



City of Trail Economic Drivers Quick Guide

This guide provides a brief introduction to the local business and industry that drive the economy of Trail and area.

Trail is home to the region's two largest employers and is the financial, health care, shopping and metallurgical innovation center for the region.

This guide is a supplement to the City of Trail Community Profile and forward looking Economic Outlook document. Both documents are available at: www.trail.ca/edc.php



Content Overview

- ★ Metallurgical Cluster
- ★ Transportation
- ★ Energy & Specialized Expertise
- ★ Retail & Financial
- ★ Health Care
- ★ Real Estate

EXECUTIVE SUMMARY

The City of Trail is home to the region's two largest employers and economic drivers: Teck Trail Operations and the Kootenay Boundary Regional Hospital (KBRH). Together, Teck and KBRH directly employ over 2,100 individuals and provide a solid economic base through wages and salaries and significant local spending, which helps to foster a rich and diverse business community. In addition to direct employment, these two major employers support many trickle-down jobs and provide niche opportunities for new business and industry related to the metallurgical and health care sectors.

As the region's largest employer, Teck employs 1,500 workers in a unionized work environment. A broad range of complimentary businesses and industries provide additional employment by providing goods and services to Teck or through secondary processing of Teck products to create new, value-added products.

Recent advances at Teck have fostered the formation of a metallurgical cluster in the region with a focus on environmentally friendly metals reclamation through end-of-life electronics (e-waste) recycling. The newly formed cluster is considered to have high growth potential and some companies have seen significant growth over the past few years.

Kootenay Boundary Regional Hospital (KBRH) is the center for health care in the region and serves 80,000 Central Kootenay and Kootenay Boundary residents. KBRH directly employs 650 with an additional 75-80 family practitioners, medical specialists and dentists as active medical staff. Employment levels in the health care sector are further augmented by various public and private health care as well as medical aesthetics facilities and services.

Trail industries benefit from abundant, affordable hydroelectric energy and are serviced by a full range of specialized engineering, planning and construction management firms. Local industry is served by two railways, three trans-load facilities and many truck transport firms. The robust transportation infrastructure allows bulk commodities to cost-effectively reach any port or destination in North America.

Key employees are easily attracted and retained by the wide variety of four season recreation opportunities and healthy lifestyle choices that include skiing, golf, hiking and mountain biking amongst others. Employee housing from starter homes to resort developments are readily available and among the most affordable in British Columbia.

Metallurgical Cluster

Teck Trail Operations is the catalyst for innovation in metallurgical technology in the region and has helped to foster a local metallurgical cluster of industries. The metallurgical cluster is best defined as local industries that utilize Teck products as inputs to produce value-added products, or that provide products and/or materials to Teck as outputs.

With the exception of Teck and Linde Canada Ltd., all industries considered part of the metallurgical cluster have a presence in the Columbia Gardens Industrial Park. The Columbia Gardens Industrial Park has sound industrial infrastructure and is located across from the Trail airport, and two kilometres north of the USA port of entry. Worldwide transportation is provided via three railway trans-load facilities that border the Industrial Park. Ample and affordable hydroelectric power is provided by the nearby Columbia River and Pend d'Oreille River generating stations.

Teck Trail Operations

Metallurgical Complex

With an average of 1,500 employees, Teck Trail Operations is the region's largest employer and part of Canada's largest diversified mining company. The Trail metallurgical complex has been in existence for over 100 years and is one of the world's largest fully integrated zinc and lead smelting and refining complexes. The facility benefits from low-cost hydro-electric power generated at the nearby Waneta Dam, jointly owned by Teck Metals Ltd (two-thirds interest) and BC Hydro (one-third interest).

Approximately 80% of Teck's refined zinc is sold in Canada and the USA. In addition to refined lead and zinc, Teck produces many specialty metals including germanium (used in semiconductors) and indium (used in flat panel TVs and monitors). Teck also produces significant quantities of gold, silver, bismuth, antimony, and cadmium, as well as a vast array of other metals, industrial chemicals, gasses and fertilizers.

Recycling - Base Metals Reclamation

Teck was an early proponent of automotive battery recycling, which now accounts for 20% of the refined lead produced at the Trail complex. In addition to recycling thousands of metric tonnes of automotive batteries each year, in 2006 Teck began recovering metals from end-of-life electronics (e-waste). E-waste is the fastest growing component of solid waste entering North American landfills.

E-waste, which can contain toxic elements, is collected at recycling collection centres, such as BC's Encorp Return-It depots, prior to initial sorting and shredding at the feedstock preparation contractor (KC Recycling). The shredded feedstock is processed in Teck's furnaces and KIVCET (flash smelting process) for metals reclamation, which includes lead and zinc.

Teck Trail Operations

Recycling - Base Metals Reclamation cont.

Non-metallic e-waste feedstock is vaporized and helps fuel the furnace in a low-emission, environmentally friendly manner. After metals are extracted, the resulting ferrous granules are sold to cement manufacturers to ensure virtually nothing goes to waste.

E-waste metals reclamation is a growth industry with higher demand than capacity. Teck currently has the capacity to recycle 30,000 tonnes of e-waste annually while Canadians dispose of 140,000 tonnes each year. Process technology is continually updated at the metallurgical complex; since the mid-1970s over \$1 billion has been spent on plant and process modernization. Additional consumer products such as alkaline batteries, fluorescent bulbs and a broad range of other devices are anticipated to be added to Teck's e-waste processing stream in the coming years as new legislation is enacted to mandate their proper disposal.

Applied Research & Technology

The Applied Research & Technology Centre (ART) is located in Trail and part of the Technology Division of Teck Resources Limited. The ART group assists the corporation in North America and overseas through the development and implementation of best-in-class technologies. Applied Research & Technology adds significant value to the corporation and recruits world-class metallurgical engineers and scientists to the Trail ART centre.

The process mineralogy facility and state-of-the-art laboratories employ highly skilled technologists and metallurgical engineers, many of whom hold PhD's. On average the ART Centre employs 50 individuals who work on a variety of projects identified in the yearly business plan. The ART centre helps ensure that Teck Resources Limited. will continue to improve process efficiencies and implement new technologies to maintain its competitive position as a world leader in its industry.

Firebird Technologies Inc. –A Division of 5 N Plus Inc

Firebird Technologies is a global leader in antimonide-based semiconductor production and high purity metals refining. Firebird's core product is indium antimonide (InSb) semiconductor wafers, of which there are only two other producers worldwide. InSb is used for infrared detection in thermal imaging cameras and infrared astronomy. In addition to InSb wafers, Firebird produces high purity antimony (7N purity), indium (6N5 purity) and tin (7N purity).

Firebird serves commercial, research and advanced materials markets worldwide and has a long-term supply agreement with Teck Metals Ltd. for germanium and indium feedstock. Firebird is a high growth company that continually improves product quality and process efficiencies and adopts new products that complement its strengths and capabilities in metals refining, crystal growth, custom fabrication and wafer polishing.

Toxco Waste Management Ltd.

Toxco Waste Management Ltd. is an innovative environmental technology company that established the world's first lithium recycling operation in a 70,000 square foot plant just south of Trail in the Columbia Gardens Industrial Park. The facility recovers lithium and cobalt from all types and sizes of lithium batteries with the main supply coming from the oil and gas industry. The global demand for lithium ion battery recycling is a growth market as an increasing number of consumer products utilize this light, portable energy source for devices ranging from cellphone and laptop batteries to hybrid and electric vehicles.

Toxco also collects and sorts common household batteries and provides some of the zinc alkaline batteries to Teck Trail Operations. Typical zinc alkaline batteries contain roughly 20% zinc that can be reclaimed at the metallurgical complex. Although not yet mandated by all provinces and states, most are considering mandatory collection and recycling of consumer batteries through Extended Producer Responsibility (ERP) programs. British Columbia's ERP program for batteries came into effect on July 1, 2010.

KC Recycling Ltd.

KC Recycling Ltd. operates the largest lead-acid battery recycling plant in Western Canada and the US Pacific Northwest. Residual plastics from batteries are turned into polypropylene pellets for re-use and the lead is processed at the Teck Trail Operations metallurgical complex. KC has the capacity to recycle 36,000 tonnes of lead acid batteries per year and normally runs at full capacity.

KC Recycling also prepares end-of-life electronics (e-waste) for processing and metals reclamation. Electronics arrive at KC from collection centres and are sorted, shredded and mechanically separated to recover the highest amounts possible of steel, aluminum, copper, silver and gold. The residual e-waste material and finely crushed glass is then sent to Teck Trail Operations for final metals recovery. Electronic waste recycling is a growth industry that addresses a global environmental problem and has the potential extend the lifetime of mined resources.

Linde Canada Ltd.

Linde Canada Ltd. (formerly BOC Gasses Ltd.) operates a \$70 million air separation plant located at the Teck Trail Operations metallurgical complex. The company supplies oxygen and nitrogen to Teck and medical grade oxygen to hospitals in southeast BC. Linde also sells argon to Canadian domestic and United States export markets.

Transportation

Transportation pertaining to the movement of people, cargo, commodities, raw materials, finished goods and packages is a tremendously important economic driver that is critical for economic success. As globalization trends continue, varied and affordable options are the key to unleashing this area's many competitive advantages and resulting investment growth. The many companies, both Canadian and American, have demonstrated world class reliability in meeting just-in-time standards and ocean vessel cut-off times.

Air Transportation

Trail Airport

The Trail Airport is owned by the Regional District of Kootenay Boundary and is serviced by Pacific Coastal Airlines for commercial flights. The southern approach over US airspace gives pilots 2 approved GPS approaches resulting in far fewer weather related cancellations. The Trail Airport is a Canpass facility for Customs & Immigration purposes.

Pacific Coastal Airlines

Pacific Coastal Airlines is the local carrier for daily flights between Trail and Vancouver Airport's convenient South Terminal. The airline offers 12 flights per week on their 19 passenger aircraft and frequently uses a 30 passenger aircraft when customer loads are high, or by special request.

Castlegar Airport

The Castlegar Airport is 16 miles north of Trail and is serviced by Air Canada Jazz. The airline offers flights to Vancouver and Calgary; Customs & Immigration services are also provided.

Spokane International Airport

The Spokane International Airport is 140 miles south of Trail and is the US gateway for the region. It is the second largest airport in Washington and allows local companies to reach customers throughout the United States. The airport is serviced by nine passenger carriers and four air cargo carriers.

Couriers and Truck Transportation

The area is well serviced by couriers that support growing global trade including: DHL Express, FedEx, UPS, Canpar, ACE, Tiger, Greyhound and Canada Post. The Spokane Airport is a hub for DHL, UPS, UPS Worldwide and FedEx. Commodity and truck transportation companies also service the region well and offer a broad range of highly competitive services.

Rail Transport

The area is serviced by Canadian Pacific Rail and its short-line operator, Kootenay Valley Railway, as well as Burlington Northern Santa Fe and its short-line operator, Kettle Falls International Railway. These competing railroads have serviced the community for over 100 years.

Rail Transport Cont.

Columbia Gardens Reload Ltd. operates a trans-load facility in the Columbia Gardens Industrial Park. The 9.7 acre facility utilizes the Burlington Northern Santa Fe railway to connect with markets and sea ports all across North America. The multi use reload facility is used by a wide variety of local industry including the pulp and paper industry, forestry, metallurgical, specialty wood product manufactures and others.

Trimac Transportation Services Inc. is a major ore concentrate handling facility located in the Columbia Gardens industrial area. This large inter-modal facility handles a variety of bulk, processed and specialty products. The facility is linked to the Burlington Northern Santa Fe Railway and has an annual throughput capacity of 600,000 tonnes of ore concentrates.

Westcan Bulk Transport Ltd is an established trucking and reload operation located in the Columbia Gardens industrial area. Westcan trans-loads bulk commodities produced at the Teck metallurgical complex from trucks to rail cars for shipment throughout North America.

Energy & Specialized Expertise

Within a 50 km radius of Trail are ten hydro-electric power generating dams giving business and industry in Trail abundant, affordable energy. The Trail area is serviced by a full range of specialized engineering, planning and construction management firms, many of which service the utility companies and Teck Trail Operations.

FortisBC is an integrated regulated electric utility with 14 field offices located throughout the southern interior of BC. The company's customer contact centre, information technology resources, system operations and key engineering functions operate out of the Trail office. FortisBC owns and operates four regulated hydroelectric generating plants and approximately 6,900 km of transmission and distribution power lines.

DBS Energy Services is an engineering consulting company that provides transmission and distribution design services for utility companies locally and in other regions.

Amec (LSE: AMEC) is a focused supplier of high-value consultancy, engineering, and project management services to the world's energy, power and process industries. With annual revenues of over £2.6 billion, AMEC designs, delivers and maintains strategic and complex assets for its customers. AMEC's Power and Process, Natural Resources and Earth and Environmental businesses employ over 22,000 people in more than 30 countries globally.

MCW Age Power Consultants is a Canadian electrical and mechanical engineering company with offices in Toronto, Winnipeg, Vancouver, Halifax, Ottawa, Kelowna, Moncton, Saint John and Trail. The company provides services to utility, industrial, commercial and institutional clients nationally and internationally. In the Trail area MCW frequently works with utility companies such as FortisBC on substation designs and transmission and distribution projects.

Other specialized firms include: Matthes Architecture Inc., Redwood Engineering Ltd. (civil, structural, mechanical), Hinterland Surveying & Geomatics (surveying, mapping, geomatics), Hil-tech Contracting, G.A. Deering (instrumentation systems), I / O Design Services (mechanical engineering), Kootenay Technical Surveying (surveying), Highland Development Consultants (planning & design), Pennco Engineering (civil), E & I Consulting, Hudu Hydraulics & Engineering Ltd., and Wildcat Precision Measurement Ltd.

Retail & Financial

Retail

The City of Trail has two main retail shopping areas that consist of the downtown core and the outlying Waneta commercial area surrounding Waneta Mall Plaza. The downtown core offers a good mix of goods and services but has seen little new development over the years. Lease rates vary significantly based on the size and quality of the space; however, retail lease rates average \$7/ ft² and office space averages \$9/ft². The availability of commercial land for new construction in Waneta has attracted retailers such as Walmart and Canadian Tire to compliment the existing shopping mall and wide assortment of other businesses.

Financial

Trail is a centre of financial services for banking, insurance and related services. Most of Canada's chartered banks are represented here, as well as the corporate offices of Kootenay Savings. Kootenay Savings (KS) began in 1969 as a merger of three local credit unions and has since grown to 13 branches in the East and West Kootenays.

Health Care

Kootenay Boundary Regional Hospital. Health care - both public and private - contributes significantly to the local economy. Trail's Kootenay Boundary Regional Hospital (KBRH) serves 80,000 West Kootenay residents and operates as the center of health care for the region. KBRH provides modern technological diagnostic equipment including a CAT Scanner, Renal Unit, ICU, as well as a large range of treatment programs.

Kootenay Boundary Regional Hospital Cont.

KBRH provides services including but not limited to: 24-hour emergency, general surgery, internal medicine, Orthopedics, Psychiatry, high-level laboratory (level three) and radiology/diagnostic imaging services.

KBRH is managed by the Interior Health Authority (IHA). KBRH employs approximately 650 individuals in Trail in addition to the 70-80 active medical staff at KBRH including internists, general surgeons, obstetricians, anesthetists, psychiatrists, general practitioners and other medical specialists and practitioners. IHA also employs staff for public health, mental health, social work, home care nursing and other community services, as well as residential care at Columbia View Lodge and Poplar Ridge Pavilion.

Many practitioners with hospital privileges operate private practices and create additional employment. The largest concentration of doctors offices are located in the Trail Medical Building which also houses a pharmacy and offers laboratory services. The cluster of health care professionals make Trail attractive to seniors and medical tourists who in turn create additional demand for a wide variety of traditional and alternative health care services.

Real Estate Developments

Resort Developments

Resort development and destination marketing are relatively new activities in Greater Trail. Resort development began in 2004 when a foreign investor constructed accommodations at the base of Red Mountain proving there was a market for ski resort homes. This prompted the sale and ongoing on-mountain upgrades that spurred additional developments at the base of Red. Full build out of Red Mountain is anticipated to occur over the next 10-15 years and will consist of 1,400 on-mountain units and 70,000 sq ft of commercial space. Today Red Mountain Resort is currently the largest employer in Rossland.

A second wave of development occurred when the original foreign investor purchased and redesigned the Rossland golf course. The new 18-hole golf course became the Redstone Resort development and 450 housing units are expected to be constructed at full build out. Visitors are drawn in the winter season for downhill and Nordic skiing as well as summer for golf, cycling and hiking on the managed network of 32 trails that span 170 km. With the growing influx of visitors and increasing global profile, a four season destination marketing organization called Tourism Rossland formed in 2007. The four season outdoor recreation opportunities coupled with the growing demand for amenities hold much opportunity for tourism amenity developers and help local companies attract and retain highly educated professionals.

Housing Affordability

In the summer of 2008 the average asking price of the 91 homes for sale in Trail through the Multiple Listing Service (MLS) was \$217,540. In 2010 the MLS listed 166 homes with an average asking price of \$256,685. Although home prices are significantly lower than the BC average, the cost of housing has steadily increased since the 2006 census. This is partially due to new developments that cater to residents of larger urban areas attracted to Trail for the friendly rural lifestyle, lower housing costs, regional hospital and the many outdoor recreational opportunities and amenities.

Housing Developments

Over the past few years most new home development has been concentrated in Waneta in the lands above the shopping mall. The Waneta area is popular due to the availability of land and services and close proximity to a wide assortment of shopping experiences and big box retailers. Well over 100 new housing units have been constructed by several independent contractors who continue to construct duplexes and single family residences.

Home prices in Trail continue to be a good investment as prices are very affordable when compared to the rest of British Columbia. Housing starts are frequently driven by demand from seniors and urban dwellers from Kelowna, Vancouver and Calgary who are attracted by the lower costs, as well as the lifestyle, employment and recreation opportunities. Developer confidence continues to remain high and many local developers have long-term development plans for future developments in Trail.