation and Entertainment occupations

#### **Travel Services**

Retail Trade Managers (A211)/(NOC0621)

Travel Counsellors (G711)/(NOC6431)

All other Travel Services Occupations

# Appendix III Concordance between Industry Groupings in BC Labour Market Scenario Model and NAICS

3 Digit BC LMSM Industries NAICS Codes

Agriculture (111, 112, 1151, 1152)

Other Primary Forestry and logging (113, 1153)&Fishing, hunting and trapping (114)& Mining, Quarrying, and Oil and Gas Extraction (21)

UtilitiesUtilities (22)ConstructionConstruction (23)ManufacturingManufacturing (31-33)

Trade Wholesale Trade (41)& Retail Trade (44-45)
Transportation and Warehousing Transportation and Warehousing (48-49)

Finance and Insurance (52)& Real Estate and Rental and Leasing (53)

Professional, Scientific and Technical Services (54) & Management of Companies and Enterprises (55) & Administrative and Support, Waste

PSM Management and Remediation Services (56)

Education services Educational Services (61)

Health Services Health Care and Social Assistance (62)

Other Services Information and Cultural Industries (51) & Arts, Entertainment and Recreation (71) & Other Services (except Public Administration) (81)

Accommodation and Food Services Accommodation & Food Services (72)

Government Services Public Administration (91)

#### Appendix IV List of Stakeholders Interviewed

- Emilie Cayer-Huard
   Community Development Specialist
   Kootenay Rockies Tourism
- Anthony Everett CEO Northern BC Tourism
- Jennifer Houiellebecq
   Industry Development and Research Specialist
   Thompson Okanagan Tourism Association
- Shawna Leung
   Director Community Relations
   Vancouver, Coast and Mountains Tourism Region
- David Lynn
   President & CEO
   Canada West Ski Areas Association
- Evan Loveless
   Executive Director
   Wilderness Tourism Association of BC
- Cailey Murphy
   Director, Communications and Business Relations

   British Columbia Hotel Association
- Dave Petryk
   President and Chief Executive Officer
   Tourism Vancouver Island
- Amy Thacker
   CEO
   Cariboo Chilcotin Coast Tourism Association
- Ian Tostenson
   President and CEO
   British Columbia Restaurant and Foodservices Association